

Draft: 10/31/19

Big Data (EX) Working Group  
Conference Call  
October 7, 2019

The Big Data (EX) Working Group of the Innovation and Technology (EX) Task Force met via conference call Oct. 7, 2019. The following Working Group members participated: Doug Ommen, Chair (IA); Elizabeth Kelleher Dwyer, Vice Chair (RI); Lori K. Wing-Heier, Shauna Nickel and Alex Romero (AK); Jerry Workman (AL); George Bradner and Wanchin Chou (CT); Stephen C. Taylor (DC); Frank Pyle (DE); Carly Jamarowicz, Rebecca Smid and Mike Yaworsky (FL); Susan Lamb (IL); Rich Piazza, Nathan Strebeck and Jeff Zewe (LA); Robert Baron (MD); Karen Dennis (MI); Phil Vigliaturo (MN); Carrie Couch, Angela Nelson, Julie Lederer and Cynthia Amann (MO); Christian Citarella (NH); Mark McGill (NJ); Mitchell Moore (NV); Jennifer Demory, Jillian Froment, Angela Dingus and Rodney Beetch (OH); David Dahl, TK Keen, Ying Liu and Andrew Stolfi (OR); Michael McKenny (PA); Kendall Buchanan (SC); J'ne Byckovski and Rachel Cloyd (TX); Armand Glick, Reed Stringham and Tracy Klausmeier (UT). Also participating were: Lindsay Bates and Travis Grassel (IA).

1. Adopted its Summer National Meeting Minutes

Mr. Piazza made a motion, seconded by Ms. Nelson, to adopt the Working Group's Aug. 3 minutes (*see NAIC Proceedings – Summer 2019, Innovation and Technology (EX) Task Force, Attachment One*). The motion passed unanimously.

2. Discussed the Use of Big Data in Fraud Detection and Claim Settlement

Commissioner Ommen said Carlos Martins (ISO Claims Solutions) will provide an update to the Working Group's discussion with ISO at the Summer National Meeting. Commissioner Ommen asked for more detail on how ISO uses data in the ClaimSearch database. Mr. Martins said the ISO ClaimSearch database has been in existence since 1971. It is a contributory claims database, and subscribers must use all reasonable measures to ensure the quality of data being submitted. Mr. Martins said ISO also has data quality checks to verify data is what they would expect. For example, a company could not submit a date of birth as all nines or zeros. Mr. Martin said ISO uses commercially available address scrubbing solutions to ensure addresses are correct and adhere to U.S. postal code standards. Mr. Martins said ISO sends Social Security numbers (SSNs) to the federal Death Master File (DMF) to ensure the SSN is not associated with a deceased individual. If an SSN is associated with a deceased individual, ISO provides an alert to the subscriber. Mr. Martin said ISO will alert a subscriber if an address is associated with a prison or mail drop location.

Mr. Martins said ISO has had a voluntary program in existence for 15 years through which a person can contest information in the ClaimSearch database. If a citizen contests information, ISO communicates with the insurer that submitted the information and works with the insurer to address any inaccuracy. ISO also adds a notation in the database that the consumer has contested data submitted. Mr. Martins said ISO does not charge a fee for this service and had had only three inquiries in the last year. Mr. Martins said only the insurer that submitted the data can correct their information. Commissioner Ommen asked if all aspects of a claim are submitted at the consent of the consumer. Mr. Martins said consumer consent is not needed since the database operates under a fraud exemption of the federal Gramm-Leach-Bliley Act (GLBA).

Ms. Nelson said ISO's website references a product called ClaimDirector, which advertises that subscribers are given access to financial, civil and criminal records. Ms. Nelson asked if insurers accessing and using this information is disclosed to consumers. Mr. Martins said ClaimDirector is a database created in 1971 and is used to deter and identify fraud and a consumer's claim history. Mr. Martins said the database allows insurers to identify potentially duplicative claims being made with multiple insurers. Mr. Martin said the database helps process meritorious claims as quickly as possible. Mr. Martins said the database helps industry understand claims with suspicious indicators, but ISO does not make a judgment on whether a claim is fraudulent. Mr. Martins said ClaimDirector applies a set of business rules created by seasoned insurance claims professionals and presents back a score and report on rules that fail. Mr. Martin said suspicious indicators would include an individual submitting similar claims with multiple insurers or an individual filing a claim after two weeks of purchasing insurance without any evidence of prior insurance. Mr. Martin said ClaimDirector also pulls in data from third-party sources, which might include information on whether a person filing a claim has been convicted on an insurance related crime. Mr. Martins said ISO provides tips and leads to insurers for an insurer to investigate. Mr. Martins said ClaimSearch DNA is provided to all ClaimSearch subscribers. Mr. Martins said ClaimSearch DNA identifies relationships between claims and insurers across the industry. For example, Mr. Martins said the database will identify cell phone numbers and addresses associated with insurance claims being processed by multiple insurers.

Mr. Chou asked how these databases are different from the Comprehensive Loss Underwriting Exchange (CLUE) database. Mr. Martins said CLUE is an underwriting database, and ClaimSearch data cannot be commingled with an underwriting database, which is subject to the federal Fair Credit Reporting Act (FCRA).

Ms. Nelson asked what disclosures are made to consumers and how a consumer would know an ISO database has been used in the claims process and how to contest data in a database. Mr. Martins said ISO contracts require confidentiality and privacy of information contributed to database and, by contract, subscribers are not allowed to share database reports with consumers or other third parties without ISO's consent. Commissioner Ommen said it appears ISO uses business rules to identify potential fraud and provides an insurance fraud score that could potentially place a claim in a holding pattern for settlement. Commissioner Ommen asked how a consumer would evaluate data that might be delaying a claim settlement. Mr. Martin said a company claims adjuster should let the claimant know the claim investigation has identified information that might delay the claim settlement. At this point, the claims adjuster and claimant would discuss this information, and the claims adjuster would know if the claimant questions the accuracy of the information. At the same time, Mr. Martins said the claims adjuster would not be trained to tell a consumer about the existence of an ISO report because of the confidentiality of the report. If the claimant questions the accuracy of the data, the claims adjuster would then work with ISO to obtain more information on which insurer submitted the prior claims data. Ms. Nelson said she is most concerned with ISO accessing and using financial, civil and criminal records and a consumer not knowing this information is being used or having any recourse if there is an error in this information.

Mr. Martins said if ISO uses third-party, publicly available data, ISO would notify a subscriber of where information was obtained if the consumer contested this information. Mr. Martins said ISO would work with the third-party vendor to address data errors and said he believes vendors would have a process to correct data. Ms. Nelson said she is concerned with a claims adjuster being provided a high-level score but not the detail of how the score was calculated. Ms. Nelson said this requires the claim adjuster to ask about the detail of how a score was calculated and then to share this information with a claimant. Mr. Martins said ISO provides reasons for a score, and a claim adjuster would need to determine relevance to the claim. Mr. Martins said insurers have different thresholds on reasons they would identify a claim to be potentially fraudulent. Mr. Martins said this process is used to process claims quickly, and only a small percentage have claims that have a fraud score that prompts further investigation.

Commissioner Ommen asked if data may identify a consumer's propensity for litigation and whether state insurance regulators have reviewed the business rules being used. Mr. Martins said he is not aware of any data or product used to predict a consumer's propensity for litigation. Mr. Martins said ISO works with subscribers on market conduct exams and that the rules used to identify a claim as potentially fraudulent come from the National Insurance Crime Bureau (NICB) and seasoned claims professionals. Mr. Martins said ISO has tried to automate these rules for more efficient claims processing.

Mr. Martins said data is not used for rating and underwriting, and this is a contractual requirement for companies submitting data. Mr. Martins said ISO does not have any systems or scores that identify gender, ethnicity or other prohibited factors. Mr. Martins said ISO also does not use this information in their databases. Mr. Martins said ISO is committed to safeguarding industry data. ISO applies the latest encryption techniques and is audited to Service Organization Control (SOC) 2 and SOC 3 level to make sure sensitive information is not misused. Mr. Martins said ISO audits data use by subscribers to make sure subscribers use data in accordance with contractual obligations.

Birny Birnbaum (Center for Economic Justice—CEJ) asked if ClaimSearch is FCRA-complaint. Mr. Martin said FCRA standards do not apply to ClaimSearch. Mr. Birnbaum asked if ISO has assessed rules to determine if they result in a disparate impact to low-income and minority consumers. Mr. Birnbaum asked if ISO has assessed algorithms to identify how many false positives occur when identifying a claim as potentially fraudulent. Mr. Martin said ISO has not conducted these types of assessments. Mr. Martins said ISO provides tips and leads to insurers and does not make a final judgement on claims. Mr. Martins said ISO works with subscribers on data quality to ensure that tips and leads are appropriate. In response to Mr. Birnbaum's question about disparate impact, Mr. Martins said ISO does not know impact because ISO does not conduct this type of analysis.

Peter Kochenburger (University of Connecticut School of Law) said there appears to be no communication between ISO and the consumer to confirm accuracy of information in database. Mr. Kochenburger asked if ISO provides any guidelines to insurers on how to address data quality with consumers. Mr. Martins said ISO requires subscribers to use reasonable efforts to ensure data quality, and any data quality issues are brought to the attention of subscribers. Mr. Martins said data quality issues are rare because ISO receives data directly from subscribers' claims systems. Mr. Martins confirmed there is no contact between ISO and the consumer.

Having no further business, the Big Data (EX) Working Group adjourned.

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# **Regulation of Collective Pricing Activity in Insurance: The History and Current State of Advisory Organizations**

## **NAIC Big Data Working Group**

December 7, 2019

Birny Birnbaum  
Center for Economic Justice  
[www.cej-online.org](http://www.cej-online.org)

## Why CEJ Works on Insurance Issues

### ***Insurance Products Are Financial Security Tools Essential for Individual and Community Economic Development.***

CEJ works to ensure ***fair access*** and ***fair treatment*** for insurance consumers, particularly for low- and moderate-income consumers.

### ***Insurance is the Primary Institution to Promote Loss Prevention and Mitigation, Resiliency and Sustainability:***

CEJ works to ensure insurance institutions maximize their role in efforts to reduce loss of life and property from catastrophic events and to ***promote resiliency and sustainability*** of individuals, businesses and communities.

## Topics Covered

1. History of Advisory Organizations – Why Was/Is Supervision of Advisory Organizations Necessary
2. Current Statutory and Regulatory Requirements for Advisory Organizations
3. Big Data Algorithm Vendors Operating as Unlicensed Advisory Organizations

# **History of Advisory Organizations –**

## **Excerpts From January 1999 White Paper by NAIC**

### **Speed to Market Task Force**

*“Following (the 1944 Supreme Court decision in South-Eastern Underwriters overturning the long-standing precedent that insurance was not interstate commerce), insurers, insurer trade associations, insurance producers, rating organizations, state legislators and insurance regulators encouraged Congress to act to avoid drastic changes to insurance regulation. The result was the McCarran-Ferguson Act (Public Law 15-79 of 1945).”*

“The McCarran-Ferguson Act provides insurers with a limited exemption from federal anti-trust laws (the Sherman Act, the Clayton Act and the Federal Trade Commission Act) to the extent that insurance is regulated by the states. Federal law still applies to acts of intimidation, coercion, or boycott or allegations of attempted intimidation, coercion, or boycott.

***Without this limited anti-trust exemption, insurers would not be able to use advisory organizations to collect and compile historical statistical information for ratemaking purposes.” (emphasis added)***



“Following the adoption of the McCarran-Ferguson Act, all states enacted laws regulating rates. At the time, there was a great deal of discussion about the topic of this paper. An All-Industry Committee representing nineteen insurer trade associations was formed to work with insurance regulators on a model law. The result was the two “All-Industry” model laws that were adopted by the NAIC in 1946. Minor amendments were made to them in 1947 and they served as the basis for rate regulation in all states. As is typical for NAIC model laws, lobbying efforts . . . led to state enactments that were similar, but not identical, to the All-Industry model laws.”

“Early rating laws compelled adherence to rates filed by rating bureaus on behalf of their member insurers. Price competition often came in the form of policyholder dividends that occurred after the policy period was over. Some states allowed insurers to file “deviations” from the rates filed on their behalf. The use of dividends and deviations added elements of price competition to the mix.”

“In the 1960s, a more significant number of regulators and insurers began to question the rate regulatory framework of earlier times. There was a movement in some states to liberalize rating laws to move toward competitively-oriented laws that allowed insurers to adjust their rates to fit the overall economic conditions of the state or area. As long as the rate had a sound actuarial basis, the insurers were allowed to compete for business.”

“In the early 1980s, the NAIC adopted model laws containing “file and use” and “use and file” concepts. The “file and use” concept allowed an insurer to introduce rates into the market at the same time they were being filed with the insurance regulator. The “use and file” process allowed the insurer to introduce rates into the marketplace and, at a specified later date, file them with the regulator.”

“In the late 1980s, a number of state attorneys general brought legal action against the Insurance Services Office (ISO) alleging its involvement in anticompetitive activities. ISO settled this litigation by changing its corporate structure and going to loss costs in states and for lines where it had not already done so. The NAIC response to this matter included the formation of a working group in January 1989. The working group was charged with the task of reviewing the practice of rating organizations providing fully developed rates, including expense and profit loadings, to their member insurers.”

“By the early 1990s, as a result of this work and of the ISO settlement, a much larger number of states had enacted legislation or adopted regulations or procedures to accommodate and/or require such organizations to file prospective loss costs instead of fully developed rates. At this time “rating organizations” became more widely referred to as “advisory organizations,” with the expectation – both by regulators and insurers – that they would now assume even more of an advisory role and should not be allowed to encourage or coordinate concerted action by insurers. Advisory organizations continue to develop loss costs, policy forms and risk classifications that may be used by insurer members of the organizations.”

# Market Conduct Examination of Advisory Organizations

## Market Regulation Handbook, Chapter 25:

- A. Procedural Considerations
- B. Advisory Organizations Operations/Management/Governance
- C. Statistical Plans
- D. Data Collection and Handling
- E. Correspondence with Insurers and States
- F. Reports, Report Systems and Other Data Requests
- G. Ratemaking Functions
- H. Classification and Appeal Handling
- I. Form Development
- J. Inspection Services
- K. Residual Market Functions—Plan Administration
- L. Residual Market Functions—Reinsurance Administration

## Background and Definitions

“Advisory organizations” are currently authorized by statute and are defined in the *Property and Casualty Model Rating Law (Prior Approval Version)* (#1780), which was amended in 2009 to a guideline, as:

“Advisory organization” means any entity, including its affiliates or subsidiaries, which either has two or more member insurers or is controlled either directly or indirectly by two or more insurers, and which assists insurers in ratemaking-related activities such as enumerated in Sections 10 and 11. Two or more insurers having a common ownership or operating in this State under common management or control constitute a single insurer for purposes of this definition.



“State statutes based on an older version of this NAIC model may use the term “rating organization” or “rate service organization” to mean the same thing.

“The *Property and Casualty Model Rating Law (Prior Approval Version)* specifically permits advisory organizations to:

“a. Develop statistical plans including territorial and class definitions;

“b. Collect statistical data from members, subscribers or any other source;

“c. Prepare, file and distribute prospective loss costs which may include provisions for special assessments;

“d. Prepare and distribute factors, calculations or formulas pertaining to classification, territory, increased limits and other variables;

“e. Prepare and distribute manuals of rating rules and rating schedules that do not include final rates, expense provisions, profit provisions or minimum premiums;

“k. Prepare policy forms and endorsements and consult with members, subscribers and others relative to their use and application;

“p. Collect and compile exposure and loss experience for the purpose of individual risk experience ratings;

“The term “statistical agent” is commonly used to describe an advisory organization when it is performing functions a. and b. above. Some advisory organizations limit the activities of the advisory organization to just the statistical agent functions.

“It is unlikely that any single advisory organization will be engaged in all of the permitted activities. Additionally, some entities may provide services that are listed above or that were not contemplated by the various state rate and form acts. Whether or not advisory organization services are regulated and permitted will depend on the various states’ laws. Likewise, certain services may not be deemed a priority for examination purposes. Those services that have the greatest potential impact on insurance consumers should be given priority for review.

“For purposes of this chapter, the term “advisory organization” will be used to encompass rating organizations, rate service organizations and statistical agents, as appropriate. It should be noted that advisory organizations that develop and file insurance programs and loss costs frequently collect data beyond the minimum standards required of all insurers under the *Statistical Handbook*. This additional detail or additional data is used to support insurance programs and for research.

“For purposes of this chapter, the terms “subscriber” and “member company” are used interchangeably to refer to insurers that rely on the advisory organization’s services and products. Some advisory organizations provide multiple levels of member company services. For example, with the appropriate advisory organization agreement in place, insurers may designate an advisory organization to file on its behalf. Or, an insurer may file with the department to adopt filed advisory organization materials. Alternatively, an insurer may purchase the right to use advisory organization materials, with or without modifications.

## **“Nature, Scope and Type of the Examination**

The advisory organization examination is a review of the organization’s systems, operations and management for the collection and reporting of statistical data, preparation of loss cost filings, and rule and form filings. Other regulated permitted activities may also be examined. Its purpose should include a check of the validity of the systems in place. It is neither a traditional market conduct nor financial examination. It is rather a hybrid of a market conduct examination and a data/systems audit. The advisory organization examination is not an examination of the accuracy of the underlying company data reported to the organization. The main purpose of the examination is to determine that the advisory organization is performing its permitted regulated functions in a manner consistent with state rating laws and in a manner that results in accurate and compliant products or services for its subscribing or member companies.

“Unlike insurance company examinations, there generally is little, if any, “market analysis” for advisory organization examinations. Similarly, advisory organizations are not regulated for solvency. Rather, advisory organization examinations review the processes and procedures used to collect, compile and ensure quality of the data, calculate loss costs and develop insurance programs on behalf of insurers and perform other regulated activities.

“Standard 1: The advisory organization has implemented written policies and procedures to prevent anti-competitive practices in the insurance marketplace, as related to the advisory organization’s services and communications to insurers.

“Standard 2: The advisory organization uses sound actuarial principles for the development of prospective loss costs.

“Standard 3: The advisory organization prepares, submits filings as necessary, adheres to applicable state filing and/or approval requirements and written procedures prior to distribution of prospective loss costs, policy forms, endorsements, factors, classifications or rating rule manuals.

“Standard 4: Experience rating factors are developed in a correct and timely manner.

“Standard 6: The advisory organization develops sound, understandable and appropriate risk classifications.

“Standard 8: The advisory organization conducts ongoing research and review of state insurance laws and insurance-related case law in order to be responsive to necessary changes in prospective loss costs, policy forms, endorsements, factors, classifications or manuals, as applicable.

“Standard 17: The advisory organization is appropriately licensed.

# Current Issues Regarding Big Data Vendors and Advisory Organization Regulatory Requirements

## *Vendors engaged in collective decision-making not licensed as advisory organizations*

What is the essence of advisory organization activity that raises anti-trust concerns requiring state supervision of the organization to exempt the activity from federal anti-trust laws?

- Collect data from insurers
- Perhaps, add additional data to the insurer data
- Analyze the data and produce pricing recommendations – in the form of prospective loss costs or risk classification relativities.



What is the functional difference between the activities of a licensed advisory organization – Insurance Services Office producing personal auto risk classification relativities and vendors not licensed as advisory organization -- Transunion providing credit scores or criminal history scores or vehicle scores? Both

- collect exposure, premium and claims data from insurers;
- analyze and/or add non-insurance data and analyze the data; and
- provide recommendations on risk classifications (rating factors, factor relativities and/or underwriting guidelines/tier placement?)

Why should the Insurance Services Office (ISO) be licensed as an advisory organization, but Transunion not despite both being engaged in the same type of collective pricing activities exempt from federal anti-trust laws only to the extent that the activities are supervised by insurance regulators?

Underwriting, Rating, Unfair Discrimination and Unfair Trade Practice Laws Need to be Updated to Clarify Regulatory Oversight of Organizations Engaged in Collective Pricing and Claims Settlement Practices – Providing Algorithms That Can Place the Vendor in the Position of Guiding or Coordinating Insurer Activity.

Consider:

Algorithms used for risk classification – credit scoring, criminal history scores, vehicle scores, price optimization algorithms. How is a credit scoring algorithm that ranks drivers based on consumer credit history functionally different from a loss cost recommendation by ISO for, say, marital status or driving record?

Algorithms Used for Claims Settlement or Anti-Fraud – scores to rank consumers on the likelihood for a fraudulent claim, or likelihood to accept a settlement of a certain value (claims optimization) or promote different claim settlement values in different communities?

The issue is not stopping the use of Big Data or algorithm.

***The issue – and need – is to create the accountability and regulatory oversight over vendors of big data algorithms as envisioned in antitrust laws and advisory organization statutes. This may mean not only bringing regulatory oversight to third party algorithm vendors but also updating advisory organization requirements and procedures for the big data era.***