THE USE OF CONSUMER DATA TO SETTLE AUTOMOBILE INSURANCE CLAIMS

Public Hearing of the

NAIC Market Regulation (D) Committee

Comments of

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The Center for Economic Justice

CEJ is a non-profit consumer advocacy organization dedicated to representing the interests of low-income and minority consumers as a class on economic justice issues. Most of our work is before administrative agencies on insurance, financial services and utility issues.

On the Web: www.cej-online.org

Why CEJ Works on Insurance Issues

Essential Financial Security Tool for Individual and Community Economic Development: CEJ Works to Ensure Access and Fair Prices for These Essential Products and Services, particularly for Low- and Moderate-Income Consumers.

Primary Institution to Promote Loss Prevention and Mitigation: CEJ Works to Ensure Insurance Institutions Maximize Their Role in Efforts to Reduce Loss of Life and Property from Catastrophic Events.

Big Data Defined

- Massive databases of information about (millions) of individual consumers
- Associated data mining and predictive analytics applied to those data
- Scoring models produced from these analytics.

Consumer Information in Big Data

- Social Media
- Shopping Habits/Purchase History
- Hobbies and Interests
- Demographics/Household Data/Census Data
- Government Records/Property Records
- Web Tracking
- Mainstream Credit Files: Loans, Credit Cards
- Alternative Credit Data: Telecom, Utility, Rent Payment

Insurance Big Data Example: LexisNexis Claims Tools

More Data Earlier: The Value of Incorporating Data and Analytics for Claims Handling at http://www.lexisnexis.com/risk/insights/value-incorporating-data-analytics-claims-handling.aspx

For third-party bodily injury settlements, the study found that more data earlier resulted in:

- 15–25 percent lower severity payments*
- 25–49 percent lower attorney involvement
- 5–15 percent shorter cycle times

Similar results were obtained for third-party property damage claims:

LexisNexis Claims Tools

LexisNexis (LN) seeks to provide a Single Point of Entry for delivering all of information directly back into a carrier's system whether from a marketing standpoint, underwriting process or especially the claims part.

LN has over 10,000 data sources that feed into its infrastructure each month and has contributed information from the industry.

"Claims Data Fill" – deliver data and analytics directly into claims system in the claims process regarding parties, vehicles and carrier information. Used to verify information provided to insurers and provide indicators beyond the data to identify whether a social security number is an indicator of fraud or whether an address provided is a good address.

LexisNexis Claims Tools

Has an analytic component at first notice of loss and throughout the claim, constantly monitoring the claim looking for fraudulent activities. Real time data verification and enhancement with fraud scoring and attributes

Example, insured was rear-ended, all I got was license plate:

Claims Data Fill takes that license plate, reach out to DMV to get vehicle registration to get VIN number, we have policy database and get the carrier and policy information, take the registered owner, go out to public records, pull back their address, date of birth, telephone number, social security, wrap that into a package and put it back into our system, 88% of the time done in less than 5 seconds.

LexisNexis Claims Tools

Take minimum information provided at first notice of loss, provide a fraud score at the initial notice of loss. Daily monitoring of claim every time new information comes in, able to run various scores: fraud scores, severity score

New contributory claims database, much deeper than prior claims databases – this is claims file submitted as new information added – allows us to track vehicles across carriers, medical providers across carriers – sharing of information much deeper than has been done before. Text mining, watch list mixed with LexisNexis data.

Take-Away: Many databases and scoring models with little or no transparency to consumers and regulators and outside the scope of consumer protection laws like the FCRA.

LexisNexis: “Severity Focus”

Identify claims with the potential to become severe: SeverityFocus utilizes advanced predictive modeling to identify claims with the potential to become severe as they develop claims that otherwise would go undetected until much later.

SeverityFocus does not constitute a "consumer report" as that term is defined in the federal Fair Credit Reporting Act, 15 USC 1681 et seq. (FCRA). Accordingly, Severity Focus may not be used in whole or in part as a factor in determining eligibility for credit, insurance, employment or another permissible purpose under the FCRA.

LexisNexis: “Severity Focus”

Due to the nature of the origin of public record information, the public records and commercially available data sources used in reports may contain errors. Source data is sometimes reported or entered inaccurately, processed poorly or incorrectly, and is generally not free from defect. This product or service aggregates and reports data, as provided by the public records and commercially available data sources, and is not the source of the data, nor is it a comprehensive compilation of the data. Before relying on any data, it should be independently verified.

LexisNexis: “Claims Discovery”

Understand claimants' prior auto or property claim histories: LexisNexis® Claims Discovery(SM) is a separate, contributory, nonFCRA database available to insurers that contains the same type of information submitted to C.L.U.E.®.

Product info includes same statements about non-FCRA data and data quality.

LexisNexis Fraud Focus

Detect possible fraud at the earliest possible moment: FraudFocus® is an effective fraud detection system that helps insurance companies proactively combat several types of fraud.

Product info includes same statements about non-FCRA data and data quality.

StatSoft's Predictive Claims Flow™,

A predictive analytics and reporting solution for property and casualty insurance companies, can help you reduce loss ratios and improve bottom-line profitability, often within a few months of implementation. StatSoft's Predictive Claims Flow™ solution incorporates predictive modeling at every stage of an insurance claim. This closed loop system has a unique scoring system that rates each claim at its inception on its propensity for fraud and then continually rescores the claim as it goes through each step of a claim's lifecycle.

StatSoft's Predictive Claims Flow™,

Using already-established fraud flags, plus intelligent variables that predictive models create, fraud scores are re-calculated every time a new piece of data is submitted, whether it's a verbal update from a claimant or a medical bill submitted by a vendor. Based on fraud probabilities, StatSoft's solution then determines the right level of servicing for the claim, including whether or not the claim should be assigned to a more senior adjuster or if there is a need for in-person-contact in order to reduce the overall duration of the claim. At the same time, predicted reserve estimates are updated and opportunities for subrogation are identified.

Infosys Social Network Analysis

The SNA tool combines a hybrid approach of analytical methods. The hybrid approach includes organizational business rules, statistical methods, pattern analysis, and network linkage analysis to really uncover large of amounts of data to show relationships via links. When one looks for fraud in a link analysis, one looks for clusters and how these clusters link to other clusters. Public records such as judgments, foreclosures, criminal records, address change frequency and bankruptcies are all data sources that can be integrated into a model. Using the hybrid approach, the insurer can rate these claims. If the rating is high, it indicates the claim is fraudulent.

Infosys: Social Customer Relationship Management

Social CRM is neither a platform nor a technology, but rather, a process. It is important that insurance companies link social media to their CRM.

Social CRM . . . gathers data from various social media platforms. It uses a “listening” tool to extract data from social chatter,. . . .The reference data along with information stored in the CRM is fed into a case management system. The case management system then analyzes the information based on the organization’s business rules and sends a response. The response, from the claim management system as to whether the claim is fraudulent or not, is then confirmed by investigations independently, since the output of the social analytics is just an indicator and should not be taken as the final reason to reject a claim

Price Optimization Technology for Claims

Regulators have become aware of vendors promoting, and insurers using, price optimization tools for setting auto insurance premium rates. PO is a big data application that adjusts cost-based rate indications based on non-cost factors such as evaluations of consumer price elasticity of demand – consumer likelihood of shopping for another carrier in the face of a rate increase.

> Earnix explained that price optimization allows insurers to "[a]nalyze the price elasticity of each customer profile and uncover the efficient pricing frontier for each product in your portfolio." Source: Earnix.com "Price Optimization: Insurance Price/Rate Optimization"

"Earnix best-in-class analytics and patent-awarded optimization technology empowers insurers to implement pricing strategies that go beyond traditional risk cost pricing, incorporating demand elasticity models to maximize profit and growth objectives."

Source: Earnix.com "Insurance Pricing and Customer Value Optimization"

If insurers are utilizing tools for pricing based on consumer response to pricing offers, it seems logical that the same tools may be utilized for claims settlement – price optimization to evaluate claim settlement offers to consumers.

Telematics Data in Claims Settlement

Telematics devices can capture large amounts of information about a consumer's operation of a vehicle:

- Time and Dates Driven
- Where Driven
- Acceleration
- Braking
- Turning/Cornering

Telematics Data in Claims Settlement

Consequently, telematics data collected by insurers has potential for use in claim settlements when the nature of the accident is unclear or contested. However, insurers have the data and the ability to analyze and interpret very detailed information, ***raising the possibility that insurers might use data when beneficial to the insurer, but not disclose the data to claimant when helpful to the claimant.***

Insurer Big Data for Claims: Consumer Protections

- Accuracy and Completeness of Data
- Oversight of Data Bases
- Disclosures to Consumer About Data Used, How Used and Privacy Protections
- Compliance with Fair Credit Reporting Act
- Consumer Ability to Challenge False Information
- Evaluation of Bias in Models
- Regulators' Knowledge Of and Capability to Provide meaningful Oversight
- Prevent discrimination Against Low-Income and Minority Consumers and other protected classes
- Asymmetric Use of Data
- Greater Cybersecurity Danger for Consumers and Insurers

Use of Big Data Scoring Models Does Not Eliminate Bias

New York Times, August 10, 2015: Algorithms and Bias: Q. and A. With Cynthia Dwork

Algorithms have become one of the most powerful arbiters in our lives. They make decisions about the news we read, the jobs we get, the people we meet, the schools we attend and the ads we see. Yet there is growing evidence that algorithms and other types of software can discriminate. The people who write them incorporate their biases, and algorithms often learn from human behavior, so they reflect the biases we hold.

New York Times, August 10, 2015: Algorithms and Bias

Q: Some people have argued that algorithms eliminate discrimination because they make decisions based on data, free of human bias. Others say algorithms reflect and perpetuate human biases. What do you think?

A: Algorithms do not automatically eliminate bias. . . .Historical biases in the . . .data will be learned by the algorithm, and past discrimination will lead to future discrimination.

Fairness means that similar people are treated similarly. ***A true understanding of who should be considered similar for a particular classification task requires knowledge of sensitive attributes, and removing those attributes from consideration can introduce unfairness and harm utility.***

New York Times, August 10, 2015: Algorithms and Bias:

Q: Should computer science education include lessons on how to be aware of these issues and the various approaches to addressing them?

A: Absolutely! First, students should learn that design choices in algorithms embody value judgments and therefore bias the way systems operate. They should also learn that these things are subtle: For example, designing an algorithm for targeted advertising that is gender neutral is more complicated than simply ensuring that gender is ignored. They need to understand that classification rules obtained by machine learning are not immune from bias, especially when historical data incorporates bias.

Big Data and Insurance Claims: What Should Regulators Do?

Recommendation: Each state should require personal lines insurers to report all types of data used for sales, marketing, underwriting, pricing, conditioning payment plan use and claims settlement; the sources of the data; and the uses of the data. The NAIC should develop a template to promote uniformity across the states. The NAIC should also serve as the data collection and compilation agent for those states needing assistance to carry out this request for information.

This information will provide regulators with an overview of the types of uses of non-insurance data and enable regulators to identify big data applications that warrant further regulatory review.

Big Data and Insurance Claims: What Should Regulators Do?

Recommendation: Each state should monitor the outcomes in personal lines markets by collecting and analyzing transaction data on sales and claims. The NAIC should serve as the data collection and compilation agent for those states needing assistance to carry out this request for information.

Given that monitoring and evaluating all the data and assumptions that go into big data claims models, it is reasonable and necessary for regulators to collect detailed data on claims outcomes to evaluate whether there is disparate treatment of certain types of consumers in the claim settlement process – regardless of whether such treatment is intentional or unintentional.