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## BULLETIN 14-23

Date: October 31, 2014

To: All P&C Insurance Companies, Rating Organizations, Joint Insurance Association, and the Maryland Automobile Insurance Fund

Re: Unfair Discrimination in Rating: Price Optimization

It has come to the attention of the Maryland Insurance Administration ("MIA") that some insurers are using "price optimization" to rate insurance policies in Maryland. Price optimization refers to the practice of varying rates based on factors other than the risk of loss, such as the likelihood that policyholders will renew their policies and the willingness of certain policyholders to pay higher premiums than other policyholders. The MIA has determined that the use of price optimization results in rates that are unfairly discriminatory in violation of §27-212(e)(1) of the Insurance Article. As a result, insurers may not use price optimization to rate policies in Maryland.

### Definitions

For purposes of this bulletin, the following definitions apply:

(1) "Price optimization" means varying rates based on factors other than risk of loss, including, but not limited to:

(a) the likelihood that a policyholder will engage in activities that result in policy turnover; and

(b) the willingness of a policyholder to pay a higher premium compared to other policyholders.

"Engage in activities that result policy turnover" includes, but is not limited to:

(a) shopping with other carriers for a lower premium;

- (b) canceling a policy before the expiration of the policy term; and
- (c) failing to renew a policy at the renewal of the policy term.

## **Maryland Law Applied to Price Optimization**

### *In General*

Section 27-212(e)(1) of the Insurance Article provides that:

An insurer may not make or allow unfair discrimination between insureds or properties having like insuring or risk characteristics in:

- (i) the premium or rates charged for insurance;
- (ii) the dividends or other benefits payable on the insurance; and
- (iii) any of the other terms or conditions of insurance.

For purposes of the Insurance Article, the Court of Appeals has defined unfair discrimination as “discrimination among insureds of the same class based on something other than actuarial risk.” *Insurance Commissioner v. Engelman*, 345 Md. 402, 413 (1997). By its nature, price optimization involves discriminating among policyholders of the same class based on factors other than actuarial risk. The purpose of price optimization is to move away from traditional cost-based rating to take advantage of price elasticity in the market by charging the most that the market will bear without losing business.

One of the ways that insurers use price optimization is to analyze patterns of behavior of policyholders to try to predict whether a policyholder is likely to switch to another insurer if the insurer increases premiums. This may involve the use of a “retention model.” If an insurer’s analysis indicates that a policyholder is likely to switch to another insurer, that policyholder will be charged a lower premium than a policyholder who is considered unlikely to switch to another insurer.

By way of example, one developer of price optimization models indicated that one of the characteristics it would consider is whether a policyholder has complained to the insurer.<sup>1</sup> If a policyholder has complained, this would indicate that the policyholder is unsatisfied and not likely to accept a premium increase. As a result, all other things being equal, this policyholder would be charged a lower premium than a policyholder who has not complained to the insurer. This means that policyholders would be charged higher premiums simply because they have not complained to the insurer, regardless of whether these policyholders pose any more risk of loss than policyholders who have complained.

One advocate of price optimization explained its use as follows:

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<sup>1</sup> Presentation of Towers Watson to the NAIC Auto Insurance (C/D) Study Group on July 28, 2014.

Microeconomic theory teaches us that thoughtful selection of prices, or price discrimination, is a key to maximizing revenue and profit. Our research, in fact, reveals that if P/C insurers adopt advanced pricing strategies that consider customer elasticity differences, they can boost their revenue by roughly 3 percent and returns-on-equity by 1 percent, on average.

Price elasticity of demand (PED) essentially refers to the responsiveness – elasticity – of a customer in terms of the quantity of a product that he or she will buy when the price of that product changes.

...

Assume that through careful study of an insurer's data, we can determine that females of a certain age exhibit less price elasticity than male drivers of the same age or females in adjacent age categories. Without being overly prescriptive, we could tweak the established rating relativity variables – within their accepted confidence levels – to arrive at a different rate for those drivers.<sup>2</sup>

As this explanation indicates, price optimization involves varying rates based on factors that are unrelated to risk of loss, such as price elasticity or the willingness of an insured to accept a premium increase. Consequently, the use of price optimization may result in two insureds with like risk characteristics being charged different premiums, which is a violation of §27-212(e)(1) of the Insurance Article.

### **Corrective Action Plan**

The MIA requires every insurer that currently utilizes price optimization to rate insurance policies in Maryland to file a corrective action plan with the Maryland Insurance Administration no later than January 1, 2015. An insurer should include in the corrective action plan:

- the lines of business for which the insurer is using price optimization, a description of the manner in which the insurer is using price optimization, and the SERFF filing numbers of any rate and/or rule filings that contain price optimization;
- a description of the company's proposed corrective action;
- a target date for making corrective rate and/or rule filings; and
- a target date for implementing the corrective rate and /or rule filings.

Corrective action plans may be mailed, emailed, or faxed to the following:

Geoffrey Cabin  
Director, P&C Rates and Forms  
200 St. Paul Place, Suite 2700  
Baltimore, MD 21202  
Email: [geoffrey.cabin@maryland.gov](mailto:geoffrey.cabin@maryland.gov)  
Fax: 410-468-2307

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<sup>2</sup> "Predictive Analytics: Bringing Price Elasticity Concepts to P/C Insurance"; published by Carrier Management; September 3, 2013; [www.fractalanalytics.com/news/predictive-analytics-bringing-price-elasticity-concepts-pc-insurance](http://www.fractalanalytics.com/news/predictive-analytics-bringing-price-elasticity-concepts-pc-insurance) (Copyright 2014, All rights reserved. Fractal Analytics, Inc.)

Failure to submit a corrective action plan and to re-file rates/rules that are compliant with Maryland law may result in administrative action. Any questions or comments regarding this bulletin should be addressed to Geoffrey Cabin, Director of P & C Rates and Forms at [Geoffrey.cabin@maryland.gov](mailto:Geoffrey.cabin@maryland.gov) or at 410-468-2310.

**Therese M. Goldsmith  
Insurance Commissioner**

*Signature on original*

**By:**

**Sandra Castagna  
Associate Commissioner  
Property and Casualty**