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Underwriting

Avoiding Fraud at the Point of Sale

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Agenda

- Fraud – The issue and costs
- What to do?
 - Traditional approach
 - Perimeter defense
- Fraud correlation
- Loss ratio correlation
- Other findings
- Conclusions

Cost of fraud

\$80 billion (entire industry)¹

13% to 18% of total auto injury claim payments (\$5 to \$7 billion)²

\$40 billion (non-health); \$400 to \$700 per year per family³

\$64 billion (P&C) industry⁴

\$15.4 billion in lost auto premium⁵

10% of P&C claims, \$13.2 billion in personal auto⁶

1. Coalition Against Insurance Fraud (<http://www.insurancefraud.org/the-impact-of-insurance-fraud.htm>)

2. Insurance Research Council (http://www.insurance-research.org/sites/default/files/downloads/IRC_Fraud_NR.pdf)

3. FBI (http://www.insurance-research.org/sites/default/files/downloads/IRC_Fraud_NR.pdf)

4. Aite Study (<http://www.aitegroup.com/report/escalating-war-insurance-fraud-pc-carriers-and-fraudsters-their-games>)

5. QPC (http://www.verisk.com/underwriting/resources/qpc%20rating%20error%20report%202010_final.pdf)

6. SNL 2012 P&C Underwriting Analysis

Recent headlines

“Insurance Fraud: A \$40 billion battle” (*Chicago Tribune*, 5/3/2013)

“Feds allege \$279 million auto insurance fraud scheme in New York” (NBC News, 2/29/2012)

“Two North Texas women sentenced to federal prison for bilking auto insurance companies” (*Dallas News*, 11/27/2012)

“19 Fraudsters Nabbed As Florida PIP Reform Takes Hold” (PropertyCasualty360, 1/4/2013)

“Durham Group accused of staging car crashes for cash” (WRAL.com, 5/31/2013)

“Vandling man charged with insurance fraud” (*The Scranton Times – Tribune*, 2/25/2014)

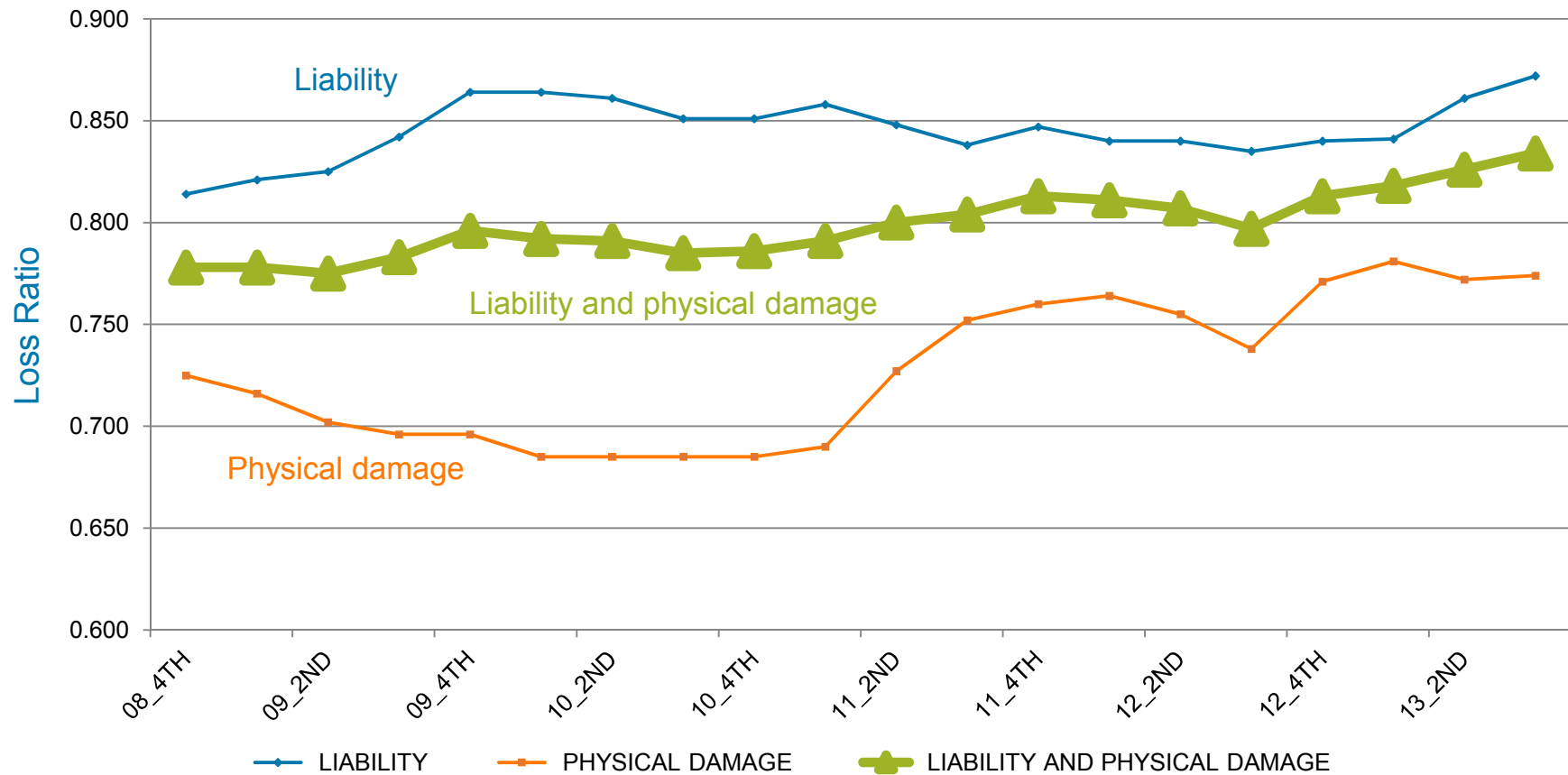
Minn. Man Charged In Auto Insurance Fraud (insurancenewsnet.com, 10/1/2013)

Insurer accuses 46 Minnesota chiropractors, MRI firm of fraud (*Minneapolis Star Tribune*, 10/15/2013)

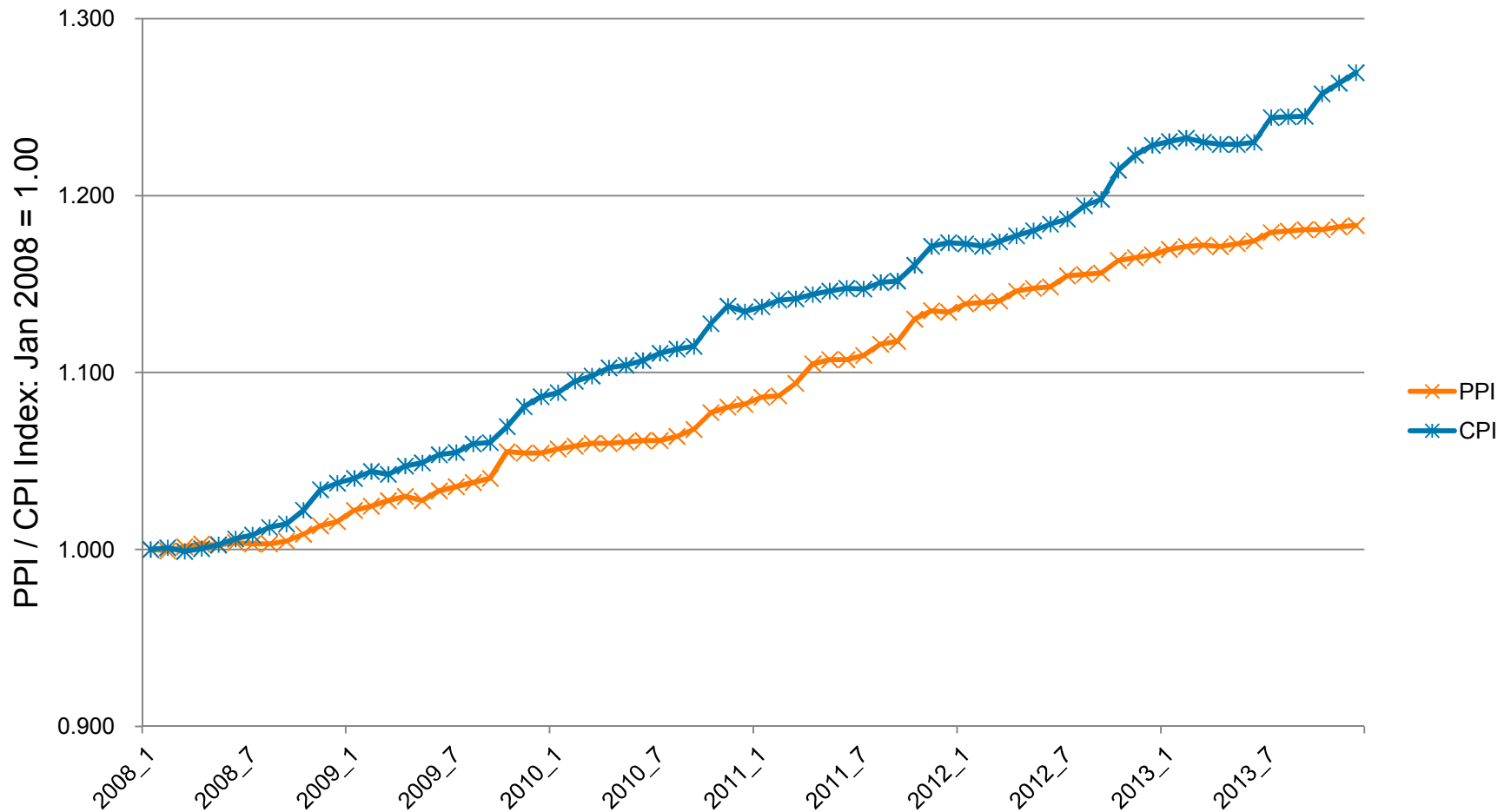
“Fort Myers chiropractor arrested for fraud” (NBC-2.com, 5/13/2013)



Loss ratio is increasing...

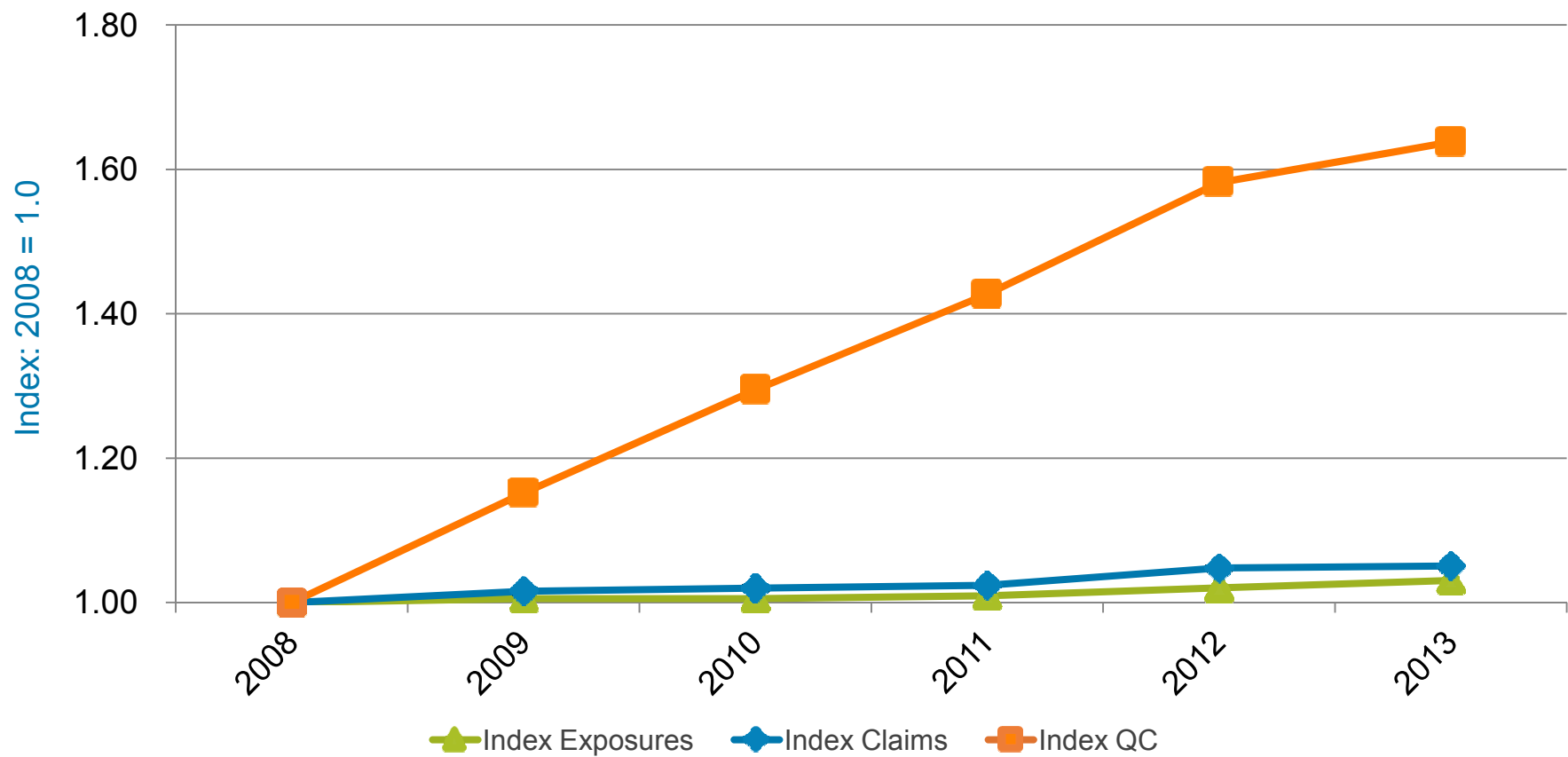


As rates and costs increase...



Source: BLS.gov

And questionable claims increase...



Sources: Index Exposures and Claims: ISO Fast Track; Questionable Claims: NICB Questionable Claims Report

What to do?

Most antifraud efforts target the claim.

- Traditional approach is to address fraud at the point of claim; too late, cost of litigation is often more than settling the claim.
- Statutes require some claims to be paid regardless.
- The desire: identify the *fraudulent claim* as early as possible.
- Almost 90% use technology to assist with fraud detection; less than half use it outside claims.



Is there a way to predict fraud at the **point of sale**?

Identify fraud at the point of sale

By validating the information on the application, can we predict:

1. A consumer's propensity to commit fraud at point of sale prior to bind (*hard fraud*)?
2. A consumer's propensity to exaggerate a claim (severity) and/or report nuisance claims (frequency) (*soft fraud*)?
3. A consumer's premium avoidance due to the purposeful misrepresentation of characteristics (*soft fraud*)?



Framework

Fraud is pervasive throughout all aspects of insurance. Carriers need an integrated multifactor framework designed to quantify and predict both hard and soft fraud:

1. Identity

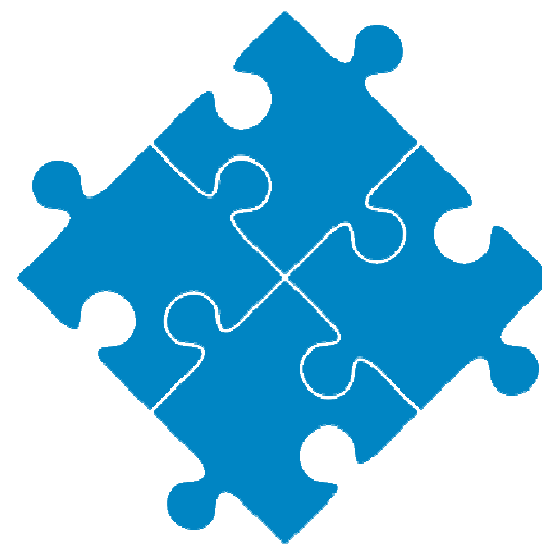
Verify consumers' identity. Are they who they say they are, or have they assumed an alternative identity?

2. Location/territory

Is the asset located where the consumer indicated it is?
What's the proximity to external risks/hazards?

3. Exposure(s)

Are consumers representing the risk adequately or have they masked/omitted characteristics that could affect rating?



Framework (continued)

4. Asset use

Does the consumer use the asset per the terms of the policy?

5. Asset ownership

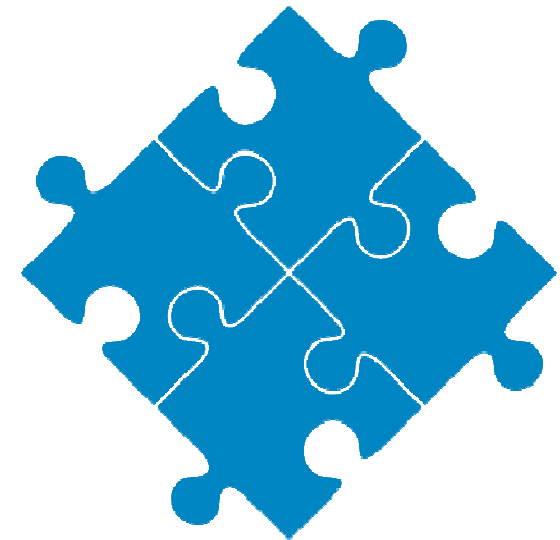
Is the consumer the owner or otherwise authorized to insure the property?

6. Rating variable validation

Did the consumer represent the characteristics and condition of the asset correctly?

7. Miscellaneous

Other verifications that do not fit into any of the other six categories; condition and restrictions fall into this category.



Study methodology

- Analyzed 3+ million policies (\$2.64 billion earned premium)
- 1.84 million associated claims (\$2.54 billion losses)
- 1,160,626 policies had no claims (38% of policies)
- 920,438 policies had nonsuspicious claims (50% of claims)
- 892,034 policies had suspicious claims (48.5% of claims)
- 26,982 flagged as known fraud (1.5% of claims)



Study methodology

We analyzed policyholder applications to see which exceptions had the highest correlation with known fraud claims.

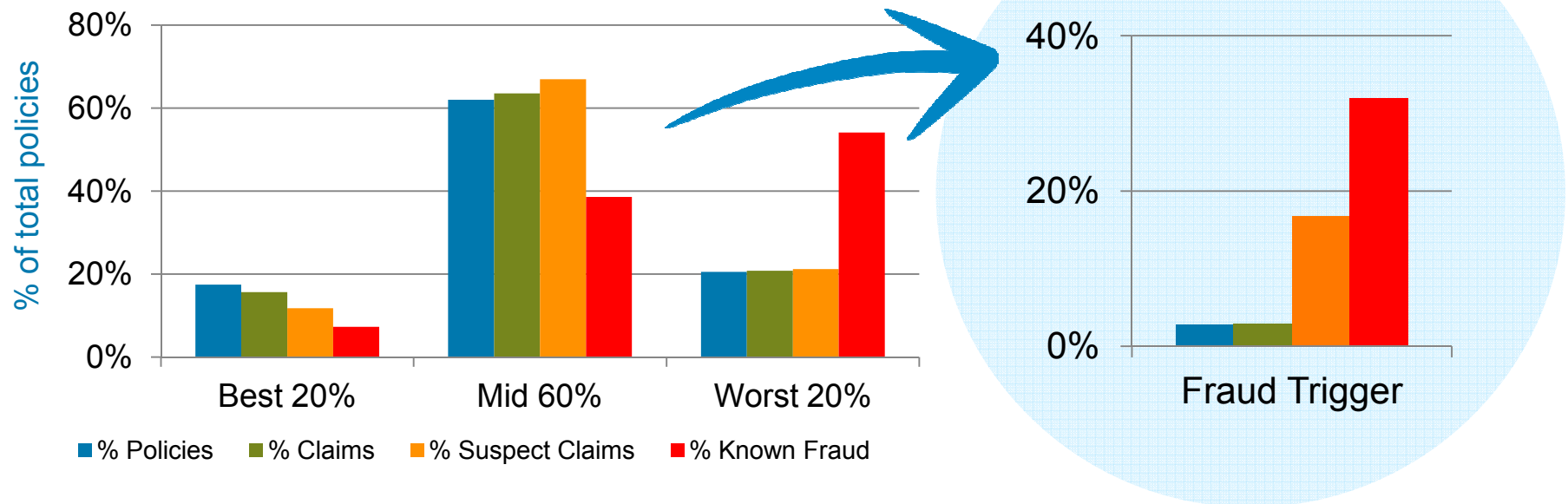
- Used 7-factor framework approach.

We performed a loss ratio analysis.

- Examined frequency, severity, and premium leakage/rate evasion.



High exception rate predicts known fraud claims



- The 20% of policies with the most exceptions are 5x more likely to have a known fraud claim.
- Policies with a fraud trigger on the application (2.8%) are 16 times more likely to have a known fraud claim.
- Conversely, the 20% of policies with the fewest exceptions are 60% less likely to have a known fraud claim.

Fraud triggers

Within the 7-factor framework, we have 2 major types of exceptions:



Application information cannot be confirmed.

Could be due to fraud, but could also be the result of a transitory lifestyle.

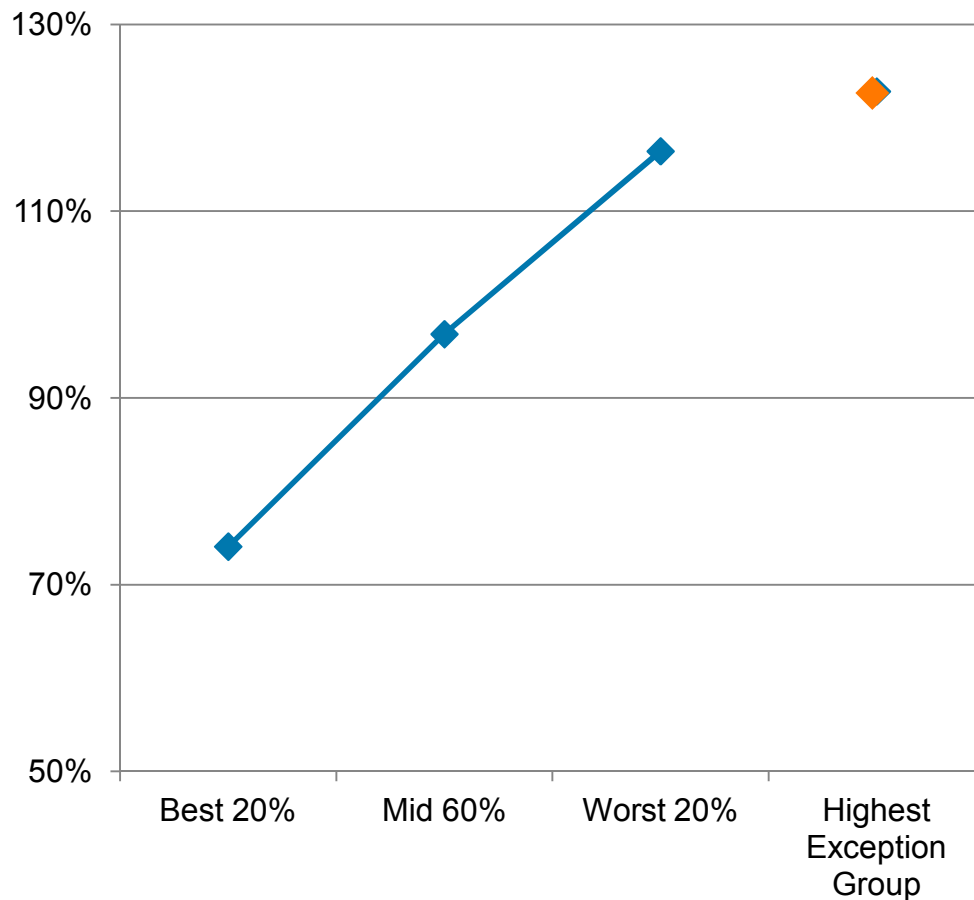


Application information is negatively confirmed.

Reflects information that is intentionally excluded or misrepresented (e.g., I “forgot about” my 16-year-old child).

Fraud triggers are the negative exceptions most highly correlated with known fraud claims.

High exception rate also predicts loss ratio

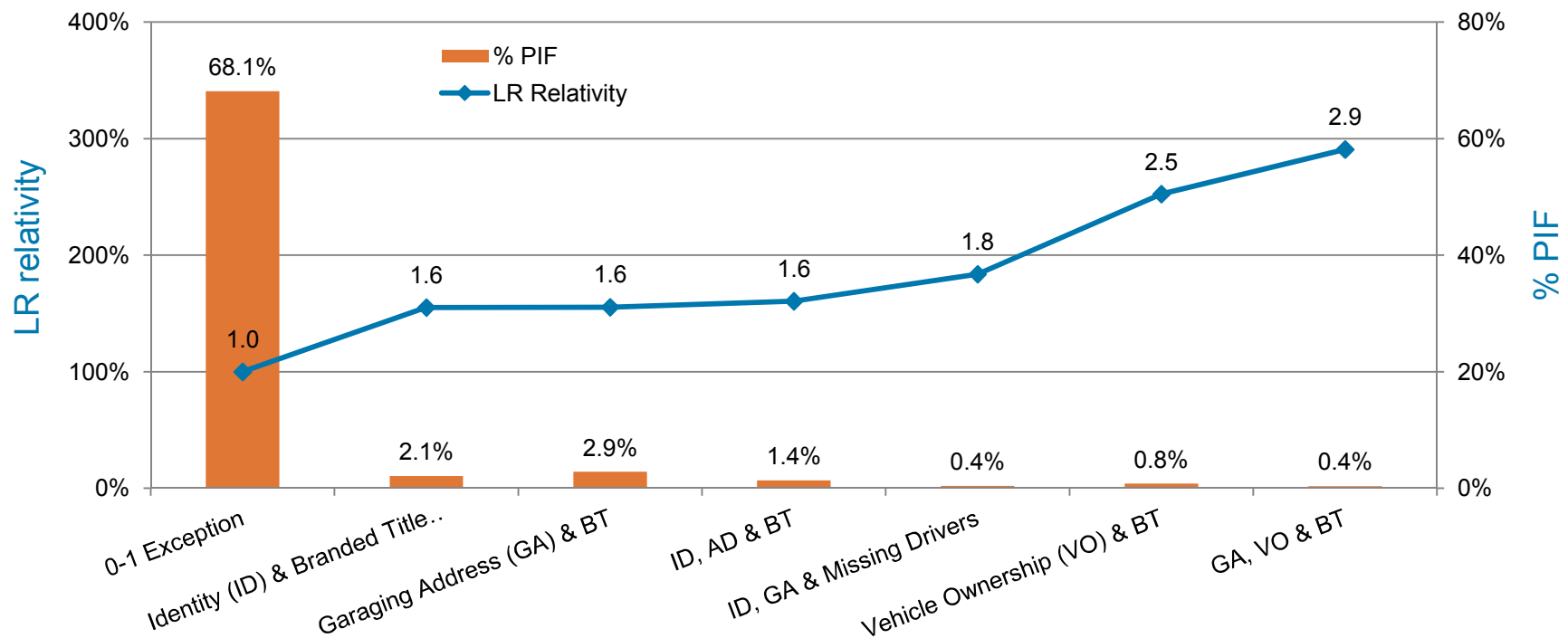


- In addition to predicting fraudulent claims, high incidence of application misrepresentation correlated to higher loss ratios.
- Studies of more recent data continue to show this relationship.

Findings from recent studies

More recent studies show correlations between types of exceptions and loss ratio:

- 0–1 exception group is base loss ratio.
- Identity and branded title have a 60% loss ratio relativity.
- Combination of garaging address, ownership, and branded title has the highest LR relativity.



Other interesting correlations

Individual triggers with high loss ratios

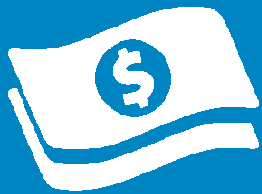
- Phone number = paging service
- Vehicle registration state \neq policy state

Foreign driver's license

- FDLs tend to have favorable performance, unless attempting to hide a valid state DL.



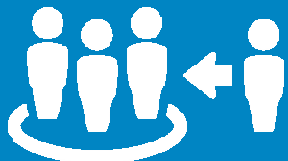
Conclusion



Once an insurer issues a policy and a loss occurs, avoiding a fraudulent claim is extremely difficult and expensive.



Insurers should use available data and technology to screen policies for fraud and misrepresentation early in the process, with minimal impact on production.



A “perimeter defense” is the most effective strategy. Keep fraudsters from infiltrating your book.

Questions?