GAO Highlights

Highlights of GAO-19-423, a report to congressional requesters

June 2019

INSURANCE MARKETS

Benefits and Challenges Presented by Innovative Uses of Technology

Why GAO Did This Study

The innovative use of technology by insurance companies (insurtech) is growing and offers the potential to improve customer experiences while also lowering insurer costs. Some stakeholders have raised questions about how certain uses of insurtech could create both risks for consumers and challenges for regulators, and whether some challenges might slow technological innovation in the insurance sector.

GAO was asked to provide information on insurtech activities in the property/casualty and life insurance sectors. This report (1) identifies new uses of technologies and potential benefits and challenges for insurers and their customers; and (2) discusses what stakeholders identified as key challenges that could affect the adoption of new technologies, and actions taken to address those challenges. GAO reviewed available literature; analyzed relevant laws and regulations; and conducted interviews with more than 35 stakeholders, including federal and state regulators, technology companies, insurers, and consumer groups (selected based on literature reviews and recommendations, and for relevance to the scope of GAO's review).

GAO is not making any recommendations in this report.

View GAO-19-423. For more information, contact Anna Maria Ortiz at (202) 512-8678 or ortiza@gao.gov.

What GAO Found

Insurtech companies (recently established companies bringing technology-enabled innovations to the insurance industry) as well as established insurers have begun to use technologies, including artificial intelligence (AI) and mobile applications, in an attempt to improve risk assessment and enhance customer experiences. For example:

- Consumers can purchase insurance products specifically tailored to their situation and needs, such as renters or auto insurance that can be turned on and off as needed using a mobile app.
- Some insurers have begun to use nontraditional data (such as from social media) to analyze policyholder risk, and use AI and complex algorithms to reduce costs by automating information gathering and risk assessment.

However, implementing these technologies can create potential challenges for insurers and risks for consumers, including the following:

- The use of AI to create underwriting models for determining premium rates can make it challenging for insurers to ensure that factors prohibited by regulation (such as race) are not used in models. Such models are often developed by data scientists who, unlike actuaries, may not fully understand insurance-specific requirements.
- Insurer collection and use of consumer data not provided by the consumer raise questions about data accuracy, privacy, and ownership.
- Some insurtechs sell coverage through nonadmitted insurers. As we have previously reported, nonadmitted insurers—unlike traditional insurers—are not required to be licensed in each state in which they sell insurance, and receive less regulatory oversight of their policies and rates. Also, if nonadmitted insurers became insolvent, state guaranty funds would not be available to help pay policyholder claims.

Stakeholders with whom GAO spoke identified challenges they said might affect adoption of innovative technologies. These include paper-based documentation requirements that do not accommodate online insurance transactions, and challenges for regulators in the evaluation of complex rating models. The National Association of Insurance Commissioners (NAIC) and state regulators have initiated a number of actions designed to address such concerns. For example:

- State insurance regulators, through an NAIC task force, have been examining regulatory areas that may pose obstacles for innovation, such as requirements for paper documentation or signatures.
- NAIC issued draft best practices for states to use when reviewing complex rating models.
- NAIC adopted a model law that creates a legal framework for states to use to require insurance companies to operate cybersecurity programs and protect consumer data.

Because many of these regulatory initiatives are still in development (or recently developed), the effect on innovation and consumer protection is unknown.