

Product Filing Review Handbook

The NAIC is the authoritative source for insurance industry information. Our expert solutions support the efforts of regulators, insurers and researchers by providing detailed and comprehensive insurance information. The NAIC offers a wide range of publications in the following categories:

Accounting & Reporting

Information about statutory accounting principles and the procedures necessary for filing financial annual statements and conducting risk-based capital calculations.

Consumer Information

Important answers to common questions about auto, home, health and life insurance — as well as buyer's guides on annuities, long-term care insurance and Medicare supplement plans.

Financial Regulation

Useful handbooks, compliance guides and reports on financial analysis, company licensing, state audit requirements and receiverships.

Legal

Comprehensive collection of NAIC model laws, regulations and guidelines; state laws on insurance topics; and other regulatory guidance on antifraud and consumer privacy.

Market Regulation

Regulatory and industry guidance on market-related issues, including antifraud, product filing requirements, producer licensing and market analysis.

NAIC Activities

NAIC member directories, in-depth reporting of state regulatory activities and official historical records of NAIC national meetings and other activities.

Special Studies

Studies, reports, handbooks and regulatory research conducted by NAIC members on a variety of insurance related topics.

Statistical Reports

Valuable and in-demand insurance industry-wide statistical data for various lines of business, including auto, home, health and life insurance.

Supplementary Products

Guidance manuals, handbooks, surveys and research on a wide variety of issues.

Capital Markets & Investment Analysis

Information regarding portfolio values and procedures for complying with NAIC reporting requirements.

White Papers

Relevant studies, guidance and NAIC policy positions on a variety of insurance topics.

**For more information about NAIC
publications, visit us at:**

http://www.naic.org/prod_serv_home.htm

© 2024 National Association of Insurance Commissioners. All rights reserved.

ISBN: 978-1-64179-394-0

Printed in the United States of America

No part of this book may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic or mechanical, including photocopying, recording, or any storage or retrieval system, without written permission from the NAIC.

NAIC Executive Office
1101 K Street NW
Suite 650
Washington, DC 20005
202.471.3990

NAIC Central Office
1100 Walnut Street
Suite 1000
Kansas City, MO 64106
816.842.3600

NAIC Capital Markets
& Investment Analysis Office
One New York Plaza, Suite 4210
New York, NY 10004
212.398.9000

PRODUCT FILING REVIEW HANDBOOK

TABLE OF CONTENTS

INTRODUCTION.....	1
Overview	1
Handbook Revisions.....	1
CHAPTER 1: A Brief History of Rate and Form Regulation	2
Early World History	2
Early U.S. History	2
<i>Paul v. Virginia</i>	2
Antitrust Laws	3
<i>Munn v. Illinois</i>	3
Life Insurance.....	3
The Armstrong and Merritt Committee Investigations.....	4
Development of Rating Bureaus.....	4
The Lockwood Committee Investigation	4
<i>United States of America v. South-Eastern Underwriters Association</i>	4
McCarran-Ferguson Act.....	5
The All-Industry Bill	5
Insurance Lines.....	5
Consumer Influence.....	6
Prospective Loss Cost.....	6
Notable State Uniformity Efforts	6
CHAPTER 2: Speed to Market	7
An Overview of Speed to Market.....	7
Speed-to-Market Tools.....	7
Uniform Review Standards Checklists.....	7
Uniform Transmittal Documents.....	8
Uniform Product Coding Matrices	8
SERFF	8
The Compact	8
CHAPTER 3: The Filing Process, Including Policy Form Review	9
The Filing	9
The Filer	9
The Reviewer	9
Policy Form Review	10
Standards for Policy Form Review	10
Speed-to-Market Imperatives	10

PRODUCT FILING REVIEW HANDBOOK

TABLE OF CONTENTS

CHAPTER 4: The Basics of Property and Casualty Rate Regulation	11
Introduction	11
Rating Laws.....	11
Rate Standards	12
Rate Justification and Supporting Data	12
Definitions of Data Elements	13
Number of Years of Historical Data.....	14
Segregation of Data	14
Data Adjustments	15
Premium Adjustments	15
Losses and LAE (DCC) Adjustments.....	17
Catastrophe or Large Loss Provisions	20
Loss Adjustment Expenses	21
Data Quality	21
Rate Justification: Overall Rate Level.....	21
Contingency Provision	22
Credibility.....	22
Calculation of Overall Rate Level Need: Methods.....	23
Rate Justification: Rating Factors.....	24
Calculation of Deductible Rating Factors.....	26
Calculation of Increased Limit Factors.....	26
Credibility for Rating Factors.....	27
Interaction Between Rating Variables (Multivariate Analysis).....	27
Approval of Classification Systems	27
Rating Tiers	27
Rate Modifications	27
Predictive Modeling	28
Advisory Organizations.....	30
Premium Selection Considerations.....	31
Installment Plans	31
Policy Fees	32
Regulatory Analysis	32
Additional Ratemaking Information.....	32
Summary	32
Chapter 4 Glossary	33

PRODUCT FILING REVIEW HANDBOOK

TABLE OF CONTENTS

CHAPTER 5: The Basics of Life and Annuity Regulation	35
Introduction	35
Laws and Regulations.....	35
Regulation of Life Insurance and Annuities	35
The Compact	35
Cash Surrender Values and Paid-Up Nonforfeiture Benefits	36
CHAPTER 6: The Basics of Health Insurance Contract and Rate Regulation.....	37
Introduction	37
Rating Laws and Guidance Manuals	37
Types of Health Insurance.....	37
Health Insurance Market Regulation	37
Rate Standards and Justification.....	38
CHAPTER 7: The Federal Affordable Care Act and Plan Management	42
Introduction	42
History	42
Categories of Regulatory Health Insurance Coverage Plans	42
Resources	43
Marketplace Types and Responsibilities	47
Marketplace Requirements	50
Form, Rate, and Plan Reviews Under the ACA	51
Chapter 7 Glossary	54

INTRODUCTION

Overview

This handbook provides basic information about the filing and review of rate, rule, and form filings. It also explains basic ratemaking processes for products that are subject to various forms of rate regulation. It provides guidance through procedures that states can implement uniformly to make the filing process more transparent and make it easier for insurers to achieve compliance.

Handbook Revisions

One of the Speed to Market (D) Working Group's charges is to facilitate the review and revision of the *Product Filing Review Handbook* as needed. A complete listing of the Speed to Market (D) Working Group's [yearly adopted charges](#) is found on the Working Group's web page. The mission of the Speed to Market (D) Working Group is to: 1) serve as the NAIC focal point for the modernization of the insurance product filing and review processes; 2) monitor the development and implementation of speed-to-market efficiencies and the System for Electronic Rate and Form Filing (SERFF); and 3) provide support to the Interstate Insurance Product Regulation Commission (Compact) for initiatives that require uniformity and policy changes within the states, where necessary.

Suggestions for improving or correcting information contained in this handbook may be made via the Speed to Market Filing Suggestion Form. This form can be accessed from the [SERFF website](#):

- Regulators: Visit www.serff.com, click on "Regulators," then click on "Speed to Market Filing Suggestion Form."
- Industry: Visit www.serff.com, click on "Speed to Market Working Group," and then on the Documents tab, click on "Speed to Market Filing Suggestion Form."

The Speed to Market (D) Working Group solicits comments or suggestions for consideration during the annual review of the *Product Filing Review Handbook*. Changes to the handbook may be considered at any time by the Working Group and are subject to the NAIC adoption process. Please note that the URLs provided are current as of the July 2025 technical (nonsubstantive) updates to the 2024 Product Filing Review Handbook.

CHAPTER 1

A Brief History of Rate and Form Regulation

To understand why insurance is regulated as it is today, some historical perspective is provided.

Early World History

Since ancient times, insurance has evolved to satisfy the risk-bearing needs of society. With the advent of trade, shipping, and credit facilities in medieval Europe, insurance arrangements also appeared. A number of insurance, financial, and commercial centers developed in Antwerp, Amsterdam, London, and several Italian cities. Marine insurance, for example, appeared in Italian ports as early as the 12th century. These centers became more prosperous, not only because they met commercial needs but also because various government sanctions ensured the enforcement of contracts.

By the end of the 18th century, London had surpassed other insurance markets. The Great Fire of London in 1666 helped lead the development of insurance in England and was eventually replicated throughout the British Empire. Insurance in the United States developed from these roots.

Early U.S. History

The first U.S. insurance plans were based on membership in an organization. In 1736, the Friendly Society, operating under a Royal Charter from England, was formed as a mutual company in South Carolina. It covered the fire losses of its members, who contributed directly to a fund that paid claims.

Benjamin Franklin organized the first incorporated fire insurance company in colonial America, the Philadelphia Contributionship, in 1752. Today, the insurer remains the oldest mutual fire insurance company in business in America. Fire marks were used to identify the houses insured by the insurance company so that its firefighting brigade would know which dwellings to protect. The Philadelphia Contributionship selected four hands crossed and clasped as its fire mark, a form commonly known as “hand-in-hand.”

After the U.S. achieved colonial independence from England, insurance companies were chartered by individual states, thus beginning regulatory limitations on insurer activities and insurer investments. By 1824, the state of New York imposed a 10% tax on premiums written by fire insurance companies incorporated in other states. This practice was quickly adopted by many states.

Insurance company financial examinations began in New York in 1828. By 1853, New York law required that all companies incorporated in that state file prescribed annual reports signed by officers under oath. This 1853 enabling law contained three sections (marine, fire, and life) and was widely imitated by other states. At the time, insurance companies in the United States were limited to one section, while insurance companies in other parts of the world were not restricted in this way.

As the United States progressed through the Industrial Revolution, insurance companies formed and became more active. By the mid-1800s, insurers were thriving in New England and developing their own customized fire insurance contracts. The absence of standard wording in these contracts presented problems in the interpretation of coverage. It became clear that a more uniform approach was desirable. Massachusetts adopted a standard form for writing fire insurance in 1873, followed in the next few years by several other states. The New York State Legislature, in collaboration with the insurance industry, adopted a standard fire policy form in 1887, revised it in 1918, and by July 1, 1943, it had evolved into the “165-line form,” popularly referred to as the New York Standard Fire Policy. The 165-line form was soon approved by reference in most states, with some states during that period incorporating the exact wording into statute.

With economic growth came increasing awareness of the need for state government oversight of the insurance industry. In 1851, the first state insurance commissioner was appointed in New Hampshire. By 1870, many states had appointed officials to oversee insurance.

Paul v. Virginia

The question of whether the states or the federal government should regulate the business of insurance has been in existence since the mid-1800s. In 1869, the U.S. Supreme Court held in *Paul v. Virginia* that insurance was not commerce and thus was not subject to federal regulation under interstate commerce laws, helping to clarify the matter. This quintessential case has shaped the regulation of insurance to this day.

The following paragraphs describe events and arguments related to *Paul v. Virginia*:

In May 1866 Samuel Paul, a resident of Virginia, was appointed the agent for several New York insurance companies. Earlier that year the Legislature of Virginia had passed a statute providing that no person shall, without a license authorized by law, act as agent for any foreign (other state) insurance company. The New York insurance companies were hoping to invalidate the Virginia statute through the court case.

Samuel Paul did not comply with all requirements of the Virginia statute for obtaining the required license, so it was disallowed. However, Mr. Paul subsequently sold a fire insurance policy in Virginia and was therefore convicted by the Virginia Circuit Court. The case ultimately was appealed to the U.S. Supreme Court on the grounds of writ of error, principally being that the judgment violated the Commerce Clause, which empowers Congress “to regulate commerce with foreign nations, and among the several states.”

The U.S. Supreme Court decision on *Paul v. Virginia*, read Nov. 1, 1869, upheld the Virginia court decision and added that such law does not conflict with the provisions of the Constitution—that Congress shall have power to regulate commerce among the several states. The Supreme Court justices further noted the following:

Issuing a policy of insurance is not a transaction of commerce. The policies are simply contracts of indemnity against loss by fire, entered into between the corporation and the assured, for a consideration paid by the latter. These contracts are not articles of commerce in any proper meaning of the word. Such contracts are not interstate transactions, though the parties may be domiciled in different states. The policies do not take effect—are not executed contracts—until delivered by the agent in Virginia. They are, then, local transactions governed by the local law.

Paul v. Virginia, therefore, was the reason that states were initially charged to regulate the business of insurance. The National Insurance Convention of the United States was formed in 1871 in large part because of *Paul v. Virginia*. The National Insurance Convention of the United States provided the insurance commissioners with a national forum for discussion of common issues and interests that transcended the boundaries of their own jurisdictions (known since December 1935 as the National Association of Insurance Commissioners—NAIC).

Antitrust Laws

A fundamental political question of the last quarter of the 19th century and first quarter of the 20th century in the United States pertained to trusts, i.e., combinations of business firms that attempted to dominate the market and typically control pricing. For example, the Standard Oil Trust (established in 1879) combined the property of more than 40 petroleum refining and pipeline companies, representing approximately 90% of that industry. The market power of such combinations concerned consumers and led to political action. During the years 1887 through 1916, the following major legislation was passed by the U.S. Congress, reflecting a new business climate and new role for government: the Interstate Commerce Act, the Sherman Antitrust Act, the Clayton Antitrust Act, and the Federal Reserve Act.

The passage of these laws was intended to remedy trust abuses of economic power by outlawing collusion or conspiracy that restrained trade. Insurance consumers had hoped that state and federal antitrust laws would limit the ability of insurers to raise rates. However, the application of the antitrust laws to insurance proved to be a complicated matter.

Munn v. Illinois

Several states passed laws in the 1870s to regulate rates charged by railroads and other private firms. These laws were challenged and appealed to the U.S. Supreme Court in the case of *Munn v. Illinois*. In that case, the Supreme Court upheld the power of a state to regulate the rates charged by a private business, provided the regulated market was “affected with the public interest.” This decision was important as it resulted in a distinct set of legal principles for quasi-public or public service companies. These firms, unlike corporations in general, were therefore obligated to provide universal service and uphold the public interest for the common good.

Life Insurance

While of little importance in the early history of the United States, by the end of the 19th century, life insurance companies enjoyed spectacular growth, which turned them into dominant financial institutions with considerable influence.

The Armstrong and Merritt Committee Investigations

In the early 1900s, there were several abuses in the life insurance industry regarding sales practices, investment, and several management practices by New York-based companies. The Armstrong Committee investigation, which uncovered numerous financial improprieties, began in New York in 1905 and shaped many insurance laws, including the prior approval insurance product and rate requirements that have been in place in some jurisdictions for more than a century. One important outcome of the Armstrong Committee investigations and subsequent legislation was in policy language and provisions. The first insurance policy provision regulation was the Uniform Standard Provisions Law, which was developed in 1911.

The Armstrong Committee investigation encouraged leading New York legislators to also call for investigations into the fire insurance industry, where they believed similar corruption or profiteering would be identified. The Merritt Committee, which met from 1910 to 1911, was formed through the New York State Legislature for this purpose but instead found that most fire insurance companies brought in only modest profits and concluded that cooperation among firms was often in the public interest.

However, the Merritt Committee suggested the licensing of agents, the admission of miscellaneous mutual companies, and a prohibition against rebating. The Merritt Committee endorsed schedule rating, which rating bureaus had developed to charge lower rates for buildings with sprinklers or construction that reduced the probability of fire damage. Schedule rating, however, would require insurance companies to cooperate through rating bureaus. The New York State Legislature responded with a 1911 rating law that authorized four rating bureaus to operate in that state, the law provided that each bureau must disclose their procedures and submit to examination by the state insurance department.

The laws written following the Armstrong and Merritt Committee investigations mandated New York state to review rates to prevent discrimination. The laws also required insurance companies to submit uniform statistics on premiums and losses for the first time. Other states soon adopted similar requirements, and by 1920, more than half of the states had some form of rate regulation.

Development of Rating Bureaus

The early rating bureaus (a type of advisory organization) were privately owned to avoid antitrust laws. Due to the desire for uniform approaches to ratemaking and form language, local fire insurance rating bureaus were replaced by regional and then inter-regional rating bureaus or rating organizations. Separate rating bureaus also developed for other lines of insurance: inland marine, casualty, surety, workers' compensation, and multiline insurance.

Today, advisory organizations offer actuarial, statistical, underwriting, and standard policy language form services.

The Lockwood Committee Investigation

Another New York legislative investigation, the Lockwood Committee, confirmed the continuance of insurance practice inequities. As a result, the New York Rate Law of 1922 was passed, which required that the New York State Insurance Department regulate insurance rates for all lines other than the following: life, marine, and accident and health. The New York State Insurance Department was to attempt to determine if the rates were "reasonable," i.e., neither excessive nor inadequate. After the passage of the New York Rate Law of 1922, casualty insurance companies in New York were subsequently required to file a Casualty Experience Exhibit with the state. Other states also continued to expand their regulation of insurance, with rating bureaus becoming the preferred way to gather needed statistical data. The bureaus, therefore, began to impose considerable structure on the insurance industry.

United States of America v. South-Eastern Underwriters Association

In 1944, a landmark insurance case came before the U.S. Supreme Court. *United States of America v. South-Eastern Underwriters Association* reversed the interstate commerce decision from *Paul v. Virginia* by declaring that insurance was interstate commerce subject to federal regulation. With this decision, the antitrust provisions of the Sherman, Clayton, and Robinson-Patman Acts applied to the business of insurance.

A dissenting justice vote expressed the following sentiment:

For 150 years Congress never has undertaken to regulate the business of insurance. Therefore, to give the public any protection against abuses to which that business is peculiarly susceptible, the states have had to regulate it. The states began nearly a century ago to regulate insurance and state regulation—while no doubt of uneven quality—today is a successful going concern. The Court’s decision at very least will require an extensive overhauling of state legislation relating to taxation and supervision. The whole legal basis will have to be reconsidered. What will be irretrievably lost and what may be salvaged no one now can say, and it will take a generation of litigation to determine. Certainly the states lose very important controls and very considerable revenues.

McCarran-Ferguson Act

United States of America v. South-Eastern Underwriters Association created a flurry of activity among insurance companies and insurance regulators alike, which led to heavy lobbying of the U.S. Congress to reverse the U.S. Supreme Court decision. The next year, out of the turmoil came the McCarran-Ferguson Act (Public Law 15), which protects the insurance industry from federal antitrust laws to the extent that the states would actively regulate insurer conduct. Once again, under the McCarran-Ferguson Act, state insurance regulation was dramatically changed. The following are excerpts from Public Law 15 (approved by the U.S. Congress on March 9, 1945):

The Congress hereby declares that the continued regulation and taxation by the states of the business of insurance is in the public interest, and that silence on the part of the Congress shall not be construed to impose any barrier to the regulation or taxation of such business by the states. No Act of Congress shall be construed to invalidate, impair, or supersede any law enacted by any state for the purpose of regulating the business of insurance, or which imposes a fee or tax upon such business, unless such Act specifically relates to the business of insurance.

The threat of federal intervention brought state insurance regulators together in support of Public Law 15, and since its passage, the states have shown more interest in enacting legislation that closely follows NAIC-adopted model laws and regulations.

The All-Industry Bill

The NAIC held extensive hearings after the passage of the McCarran-Ferguson Act to determine the best framework for state-based insurance regulation. The NAIC hearings, under the leadership of New York State Insurance Superintendent Robert Dineen, then NAIC president, resulted in proposed legislation called the All-Industry Bill, which was adopted by the NAIC as a model law in 1946. By 1948, every state had enacted a rate regulatory law, typically patterned after the All-Industry Bill, to meet the provisions of the McCarran-Ferguson Act, thereby allowing insurance to be exempt from federal antitrust laws. This served to further entrench the bureaus—who made the rates—with deviations and independent filings being the exception.

Insurance Lines

As early as 1871, the New York insurance superintendent proposed to the National Convention of Insurance Commissioners that life insurance companies should not be allowed to write any accident or casualty insurance. States generally followed the New York example, with its corporate state law restricting the underwriting authority of insurance companies. Therefore, when a new insurer applied for a corporate charter, it had to specify its business type as either fire, marine, or life. The new requirement not only separated life insurance from other lines of business, but it also precluded any single insurer from writing both property and casualty insurance. To overcome these restrictions, U.S. insurers organized groups of companies writing different lines of business but owned in common.

The New York practice of restricting an insurance company from underwriting certain lines prevailed nationwide because of the so-called Appleton Rule (promulgated by New York Deputy Superintendent of Insurance H.D. Appleton). The Appleton Rule, which by 1940 had been incorporated into the insurance law of New York, required all insurance companies licensed in the state of New York to accept this limitation wherever they operated. Because most major insurance companies wanted to operate in New York, they accepted this “separation of business lines” rule.

There were some critics of the Appleton Rule, who believed it led to undesirable consequences. For example, it was perceived that the Appleton Rule might create a vacuum where some serious hazards could find no U.S. protection, resulting in protection through foreign (i.e., alien) insurance markets. In 1943, the NAIC formed the Diemand Committee, which recommended that fire, marine, casualty, and surety companies be permitted to write any kind of insurance except life outside the United States

and to accept reinsurance for the same lines within the United States. It also recommended that insurance companies be permitted to write comprehensive automobile policies, comprehensive aviation policies, and personal property floaters. The NAIC adopted the Diemand Committee's recommendations in June 1944 and referred the recommendations to the states.

In 1949, New York authorized full underwriting powers to fire and marine, and casualty and surety insurance companies—proving to be a turning point for all other states to enact similar legislation. These changes permitted insurance companies to operate as multiline companies by combining different types of coverage into a single policy.

Consumer Influence

The fundamental insurance issues that concern consumers tend to involve policy rating. Rates that are adequate but not excessive or unfairly discriminatory are often difficult to determine and subject to contention. This problem was at the center of consumer unrest regarding the insurance marketplace throughout the 20th century. High insurance rates could lead to consumer protests, but the lowering rates could lead to insurer insolvency—both of which ultimately harm the consumer.

In 1947, New York enacted an insurance guaranty fund law. The law assessed all insurance companies writing business in that state a percentage of premiums to be placed in a New York guaranty fund for the purpose of paying unsatisfied claims against insolvent insurers. All other states enacted similar laws to establish their own guaranty funds.

Beginning in the late 1960s and continuing through the following two decades, many states replaced their prior approval laws (where rates must be filed and approved by the state insurance department before use) with some type of open competition law (e.g., modified prior approval, flex rating, file and use, use and file, or no file). By 1987, competitive rating laws were enacted in several states. In contrast, a few states required insurance companies to roll back their rates. For example, the 1988 passage of Proposition 103 in California required insurance companies to reduce most insurance rates to 20% below the rates that existed prior to Nov. 8, 1987.

Prospective Loss Cost

During the NAIC 1988 Winter National Meeting, a working group was formed to review the role of advisory organizations in preparing and filing final rates. After holding several meetings, the working group concluded that advisory organizations should be prohibited from preparing and distributing final rates for subscribing company members. However, the working group recognized that statistical and administrative advantages exist for having a central agent collect and analyze loss data, but for competitive reasons, the working group believed insurance companies should develop their own expense and profit-loading factors.

Reacting to this working group recommendation and external pressure to limit insurers' antitrust exemptions due to perceived anticompetitive rating practices, advisory organizations, such as the Insurance Services Office (ISO) and the National Council on Compensation Insurance (NCCI), announced in the late 1980s that they would no longer be preparing and filing final rates for their members. Instead, advisory organizations would only file the loss component of rates (termed "advisory prospective loss costs") and leave it up to member insurance companies to determine and file their operating and underwriting expenses and profits.

Notable State Uniformity Efforts

- **Terrorism Model Bulletins**

A model bulletin addressing insurance coverage regarding acts of terrorism was first adopted by the NAIC members on Nov. 26, 2002. The model bulletin provided voluntary filing procedures for property/casualty (P/C) insurers writing commercial lines coverage to help them obtain expeditious compliance with the provisions of the Terrorism Risk Insurance Act of 2002 (TRIA). Through diligence of the insurance commissioners, the model bulletin was adopted on the day that former President George W. Bush signed TRIA into law. As TRIA is extended, insurance commissioners and their staff quickly adopt revised model bulletins, procedures, and disclosure forms for insurers to use.

- **Speed-to-Market Initiatives**

SERFF and the Compact are two key speed-to-market initiatives of the NAIC.

CHAPTER 2

Speed to Market

An Overview of Speed to Market

In the mid-1990s, regulators and industry representatives began to discuss compliance challenges with rate and form filing that industry professionals faced. There was consensus among the parties that the existing paper-intensive rate and form filing process lacked efficiency and required modernization.

By March 2000, the NAIC issued a *Statement of Intent—The Future of Insurance Regulation* that focused on modernizing many facets of the state-based insurance regulation schema and was designed to further improve insurance marketplace efficiencies and accommodate insurance consumers. Insurance regulators referred to this plan as the “speed-to-market” initiative.

In their efforts to promote speed to market, state insurance regulators focused attention on four primary areas: 1) integration of multistate regulatory procedures with individual state regulatory requirements; 2) encouraging states to adopt regulatory environments that place greater reliance on competition for commercial lines insurance products; 3) full implementation of System for Electronic Rates & Forms Filing (SERFF), including integration with operational efficiencies developed for the achievement of speed-to-market goals; and 4) development and implementation of a central point of filing for life and health products to develop uniform national product standards. Through the efforts of state insurance commissioners and with the support of state legislatures, the goal was to provide an efficient and responsive regulatory environment for both insurers and insurance consumers.

Speed to market benefits both companies and consumers. Faster delivery of a new product gives companies more flexibility in reacting to changes in the market, resulting in products that meet consumers' current needs.

The NAIC is a central repository for information, development, and support tools to achieve speed to market and uniformity across the states. The best way for the NAIC to keep on track with the needs of this dynamic industry is to receive input from the individuals who use the products and are involved in the regulatory process on a day-to-day basis. The Speed to Market (D) Working Group provides a forum for regulators, filers, and interested parties to make suggestions for enhancements or additions to speed-to-market initiatives. The Working Group monitors the development and implementation of national standards in conjunction with the Interstate Insurance Product Regulation Commission (Compact), as well as modernization efforts to SERFF. The Working Group is also responsible for writing and updating the *Product Filing Review Handbook*. Additional details on the Working Group's charges are located on the [Speed to Market \(D\) Working Group page](#).

Speed-to-Market Tools

The speed-to-market tools provide a more streamlined approach in the regulatory submission process, while maintaining state-specific statutory requirements.

Suggestions for improving these tools may be made via the Speed to Market Filing Suggestion Form. This form may be accessed from the [SERFF website](#) as follows:

- Regulators: Visit www.serff.com, click on “Regulators,” then click on “Speed to Market Filing Suggestion Form.”
- Industry: Visit www.serff.com, click on “Speed to Market Working Group,” and then on the Documents tab, click on “Speed to Market Filing Suggestion Form.”

Uniform Review Standards Checklists

The Review Standards Checklists were designed to help insurance companies verify the filing requirements of a state before making a rate or policy form filing. The checklists provide information regarding specific state statutes, regulations, bulletins, or case law that pertains to insurance products. Some states post Review Standards Checklists to their state websites, while others incorporate the contents of the checklists into the SERFF filing submission requirements.

The Review Standards Checklist Best Practices and the Instruction for Completion of Checklists are provided on the [NAIC website](#),

Uniform Transmittal Documents

The Property & Casualty Transmittal Document and the Life, Accident & Health, Annuity, Credit Transmittal Document each provide a uniform transmittal form to be completed by the industry filer whenever a filing is submitted. The transmittal documents are designed to obtain essential information in a uniform manner for evaluating rate, rule, and/or policy form filings. The transmittal documents are accompanied by a description of items listed within the document. The Uniform Transmittal Documents are found on the [NAIC website](#). All Uniform Transmittal Document fields have been built directly into SERFF and are part of every SERFF filing.

Uniform Product Coding Matrices

The Uniform Property and Casualty Product Coding Matrix and the Uniform Life, Accident/Health, Annuity, Credit Product Coding Matrix (PCMs) provide uniform product naming conventions, consistent terminology, a numerical coding system and descriptions for use in product filings. The PCMs standardize naming conventions of specific products by type of insurance and subtype of insurance and are available on the [NAIC website](#).

The PCMs are typically updated on an annual basis depending on the current needs of the market. All users may submit suggestions for PCM changes through the state suggestion submission guidelines. Suggestions for future PCM changes may be made via the Speed to Market Filing Suggestion Form. Updates, if any, are effective Jan. 1 of each year.

SERFF

Nearly every jurisdiction accepts rate and form filings via SERFF. More than 8,200 insurance companies, third-party filers, advisory organizations, and other companies make filings electronically through SERFF to the individual jurisdictions. SERFF processes over half a million transactions annually.

SERFF is a web-based application designed to provide an efficient process for rate, rule, and form filing and review. Filings are created and submitted by industry filers for review.

SERFF facilitates communication, management, analysis, and electronic storage of documents and supporting information. It also provides up-to-date filing requirements. SERFF also provides a flexible option of compliance with public access laws. Using SERFF as a single system for rates, rules, and forms eliminates the cost of alternative internal storage and reporting systems.

More detail about SERFF functionality is available on the [SERFF website](#).

The Compact

The Compact is an instrumentality of the compacting states that have adopted the Compact law. The Compact operates through uniform standards for insurance products developed in a collaborative manner with Compact member jurisdictions and industry representatives. The Compact allows companies to compete more effectively in the modern global financial marketplace, while continuing to provide protection for consumers. The Compact started receiving and reviewing product filings in 2007. The majority of jurisdictions are members representing more than three-quarters of the insurance premium volume in the United States.

The uniform standards-setting process at the Compact is conducted through comprehensive public notice and comment periods that afford full opportunity for input to industry, consumers, and the general public. The Compact ensures that products can quickly enter the market and that those products are suitable for consumers, with appropriate protections in place. For more information, visit the [Compact website](#).

The Compact establishes a central filing point via SERFF for select individual and group life, annuity, disability income, and individual long-term care insurance products. In the event of approval, an insurer would then be able to sell its products in multiple states without separate filings in each state.

CHAPTER 3

The Filing Process, Including Policy Form Review

The insurance filing process is a cooperative effort between the filer and the regulator. In this process, the filer submits a proposed product or revisions to an existing product to the regulator for review and/or approval. The product must comply with applicable federal laws, state laws, regulations, and bulletins.

The Filing

Filings can be made for a single insurance company or multiple insurance companies within a group. The filings can be made by an insurance company or a contracted third-party filer. In addition, advisory organizations such as the American Association of Insurance Services (AAIS), the Insurance Services Office (ISO), the National Council on Compensation Insurance (NCCI), and the Surety and Fidelity Association of America (SFAA) are authorized to make insurance filings for or on behalf of insurers.

States determine what needs to be filed (i.e., rates, rating rules, policy forms, underwriting rules, etc.) which may vary by product or filer. Certain filings might simply be approved when received, while others might require actuarial analysis and legal review.

Most filings are modifications to existing programs in response to enacted legislation, regulations, court decisions, or to enhance an existing program. Some filings will pertain to an insurer's response to material filed on its behalf by the advisory organizations.

Rate filings are generally made by insurers on a regular basis in response to updated loss experience, as discussed in later chapters. Rate filings might also be prompted by a loss cost filing made by an insurer's advisory organization.

In most states member insurers may authorize these entities to make filings on their behalf. Insurers may file to 1) implement the material at another time, 2) not implement, or 3) implement with modifications.

The Filer

The entity making the filing (e.g., insurance company, rate service organization (RSO) or third-party filer) is referred to as the "filer." The steps in the insurance product development cycle that an insurer or RSO might take to bring a new insurance product before a state insurance department regulatory agency are described below.

The filer identifies a need for the insurance product. This step is followed by drafting the contract language, including the policy form, the cover page or declarations, and any endorsements that might be used to amend the policy. Actuaries would price the product and develop rating rules or actuarial memoranda. The filer would develop underwriting rules to guide marketing and underwriting staff in deciding whom to accept as a policyholder and whether other coverage limitations are required.

Once a contract has been drafted and priced, the filer needs to determine whether the product needs to be filed with an insurance regulator. Ideally, the filer would review applicable state-specific product standards and filing requirements during the product development phase to assure that the submitted filing is complete and compliant so that an expeditious approval/acceptance disposition can be anticipated. The filing process is a two-way street. Delays occur when a filer has not taken the time during the product development process to correctly identify state-specific product regulatory requirements.

The Reviewer

Once a state insurance regulatory agency (the regulator) receives a filing, a typical process is outlined below:

- **Filing intake:** If the filing is complete, it is then assigned to a reviewer. If the filing is found to be incomplete, the filing may be rejected, or additional information may be requested.
- **Reviewer:** One or more rate and/or form reviewers analyze the filing for completeness, compliance with laws and regulations, and any other factors applicable for the type of insurance being filed. If the filing is found to be in compliance, the reviewer will approve/accept the filing or recommend approval/acceptance (if required) to the filing manager. If the filing is found not to be in compliance, communication from the regulator will be sent to the filer, explaining filing deficiencies. Some states specify the timeframe within which the deficiencies are expected to be remedied. If the filing is complete and in compliance with applicable laws and regulations, then the filing is approved or accepted.

The above guidance for filers and reviewers provides examples of how these processes generally work. A filing can be handled more expeditiously if the initial submission is complete because less time is spent sending and receiving communications. Much time may be lost waiting for correspondence to be sent and received between the filer and the reviewer. It is therefore in the interest of both the filer and the reviewer, when correspondence is necessary, to exchange information with courtesy, promptness, and clarity.

Policy Form Review

Policy form review ensures protection for the public. For example, these reviews confirm delivery of benefits to the policyholder, inclusion of provisions that are specified in law or regulation, and exclusion of provisions that are prohibited by law or regulation.

When used in this chapter, the term “policy form” includes policies, certificates, applications, riders, declarations or information page, amendments, and endorsements, etc., as well as notices, disclosures, outlines of coverage, and other forms required for use with any type of policy contract, including advertising material, where applicable. “Advertising material” usually includes any advertising or promotional literature that includes an invitation to inquire or contract.

Standards for Policy Form Review

The policy form review determines if a particular product offering meets the state’s definition of an insurance product and if that insurer is licensed in their state to sell that line of insurance. Additionally, the review determines if the policy forms comply with laws and/or regulations related to the product that is being offered, which may include any readability requirements.

When applicable, the policy form reviewer might need to coordinate activities with the rate filing reviewer for implementation effective date consistency for rate, rule, and form filings.

Speed-to-Market Imperatives

Through a variety of speed-to-market initiatives, states have made significant improvements in the transparency of regulatory filing requirements. It is easy to process a filing that is fully compliant. No communication with the filer is needed, other than to send a notice that the filing is approved or acceptable for use. In contrast, noncompliant filings require a great deal of time to document the shortcomings in the filing. Adhering to filing and product requirements shortens the review time and helps get products to market sooner.

Filings submitted through the Compact need to meet the filing submission requirements contained in the applicable Uniform Product Standard for the product being filed.

CHAPTER 4

The Basics of Property and Casualty Rate Regulation

Introduction

This chapter provides an overview of rate regulation for property/casualty (P/C) lines of business, including information about typical state rating laws and rate standards, ratemaking data, and common regulatory issues. This should not be viewed as a step-by-step process to the development of rates but rather an outline of the potential process and issues.

Some calculations are provided throughout the chapter to aid understanding of subjects, but not all regulatory reviewers are required to understand the mathematical or actuarial aspects of these calculations. To be prepared for actuarial review of rate filings, additional actuarial training is needed. Terms to be familiar with are further defined at the end of the chapter.

Rating Laws

Each state legislature has enacted state insurance rating laws (except Illinois, which has no rating law). Some of these laws are based on the following NAIC P/C model rating laws and guidelines:

- Model #777: *Property and Casualty Commercial Rate and Policy Form Model Law*
- Guideline #1775: *Property and Casualty Model Rating Law (File and Use Version)*
- Guideline #1780: *Property and Casualty Model Rating Law (Prior Approval Version)*

Other laws are still from the All-Industry Bills of 1947, prior to promulgation of the NAIC model laws. [NAIC model laws](#) are available on the NAIC website. Model laws that do not appear in a search on the [NAIC model laws](#) web page are accessible at the [NAIC Library](#).

Each state regulator adopts the language needed to implement the state insurance rating laws. Rating laws are often classified as prior approval, file and use or use and file (competitive), no file (open competition), or flex rating. The terms of the classification can vary by state, but generally, the following definitions are used:

- **Prior approval rating laws** are when rates must be filed with and approved by the state insurance department before they can be used. Approval can be by means of a deemer provision, which indicates approval if rates are not denied within a specified number of days (e.g., 30 days).
- **Competitive rating laws** typically allow use of rates as long as they are filed. Two variations of competitive rating laws are 1) file and use and 2) use and file.
 - **File and use rating laws** are those when the rates can be introduced into the market at the same time as they are being filed with the insurance regulator. Specific approval is not required, but the department retains the right of subsequent disapproval. In most instances, the subsequent disapproval is on a prospective basis only. In some states, refunds can be required.
 - **Use and file rating laws** are those when the rates can be introduced into the marketplace and must be filed with the regulator at a specified later date.
- **No file or open competition rating laws** do not require the rates to be filed with or approved by the state insurance department. However, the company must maintain records of experience and other information used in developing the rates and make these available to the commissioner upon request. Rates can be modified without notification to the insurance department.
- **Flex rating** is a system when prior approval of rates is required only if the rate change would be greater than (and sometimes less than) a certain percentage (e.g., 7%).

1. Competitive Market

With competitive rating laws, there is usually a requirement for the market to be “competitive,” or else the system reverts to prior approval for the line of business that is not competitive.

The NAIC *Competition Database Report* can be used as a starting point for examining the competitiveness of state insurance markets. Several factors to determine the competitiveness of a market would likely need to be considered, including market concentration, market entries and exits, market growth, insurance policy availability, and insurance company profitability.

2. State Priority: Commercial Versus Personal Lines

In reviewing filings at the state, states often place more emphasis on personal lines filings versus commercial lines filings. The concept here is that personal lines consumers are less sophisticated and knowledgeable about insurance than commercial lines customers. There are also more societal considerations taken into account in personal lines insurance than commercial lines insurance.

Rate Standards

Rate standards are included in the state rating laws and are the foundation for the acceptance, denial, or adjustment to rate filings.

Typical rate standards included in the state rating laws require that rates shall not be excessive, inadequate or unfairly discriminatory. These terms are sometimes defined exactly in state law or regulation, but when they are not defined, they are generally interpreted as follows:

- **Excessive** means the rates are too high, or that the rates would exceed the amount that is needed for a company to achieve an acceptable level of profit. However, some state laws dictate that when a market is competitive, no rates are deemed excessive.
- **Inadequate** means the rates are too low or that a company could not sustain the rates for a long period of time without threatening solvency. Sometimes this assessment is made depending on competition, with an eye toward one company trying to gain market share over others.
- **Unfairly discriminatory** is a concept often based on cost-based pricing with the key word being “unfairly.” For example, charging different prices to a man versus a woman is discriminatory; however, it is only unfairly discriminatory if it cannot be reasonably explained by differences in expected costs. With that said, there are sometimes restrictions on what criteria are allowed by law. A few states have enacted constraints on rating criteria, such as the use of gender or marital status in private passenger automobile ratings.

From the Casualty Actuarial Society (CAS) *Statement of Principles Regarding Property and Casualty Insurance Ratemaking* adopted in 1988:

A rate is reasonable and not excessive, inadequate, or unfairly discriminatory if it is an actuarially sound estimate of the expected value of all future costs associated with an individual risk transfer.

Rate Justification and Supporting Data

Rates for P/C insurance are established by the filer before the costs of the product are known. This contrasts with pricing for manufactured products where a company would know the cost of the goods before the product is sold (i.e., how much their materials cost, how much labor costs to build the product, etc.). In insurance, however, a policy typically covers an accident or occurrence that will happen in the future, yet the costs of those accidents or occurrences will not be known until after they happen and claims are settled, which could be many years in the future. So, the pricing of insurance requires estimation of the future costs, making the determination of rate levels very difficult. Just because actual results for a period are better than estimated in setting rates does not mean the rate selected was excessive or not actuarially sound; similarly, just because actual results are worse than estimated does not mean the rate selected was inadequate or not actuarially sound.

The determination of the overall rate level may be based on prior loss experience and expected expenses, projected into the future. The basic concepts involved in that analysis are as follows:

1. Historical Data

A company will likely start with historical years of data and will adjust that data to reflect the anticipated ultimate level of costs for the future time period covered by the policies. While most Annual Statement data is grouped by calendar year transactions, data for ratemaking is typically grouped by accident year, policy year, or report year:

- **Accident year data** is the accumulation of loss data on all accidents with the date of occurrence falling within a given calendar year, regardless of when the claims are reported or paid.
- **Policy year data** is the accumulation of loss data for accidents that are covered by the policy written (or incepting) for a specified year, regardless of when the claims are reported or paid.
- **Report year data** is the accumulation of all claim amounts for accidents where notice is given to the filer of a claim in that year, regardless of when the accident occurred (so long as the accident occurred during a time period covered by a policy) and no matter when the claim is paid.

The following will focus on accident year data, but other data could be more appropriate depending on the policy and line of business. And in some cases, the data used might not be years but quarters, half-years, rolling four quarters, etc.

Definitions of Data Elements

The following are common data elements used by the filer.

1. Earned Premiums

Earned premium is the portion of a premium paid by an insured that has been allocated to the insurance company's loss experience, expenses, and profit year to date. As an example, if an annual policy is written on Jan. 1 and premium is earned pro rata, all the premium is earned by the end of the year. If that same policy had been written on April 1 instead (after three months of the year have elapsed), then nine-twelfths (or nine months out of 12 months) of the premium is earned by the end of the year.

Earned premiums are typically used for rate analyses because they tend to be a better match to the loss data; however, for some levels of detail (e.g., for minor coverages on the policy) where a company does not maintain earned premiums in their statistical system, written premiums are used. Written premiums are the total premiums generated from all policies written by an insurance company within a given period of time.

The earned premiums could be calendar year or accident year. If they are calendar year data and there are significant audit or retrospective premiums, companies will tend to adjust their calendar year premiums for anticipated changes from audits or retrospective adjustments.

2. Incurred Losses

Losses are the damages that must be paid for insured events. Losses can be grouped in many ways:

- **Paid losses** are the actual dollar amount of total losses paid by an insurance company during a specified time interval.
- **Incurred losses** are losses that have occurred within a stipulated time period, whether paid or not. The incurred losses would include paid losses plus an estimate of amounts remaining to be paid.
 - **Case-incurred losses** are the incurred amounts established by the claims departments after review of claims.
 - **Total or ultimate incurred losses** include losses that have not yet been reported to the insurance company as of the case-incurred evaluation date.

3. Incurred Loss Adjustment Expenses

Loss adjustment expenses (LAEs) are the costs involved in an insurance company's adjustment of losses under a policy. Some examples of expenses incurred in these activities are investigating and settling claims, legal expense, estimating the amounts of losses, disbursing loss payments, maintaining records, and claim office maintenance.

Since 1998, LAEs are split in the Annual Statement into two categories: Defense and Cost Containment (DCC) and Adjusting and Other (A&O) expenses. Refer to SSAP No. 55—*Unpaid Claims, Losses and Adjustment Expenses* for detailed definitions, but the general intention is that the DCC expenses are those that are correlated with loss amounts, such as legal expenses, and the A&O are those expenses that are correlated with claim counts or are general loss adjusting expenses, such as claim office rent.

For ratemaking purposes, the DCC expenses are evaluated alone or combined with loss amounts. The A&O are evaluated alone or combined with other expenses (and are sometimes included as a percentage of the projected combined loss and DCC).

The DCC expenses are often grouped by accident year. The A&O are not necessarily grouped by accident year but are needed in enough detail to determine a projected amount.

Some companies will be able to match some of their A&O expenses to specific claims and, thus, will then split their LAEs into allocated (ALAEs) and unallocated loss adjustment expenses (ULAEs). This adjustment can result in more accurate ratemaking.

4. Other Expenses Incurred

Other expenses include items such as commissions, general expenses, other acquisition expenses, taxes, licenses, and fees. Other expenses are grouped by calendar or accident year and are often stated as percentages of premium.

Variable expenses vary directly with premium, while fixed expenses do not. For example, state premium taxes are variable expenses because as insurance premiums increase, premium taxes increase. Rent for the insurer's building is a fixed expense because as insurance premiums increase, the rent does not change. Some fixed expenses will actually increase as more policies are written, but if these expenses cannot be defined as a percentage of premium, they are generally considered to be fixed expenses.

The distinction between fixed and variable expenses is used when determining the impact of any proposed rate change. If a premium will be increasing, then additional money will be needed to pay the higher variable expenses.

Some filings include the net cost of reinsurance either in with "other expenses" or as a separate adjustment. Regulators should check the state's position on this issue, especially because some states have statutes or regulations that require "direct" data (before reinsurance) only. The rationale for including this net cost (after accounting for expected ceded losses and commissions) is to recognize the importance of reinsurance in that reinsurance can provide a benefit to the policyholders, especially from overall solvency of the insurance company and ability to pay policyholder claims.

Conversely, the rationale against including reinsurance cost is that reinsurance prices can be established to recoup past negative reinsurance loss history and, thus, should not be included in prospective rates and/or the individual risk transfer for which rates are being made is the transfer of risk from the policyholder to the insurer, not from the insurer to its reinsurer.

5. Claim Counts

Claim counts are the number of claims. The number of claims can vary by company depending on their classification system. Companies calculate different claim counts depending on how they consider multiple claimants from one accident and how they consider multiple coverages from one accident. For example, in auto insurance, for a claim with both bodily injury liability and property damage liability potential losses, one company might count this as one claim and another company might count it as two. The important consideration in ratemaking is that the company uses the claim counts consistently in the rate calculation, based on their definition.

Claim counts are not always needed; it depends on the methodology used in the rate filing.

6. Exposures

Some ratemaking methods use exposures or the underlying coverage unit. For example, in auto or home insurance, one auto or one home is typically one exposure unit. The exposure units can get more complex based upon line of business, and include items such as payroll, receipts, sales, etc., but the important consideration in ratemaking is that the company is consistent and uses the exposure amounts appropriately.

Number of Years of Historical Data

There is a trade-off between stability and responsiveness when deciding how many and which years of data to use. Using recent data would be more responsive to reflect current claim conditions; however, the most recent accident year data has more immature data (meaning that not all losses are reported and not much might be known about the reported losses, so there would be a lot of estimates in the incurred losses). The immature data could add potential errors in the estimation of the ultimate incurred losses. Using multiple years of data would likely be more stable as one year of data doesn't significantly change the projection, but the older data might not reflect the current claim environment. Judgment is needed to determine how many years of data to use, with consideration of whether the amount of data is sufficient to be statistically reliable (or credible) and consideration of what the filing is trying to accomplish. A few states have requirements as to how many years of data must be used for a specific line of business.

Segregation of Data

Lines of business or products likely require separation of data for analysis purposes. Consideration must be given to similarity of the data (homogeneity) and whether there are sufficient data to be reliable (credibility). Segregation of data will be significantly different from the lines of business groupings in the Annual Statement.

Data Adjustments

Because the insurance contracts will be written to cover future accident periods, the past data needs to be adjusted to reflect the anticipated future premiums and costs. These adjustments will provide a profit/loss picture if no rate change occurs. Calculations can then be made to determine the overall rate need (or indication).

Premium Adjustments

If the method of analysis of the overall rate need requires premiums, one must adjust historical premiums to levels anticipated in the future (assuming the current rates were to remain in place). Since the ratemaking analysis is testing the current rating structure, the first adjustment to historical premiums is to reflect the premium that would have been collected had the current rates been in place in the past. The next adjustment is to project inflation-sensitive premiums using trend analyses (e.g., workers' compensation premiums that are a function of payroll or automobile physical damage premiums that are a function of vehicle costs).

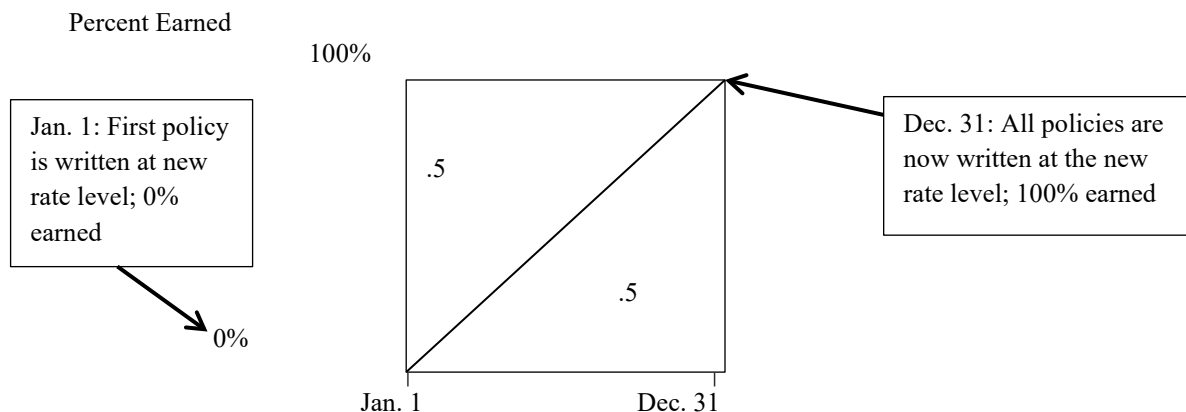
1. Current Rates (On-Level or Current-Level Premiums)

To adjust historical premiums to current level, one could re-rate all prior policies using the current rate. This would be an "extension of exposures" technique. If this is not possible, using the computer system or is too expensive to do manually, an alternate approach called the "parallelogram method" is often used.

The parallelogram method is based on geometric principles. A square represents the written premium for a calendar year. The bottom line of the square (the x-axis) represents the policy effective date. A vertical line represents the exposures effective on a particular date. A diagonal line represents the effective period for policies effective on the date the diagonal line touches the x-axis of the square.

In the parallelogram method, a diagonal line represents a change that affects policies as they renew (such as rate changes). The area of the square to the left of the diagonal line represents the amount of written premium for the year that is based on rates effective before the rate change. The area of the square to the right of the diagonal line represents the amount of written premium for the year that is based on rates effective after the rate change.

When a rate change is effective Jan. 1 and the policies are written as annual policies, there is a diagonal line that shows that half of the square represents earned premium at the old rate level. The area on each side of the diagonal line is one half or 0.5.



To adjust the entire year's premium to current-rate level, multiply the year's premium by an on-level or current-rate level factor. This on-level factor is calculated as:

$$\text{Factor} = \frac{\text{New Rate Level}}{\text{Average Rate Level in Effect}}$$
$$(1 + \text{Rate Change})$$
$$\text{Weighted Average of old rate level (or 1.00 in this case) and } (1 + \text{Rate Change})$$

Assume the rate change was 7% effective Jan. 1. With an effective date of Jan. 1, the areas of the triangles are .5 at the old level and .5 at the new level. The on-level factor would be calculated as:

$$\text{Factor} = \frac{(1 + .07)}{1.00 \times .5 + (1 + .07) \times .5}$$

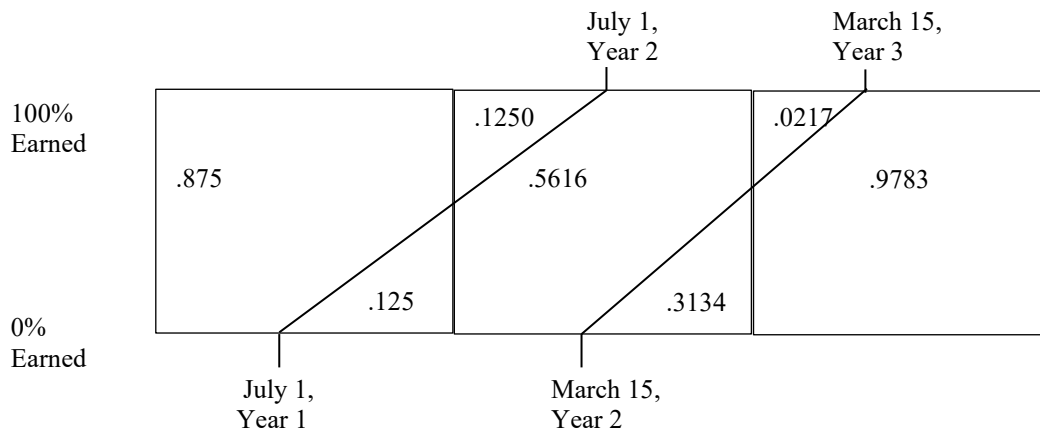
$$= \frac{1.07}{1.035}$$

$$= 1.0338$$

The calculation of the geometric area can get complicated when there are multiple rate changes that have impacted the same calendar year. Assume that in Year 1 there is a 6% rate change effective July 1. In Year 2, there is a 4% rate change effective March 15.

Rate Change Effective Date	Percent Change
July 1, Year 1	6%
March 15, Year 2	4%

The areas are calculated first using geometry. Here are those numbers:



The factors are then the current price level or $(1 + .06) \times (1 + .04)$, divided by the earned price level as derived by multiplying the areas calculated in the figure above by the rate change that was effective during the matching time period.

$$\begin{aligned} \text{Year 1: Factor} &= \frac{(1 + .06) \times (1 + .04)}{1.00 \times .875 + (1 + .06) \times .125} \\ &= \frac{1.1024}{1.0075} \\ &= 1.0942 \\ \text{Year 2: Factor} &= \frac{(1.06) \times (1.04)}{1.00 \times .1250 + 1.06 \times .5616 + 1.06 \times 1.04 \times .3134} \\ &= \frac{1.1024}{1.0658} \\ &= 1.0343 \\ \text{Year 3: Factor} &= \frac{(1.06) \times (1.04)}{1.06 \times .0217 + 1.06 \times 1.04 \times .9783} \\ &= 1.0008 \end{aligned}$$

An important assumption in the parallelogram method is that policies are evenly distributed throughout the year (e.g., one policy is written every day of the year). For business such as commercial insurance that is often heavily written with policy effective dates of Jan. 1 or July 1, this method would require adjustment.

2. Audit or Retrospective Premiums

If there are significant audit or retrospective premiums for a company, the premiums need to be adjusted to reflect the typical development pattern. This is similar to how losses are developed (as described in the Loss Development section in this chapter).

3. Premium Trends

When premiums depend on inflation-sensitive components, the future premiums will change with inflation. For example, payroll is often inflation sensitive, and workers' compensation premiums are calculated as a base rate multiplied by payroll. So, as payroll increases, the premiums for workers' compensation will increase in the same proportion. A ratemaking process that uses premiums would require anticipation of changes in the premium exposure base. The adjustment to premiums is made through a trend factor. If payroll increases by 2% a year, then the premiums that are a percentage of payroll would increase by 2% a year to reflect trend.

Not all premium trends result from dollar-based exposure bases. Another example of premium trend arises in personal auto insurance rating with model year and symbol drift. For model years, companies might have automatic adjustments to the rates for the next model year (e.g., the next year's models would be priced 5% higher than the current year.) Symbol drift, or the change/increase in the insurance company's average auto symbol, should be reflected as a premium trend if it has not already been reflected as a rate change.

Losses and LAE (DCC) Adjustments

1. Loss Trends

The historical data reflects the level of claim costs at the time. Yet, over time, inflation and other factors can affect the number of accidents or the dollar amount of claims. Since the ratemaking process includes an estimation of the future costs, the historical costs need to be adjusted for trend. Trends are often analyzed separately for claim counts and amounts, using frequency and severity:

- **Claim incidence** is often evaluated using frequency or the number of claims divided by the number of exposures. For auto insurance, the frequency could be the number of claims divided by the number of insured vehicles.
- **Claim amounts** are often evaluated using severity or average loss per claim. The severity could be the total amount of loss divided by the number of claims. (Here, "loss" could include DCC.)

The evaluation of trend generally involves fitting a curve (or line) to a set of internal data values, generally using either exponential or linear regression. Exponential is sometimes used when the percentage change is constant over time. Linear is sometimes used when the dollar change is constant over time (with the percentage change decreasing over time). Plotting the data on a graph is sometimes useful to evaluate the trend selection.

Linear: $Y = aX + b$

Exponential: $Y = b(a^X)$

Where Y is the average claim amount or frequency

X is the time in years

a and b are constants determined by the regression

Trend can also be selected based on external data, such as from a component of the Consumer Price Index (CPI) or another insurance or general economic indicator. An important consideration in the selection of the trend is that the historical trend can be an indicator of a projected trend, but it is not the only consideration in selecting the trend. The selection of the trend should be reasonable and justifiable but should not have to match a formula calculation.

Loss trends are occasionally evaluated with frequency and severity combined, which is called the pure premium. Formulaically, frequency times severity equals pure premium. It is typically more advantageous to evaluate frequency and severity separately because significant events (such as law changes) that affect trend, affect frequency and severity differently and are not only easier to evaluate separately, but provide more information upon which to make informed decisions.

Trend factors are calculated for each historical period:

Trend factor (for a linear trend) = $(1 + \text{selected trend \%})^{\text{Time Factor}}$

Trend factor (for an exponential trend) = $(e)^{\text{Selected Trend \%} \times \text{Time Factor}}$

The time factor is the number of years from the midpoint of the data year to the average loss date. The average loss date is the midpoint of the losses for the policies that have the new rates.

Example:

Historical data period: Accident year 2015
Annual policies
Policy effective date of rate change: June 1, 2017
Annual rate changes are anticipated
Selected trend: 3%

Assuming an average date of loss during a given year is the middle of the year and that policies renew evenly over the year:

Midpoint of the data year: July 1, 2015
Midpoint of the projection: June 1, 2018
Time factor:
6 months of 2015
12 months of 2016
12 months of 2017
5 months of 2018
= 35 months
Time factor = 35 / 12 months = 2.9167
Linear trend factor = $(1 + .03) 2.9167 = 1.0900$

When calculating loss trends, it is important to select appropriate data and make appropriate adjustments. Some examples include:

- Data should be adjusted for seasonal impacts. For example, if winter weather significantly impacts losses, then it is important to use 12-month rolling data rather than include some winter months without offsetting with the warmer months.
- It is also important to adjust the data for outliers when appropriate. An example of an outlier is when a data period includes catastrophe amounts that increase the claim counts and average severities so that if the data is graphed, the data point is significantly higher than the other data points. An outlier distorts calculation of the true trend estimate.
- Changes to laws can impact both frequency and severity trends. For example, the introduction of no-fault laws impact bodily injury liability by generally decreasing claim counts and increasing average severities.

The selection of the large trend has a significant impact on the resulting rate indication. A small difference in the percentage can result in large changes projected over numerous years.

2. Loss Development

The change in losses over time (for a given accident year) is referred to as development. Paid losses generally increase over time (or develop) until the ultimate value of claims is reached and all claims are paid. Similarly, case-incurred losses, losses for claims not yet reported, claim counts, and other amounts develop over time.

Loss development can be illustrated in loss development triangles, similar to the Schedule P loss development triangles in the P/C Annual Statement. Each accident year is a separate row, and each column shows the development at increasing ages of development. The following is an excerpt of a cumulative paid loss development triangle from Schedule P:

Accident Year	Cumulative Paid Losses at Year End			
	2016	2017	2018	2019
2016	100	200	250	250
2017	XXX	150	300	375
2018	XXX	XXX	200	400
2019	XXX	XXX	XXX	250

Reading across the columns on the 2016 accident year row, this table illustrates that for those accidents that happened in 2016, the losses paid by the company cumulated to:

- \$100 as of the accounting date Dec. 31, 2016
- \$200 as of Dec. 31, 2017
- \$250 as of Dec. 31, 2018
- \$250 as of Dec. 31, 2019

On the next row for the 2017 accident year, “XXX” appears in the first column. This is because no payments were made for accidents that occurred in 2017 prior to 2017 (because they had not yet happened). The table then illustrates that for those accidents that happened in 2017, the losses paid by the company cumulated to:

- \$150 as of the accounting date Dec. 31, 2017
- \$300 as of Dec. 31, 2018
- \$375 as of Dec. 31, 2019

So, the development shows how the payments changed as time passed.

These triangles can be arranged differently than the Schedule P format. Instead of showing years for the columns, the number of months of development (called “age”) could be used. The column headings are then changed, and the data is shifted to the left.

Accident Year	Cumulative Paid Losses at Age			
	12	24	36	48
2016	100	200	250	250
2017	150	300	375	
2018	200	400		
2019	250			

Reading across the columns on the 2016 accident year row, this table illustrates that for those accidents that happened in 2016, the losses paid by the company cumulated to:

- \$100 as of age 12 months (equivalent to the accounting date Dec. 31, 2016)
- \$200 as of age 24 months (equivalent to the accounting date Dec. 31, 2017)
- Etc.

For books of business that are new or are rapidly changing, one will often find the triangles created by month or by quarter (with valuations every three months) instead of by year (with valuations every 12 months).

Loss development triangles are often used to calculate an estimate of the ultimate incurred losses. The method is called the loss development method and centers on the relationships of reported or paid loss amounts from one age to the next. The concept is that these relationships (or similar relationships) will be repeated in the future. The following is an example of the loss development method. In no way is this to be interpreted as the only or the preferred way to derive ultimate losses, but the method is provided as an illustration.

LOSS DEVELOPMENT METHOD EXAMPLE

Accident Year	Cumulative Paid Losses at Age				Estimated Ultimate
	12	24	36	48	
2016	100	200	300	300	?
2017	125	250	375		?
2018	150	300			?
2019	175				?

Step 1: Calculate Age-to-Age Factors

Accident Year	Age-to-Age Development Factors		
	12-24	24-36	36 – ultimate
2016	$200 / 100 = 2.0$	$300 / 200 = 1.5$	$300 / 300 = 1.0$
2017	$250 / 125 = 2.0$	$375 / 250 = 1.5$	
2018	$300 / 150 = 2.0$		
2019			

Step 2: Average the Factors

Factors can be averaged in numerous ways. There are three-year, four-year, five-year, and all-year averages; there are weighted averages and averages after eliminating the highest and lowest factors. It is beyond the scope of this chapter to compare and contrast reasonability of different averaging methods.

Accident Year	Age-to-Age Development Factors		
	12-24	24-36	36–Ultimate
All Year Average	2.0	1.5	1.0

Step 3: Select the Factors

Different averages might be analyzed, and judgment might enter into selection of the age-to-age development factors to use in the projection.

Accident Year	Age-to-Age Development Factors		
	12-24	24-36	36–Ultimate
Selected	2.0	1.5	1.0

Step 4: Calculate the Estimated Ultimate Losses

Accident Year	Cumulative Paid Losses at Age				Estimated Ultimate
	12	24	36	48	
2016	100	200	300	300	300
2017	125	250	375	$375 \times 1.0 = 375$	375
2018	150	300	$300 \times 1.5 = 450$	$450 \times 1.0 = 450$	450
2019	175	$175 \times 2 = 350$	$350 \times 1.5 = 525$	$525 \times 1.0 = 525$	525

This example used paid losses, which can be a proper method to estimate the ultimate incurred losses. Another popular alternative is to use case-incurred losses. The example also refers to losses, but DCC also can be included.

(Note: This “development” is different from the Annual Statement Schedule P, Part 2 “development.” In Schedule P, the development is the accounting change that occurred in the ultimate incurred loss over the past year or two. It is not a projection of anticipated future development calculated here.)

Numerous adjustments might be appropriate to account for law changes, changes in policy terms (coverage and benefit level changes), distributional shifts (mixes of business), and changes in business volume over time.

There is often confusion about the difference between loss development and trend. Loss development would measure expected future changes over time in the given accident year payments; whereas, trend would measure the differences in these developed losses from one accident year to the next. Trend and development measure different things and do not overlap in their purpose.

Catastrophe or Large Loss Provisions

The overall rate need should contemplate the catastrophe or large loss occurrences expected in an average year. The typical procedure is to take out the catastrophe or large losses from the historical data and add in an expected average amount.

The original practice to calculate a catastrophe factor was to use the relationship of excess catastrophe amounts to the underlying non-catastrophe amounts, as determined from 20 or more years of catastrophe loss experience. This factor relationship would then be multiplied by the historical accident year non-catastrophe losses to adjust the losses to an average catastrophe loss amount. (Note: The separation of amounts into excess catastrophe and non-catastrophe generally requires establishment of a limit that should be de-trended for inflation for each year.) It is generally accepted that a large volume of data is required, for some insurers at least 30 years of data, and data should be adjusted to reflect the current situation (e.g., changes in underwriting by location, policy coverage, etc.)

This original practice is still in use today; however, for some perils, especially for hurricanes and earthquakes, companies are often using advanced technology and are modeling catastrophe losses to determine the catastrophe factor. These models are able to evaluate the ever-changing value of insured property, the number of properties an insurer writes in catastrophe prone areas, the vulnerability of insured structures, the amount of loss covered by the filer, and other changes in catastrophe exposure.

These models are typically based on the potential loss under various simulations and are, thus, difficult for most regulators to evaluate. However, because the rates calculated from a catastrophe model may better reflect an insurer's loss potential from catastrophic events, these models are becoming more widely accepted. Guidance on catastrophe models can be found in Actuarial Standard of Practice (ASOP) No. 38, *Using Models Outside the Actuary's Area of Expertise (Property and Casualty)*.

Insurance regulators recognize the importance of catastrophe models but sometimes report inability to conduct detailed reviews of the models. The NAIC is investigating ways for regulators to evaluate models more effectively and accurately.

A company could have a catastrophe provision that is modeled and intended to cover certain perils plus have another catastrophe provision for other types of catastrophe or large losses not included in the modeling.

Loss Adjustment Expenses

If LAEs were not included in the underlying loss data, provisions for LAE need to be added. Typically, the DCC expenses are included with the losses in the analysis, and the A&O expenses are added at the end. A common method to add the A&O expenses is to look at the ratio of historical amounts of A&O expenses to incurred losses and DCC for several calendar years. For example, if the average historical ratio was 0.05, the A&O factor would be 1.05. The A&O factor would then be multiplied by the projected loss and DCC amounts to achieve the projected loss, DCC, and A&O amount.

Data Quality

The quality of data is obviously an important issue in all aspects of insurance ratemaking but especially because of the expansion of the level of detail of data used in insurance ratemaking and the proliferation of new tools and analysis techniques. The Casualty Actuarial Society Data Management Information Educational Materials Working Party defines "quality data" as data that is appropriate for its purpose; as such, it is a relative and not an absolute concept. Data for an annual rate study might not be appropriate for a more-detailed class relativity analysis. And, data for advanced techniques, such as predictive modeling, catastrophe modeling, or credit scoring, might need to be held to higher standards.

With varying needs of action depending on the use of the data and the impact of the data on the rate levels, regulators need to be comfortable that the company adequately tested its data quality in order to rely on the answers that result from use of the data. It might be appropriate for a company to provide a general narrative on the quality checks and control of the data, including examination of validity, accuracy, reasonableness, and completeness.

In ASOP No. 23, *Data Quality*, due consideration is required of the following:

- Appropriateness for the intended purpose.
- Reasonableness and comprehensiveness.
- Any known, material limitations.
- The cost and feasibility of obtaining alternative data.
- The benefit to be gained from an alternative data set.
- Sampling methods.

The NAIC *Statistical Handbook of Data Available to Insurance Regulators* contains data quality standards.

Rate Justification: Overall Rate Level

1. Profit Provision

The profit provision is the company's estimate of its underwriting profit needs that, in combination with investment income and other miscellaneous (non-investment) income, will result in the achievement of company, policyholder, and shareholder expectations.

Underwriting profit is calculated as:

- Earned premiums.
- Less incurred losses.
- Less incurred expenses (loss adjustment expenses and underwriting expenses).
- Less policyholder dividends.

Per ASOP No. 30, *Treatment of Profit and Contingency Provisions and the Cost of Capital in Property/Casualty Insurance Ratemaking*, P/C insurance rates should provide for all expected costs, including an appropriate cost of capital associated with the specific risk transfer. This cost of capital can be found by estimating that cost and translating it into an underwriting profit provision, after taking leverage and investment income into account or developing an underwriting profit provision and testing that profit provision for consistency with the cost of capital.

In the determination of the underwriting profit needed, the company should consider the economic risk/reward situation from the risk in its insurance policies and the overall rate of return needed. To avoid excessive underwriting profit provisions, the filer should account for the investment income that will be derived from assets that support the unearned premium and loss reserves and should also account for any risk loads included in the pricing of rating factors (e.g., the risk loads typically included in the increased limit factors for liability coverages).

Prior to the 1980s, it was common for insurance companies to use underwriting profit provisions from 2% to 5% because policies covered short-tailed lines of business (e.g., property coverage where claim payments are made within a few years), and investment income was low. From the 1980s on, the high-investment income allowed significantly negative profit provisions, especially for longer-tailed lines of business (e.g., medical malpractice where claim payments might not be made for seven or more years).

In consideration of appropriate profit provisions, an analyst can utilize the most recent NAIC *Report on Profitability by Line by State* to determine reasonability. The Profitability Report includes historical underwriting profit by line of business by state. Care should be taken to avoid allowing greater profitability for lower efficiencies or for having too much or too little capitalization for the amount of business written. A company's decisions about the allocation of surplus should be reviewed for reasonableness because this will have a significant impact on the resulting profit provision.

In some states with excess profit laws that cap the amount of profit an insurance company can have, there is additional protection to make sure underwriting profit provisions are not excessive.

Contingency Provision

The contingency provision provides for the expected differences, if any, between the estimated costs and the average actual costs that cannot be eliminated by changes in other components of the ratemaking process. While the estimated costs are intended to equal the average actual costs over time, differences between the estimated and actual costs of the risk transfer are to be expected in any given year. If a difference persists, the difference should be reflected in the ratemaking calculations as a contingency provision. The contingency provision is not intended to measure the variability of results and, as such, is not expected to be earned as profit, per ASOP No. 30.

When insurers include a contingency provision in their rates for lines of business with potential for catastrophes or with other significant potential for adverse deviation in expected costs, the regulator should discuss whether that is better defined as additional profit loading or an additional catastrophe provision. For example, if the line of business is subject to greater uncertainty and can be expected to require more capital to support, then the amount should be included in the profit provision. (In this case, companies often combine the profit and contingency provisions as one number.) If the provision is intended to cover extreme or unexpected catastrophe potential not accounted for in the catastrophe modeling process, then the amount should be recognized in the catastrophe provision. In any case, the filer should be able to justify a provision as being reasonable. Whether the contingency provision is considered to be a part of losses, expenses, or the profit loading, it should be considered in the calculation of the overall return on premium or equity.

Credibility

As explained in the *Foundations of Casualty Actuarial Science*, "Credibility, simply put, is the weighting together of different estimates to come up with a combined estimate. For instance, an insured's own experience might suggest a different premium from that in the manual. These are two different estimates of the needed premium, which can be combined using credibility concepts to yield an adjusted premium." For a rate filing, credibility is commonly used to quantitatively describe "the level of believability" of data and is used when an insurer's historical data is insufficient to provide reliable ratemaking calculations. A credibility factor of 70% means there would be 70% weight assigned to the company's own indication, and the complement of credibility of 30% (= 100% - 70%) weight assigned to an alternative indication or allocated to multiple alternative indications.

The determination of the credibility weight varies from pure selection (based on judgment) to detailed calculations using expected values and variances or minimization of the sum of squared errors. A common standard of credibility based on frequency and ignoring severity (assuming severity is constant) is a full credibility standard of 1082 claims. Partial credibility is then the square root of the number of claims divided by 1082. With 250 claims underlying the claim data, there would be $(250 / 1082)^{1/2}$, or 50% credibility. While this credibility standard might be used, it is not always appropriate. It is not appropriate for most lines of business since severity typically varies, and the Poisson frequency distribution typically does not apply. There are numerous accepted methods of calculation of credibility factors.

The evaluation of credibility factors is difficult for regulators because selection is often a matter of judgment, and credibility selections vary depending on what is being evaluated (e.g., credibility can be claim counts for some items and premium volume for others) or for what purpose credibility is being used (e.g., rate level versus trend). The filing should be able to support the reasonability of the credibility selection.

Once a credibility factor is selected, it is also important to evaluate the reasonableness of the selection of the alternative indication. Common examples of a statewide indication are a regional indication, countrywide indication, or inflation.

Calculation of Overall Rate Level Need: Methods

Two commonly used methods to determine the overall rate level need are the loss ratio method and the pure premium method.

1. Pure Premium Method

The pure premium method starts with the loss costs needed to pay claims and adds in expenses. Splitting the expenses by the fixed and variable components, the rate formula would be:

$$\text{Indicated Rate} = \frac{\$ \text{ Projected Pure Premium} + \$ \text{ Projected Fixed Expenses}}{1 - \text{Variable Expense \%} - \text{Profit and Contingencies \%}}$$

This method makes intuitive sense but still requires significant analysis to determine the individual components. In addition, exposure units are sometimes not available or meaningful, so the method would not be useable. However, with new lines of business or products, this method is the only alternative and would be based on significant judgment.

2. Loss Ratio Method

A loss ratio is losses divided by premium. Losses and premium can be defined in numerous ways, but for analysis of the overall rate level need, it is likely that the loss ratio is the projected ultimate loss and loss adjustment expense divided by projected premiums. An indicated rate is the old rate times the ratio of the projected loss ratio to the target loss ratio (e.g., projected loss ratio divided by the target loss ratio).

Projected Loss and LAE Ratio =

$$\frac{\text{Incurred Loss and DCC (adjusted for trend, loss development, CAT/large losses, A\&O, law changes, etc.)}}{\text{Projected On-Level Premium}}$$

$$\text{Target Loss and LAE Ratio} = \frac{1 - \text{Variable Expense \%} - \text{Profit and Contingencies \%}}{1 + \text{Ratio of Fixed Expenses to Losses}}$$

$$\text{Indicated Rate Change} = \frac{\text{Projected Loss and LAE Ratio}}{\text{Target Loss and LAE Ratio}} - 1$$

$$\text{Indicated Rate} = \text{Old Rate} \times (1 + \text{Indicated Rate Change})$$

3. Loss Ratio Method Versus Pure Premium Method

- The loss ratio method produces an indicated rate percentage change. The pure premium method develops indicated rates directly. Thus, the loss ratio method requires historical data and old rates.
- For new coverages or new lines of business, typically the pure premium method is used or another method based significantly on judgment or competitor market rates.
- Both methods require projection of ultimate losses.
- Only the loss ratio method requires the projection of premium. The pure premium method uses earned exposure units.
- Both methods will produce identical rates when identical data and consistent assumptions are used.

Rate Justification: Rating Factors

1. Rating Factors

Many rating systems utilize a “base-times-factor” methodology. The premium to charge is calculated from a base rate with additional price being added or credited (typically by multiplying by rating factors) depending on the policy coverage options selected and the risk characteristics of the policyholder. Policy coverage options in auto insurance would be choices such as increased limits and deductibles. Risk characteristics commonly considered in the rating variables for auto insurance are age, gender, marital status, driving record, citation record, vehicle rating group (by make/model), annual mileage, vehicle use, garaging location (also known as territory), and others. (Note: Some states do not allow some of these rating variables.)

The use of classifications and similar rating variables allows for the price of insurance to be more equitable among policyholders because policyholders pay a price commensurate with the risk they bring to the insurance company. Regulators do need to evaluate classifications for unfair discrimination. A rule of thumb is that prices are not unfairly discriminatory when consumers are charged different amounts that are actuarially justified (or justified based on risk/cost).

In addition, rate classifications help to maintain availability in the market for all risks. If one rate were charged to every policyholder, then some groups of policyholders with identifiable characteristics would create large profits to insurance companies, and others would result in large losses. As these groups are identified, the insurance companies would start to write the more profitable business and would not write the others, resulting in availability problems for those high-risk groups.

2. Acceptability of Rating Factors

Some rating factors, such as education or occupation, might be controversial or perceived to be discriminatory against protected classes and might not be acceptable in a state. For unprotected classes, the more that the rating factors relate to the exposure covered in the insurance policy, the more acceptable they tend to be. One should be aware of the applicable state laws and regulations regarding which rating factors are allowed.

3. Calculation of Rating Factors

Rating factors are generally developed for each rating variable (although additive dollar amounts are also options). Rating factors less than 1.00 are credits or discounts from the base rate. Rating factors greater than 1.00 are surcharges from the base rate. Rating factors of 1.00 are typically the base rate (although other classifications could also have rating factors of 1.00).

Each rating variable is divided into groups that have rating factors associated with them. For example, a company that slots insured vehicles into rating groups based on damageability and cost to repair vehicles would develop rating factors for each group. The following is an example of rating factors by group:

Vehicle Rating Group	Rating Factor
1	.90
2	.95
3	1.00
4	1.05
5	1.10

If the base rate is \$200 for Vehicle Rating Group 3, the price this company would charge to insure a vehicle included in Vehicle Rating Group 1 would be \$180 ($= \$200 \times .90$).

Development of the rating factors is similar to how the overall indication is developed. The loss ratio method can again be used to create or modify rating factors. The indicated rating factor for Vehicle Rating Group 1 would be the current rating factor of .90 multiplied by the ratio of the loss ratio for Group 1 divided by the loss ratio of Group 3. If the loss ratios were 63% for Group 1 and 70% for Group 3, then the indicated rating factor for Group 1 would be .81 ($= .90 \times 63\% / 70\%$). There might be additional steps for credibility or to account for fixed expenses that do not vary by rating group (also called “flattening” for expenses).

Because there are numerous rating variables in the classification system, it is accurate to adjust all relativities simultaneously or do a sequential analysis with loss ratios being adjusted along the way for rate credits/debits already evaluated. The sequential analysis removes potential double counting of the same underlying loss effects.

Once the indicated rating factors are calculated, the overall rating impact from changes to the rating factors should be calculated. The change in the average rating factor is the overall rating impact, although one must take care in the calculation of the average rating factor. A rating factor should never be averaged with the premium that includes the impact of the rating factor; however, the current level premium should be divided by the current rating factor and then used to weight the factors. An alternative to using premium prior to application of the rating factor is to use exposures. Once the overall rating impact from changes to the rating factors is calculated, the base rates would change enough so that in total, the overall selected rate change is met.

An example of this analysis is provided:

Overall Rate Need (= Selected Rate Change): 7%

Data:

Vehicle Rating Group	Current Rating Factor	Loss Ratio	On-Level Premium
1	.90	63%	\$1000
2	.95	71%	\$1200
3	1.00	70%	\$1200
4	1.05	72%	\$1000
5	1.10	77%	\$500

Calculation:

Vehicle Rating Group	Current Rating Factor	Loss Ratio	Loss Ratio Relativities	Indicated Rating Factor
1	.90	63%	.63 / .70 = .90	.90 x .90 = .81
2	.95	71%	.71 / .70 = 1.01	.95 x 1.01 = .96
3	1.00	70%	.70 / .70 = 1.00	1.00 x 1.00 = 1.00
4	1.05	72%	.72 / .70 = 1.03	1.05 x 1.03 = 1.08
5	1.10	77%	.77 / .70 = 1.10	1.10 x 1.10 = 1.21

Vehicle Rating Group	On-Level Premium	Current Rating Factor	On-Level Premium Prior to Rating Factor (at Base Rate)
1	\$1000	.90	\$1000 / .90 = 1111.11
2	\$1200	.95	\$1200 / .95 = 1263.16
3	\$1200	1.00	\$1200 / 1.00 = 1200.00
4	\$1000	1.05	\$1000 / 1.05 = 952.38
5	\$500	1.10	\$500 / 1.1 = 454.55
Total			4981.20

The average current Rating Factor is calculated as:

$$\frac{.90 \times 1111.11 + .95 \times 1263.16 + 1.00 \times 1200.00 + 1.05 \times 952.38 + 1.10 \times 454.55}{4981.20} = .9837$$

The average indicated Rating Factor is calculated as:

$$\frac{.81 \times 1111.11 + .96 \times 1263.16 + 1.00 \times 1200.00 + 1.08 \times 952.38 + 1.21 \times 454.55}{4981.20} = .9819$$

Overall rating impact from changes to Rating Factors:

$$= .9819 / .9837 - 1 = -0.2\%$$

Price change needed to base rates to achieve overall 7% rate change:

$$\begin{aligned} &= [1 + \text{overall price change}] / [1 + \text{Rating Factor impact}] - 1 \\ &= [1 + 7\%] / [1 + (-0.2\%)] - 1 \\ &= 7.2\% \end{aligned}$$

Calculation of Deductible Rating Factors

A deductible is the amount the policyholder pays in the event of a claim, as established in the policy. The insurance company is responsible for the covered loss amount above the deductible.

Deductible factors are a function of the losses remaining to be paid compared to total loss that would be paid without the deductible, with an adjustment for the fact that some expenses (such as commission expense or office rent) are not eliminated with the deductible.

The first step is to determine the loss elimination ratio (LER), or the amount of losses eliminated by the deductible divided by the total amount of losses. An example of this calculation is provided:

Loss Size	# of Claims	Total Loss Amount	Losses After \$100 Deductible
\$100	10	1000	0
\$250	10	2500	1500 (2500 – 10 x 100)
\$500	5	2500	2000 (2500 – 5 x 100)
\$1000	4	4000	3600 (4000 – 4 x 100)
Total (Sum)		10000	7100
Loss Eliminated: 10000 – 7100 = 2900			
Loss Elimination Ratio: 2900/10000 = .29			

The LER is then adjusted for Fixed Expenses to calculate the Deductible Factor:

$$\text{Deductible Factor} = \frac{\text{Expected Loss Ratio} \times (1 - \text{LER}) + \text{Fixed Expense Ratio}}{1 - \text{Variable Expense Ratio}}$$

If the expected loss ratio is 60%, the variable expense ratio is 30%, and the Fixed Expense ratio is 10%, then the Deductible Factor would be:

$$\begin{aligned}\text{Deductible Factor} &= \frac{.60 \times (1 - .29) + .10}{1 - .30} \\ &= .75 \quad (\text{rounded})\end{aligned}$$

The LER suggests a 29% reduction; however, with flattening for expenses, the rate credit is only 25% (1.00 - .75 deductible factor).

Calculation of Increased Limit Factors

Increased limits are typically defined as the limits of liability above the minimum required limits established by the state (e.g., the financial responsibility limits in auto insurance). Loss ratio and pure premium methods do not work well for increased limit pricing, largely because of sparse data at the higher limits and of policy limit censorship (e.g., if a loss is \$500,000 but the limit of liability is \$100,000, then only the \$100,000 gets coded into the data system).

Mathematical distributions are often used to derive increased limit factors. Available data is fitted to a mathematical distribution, and then that distribution is used to extrapolate anticipated expected losses at higher levels of limits.

When using loss data, consideration needs to be given to any differences in loss development or loss trends by limit. Loss development factors tend to be higher for higher limits of liability because the losses at the higher limits tend to be the ones that take a longer time to settle. Trend factors also tend to be higher for higher limits of liability because the growth of loss amounts for lower limits are capped more often by the limit of liability.

Increased limit factors often contain risk loads that increase as the limits of liability increase. Based on economic principles, it is appropriate to obtain higher rates of return when accepting higher risk.

Credibility for Rating Factors

Just as credibility, or the level of believability of data, was considered in the overall indicated rate change, credibility is considered in the rating factor indications. While common examples of the alternative indication used when applying credibility to the overall rate change are a regional indication, countrywide indication, or inflation, credibility for rating factor indications is often weighted with the overall indication.

Interaction Between Rating Variables (Multivariate Analysis)

If each rating variable is evaluated separately, statistically significant interactions between rating variables may not be identified and, thus, may not be included in the rating plan. Care should be taken to have a multivariate analysis when practical. In some instances, a multivariate analysis is not possible. But, with computing power growing exponentially, insurers believe they have found many ways to improve their operations and competitiveness through use of complex predictive models in all areas of their insurance business.

Approval of Classification Systems

With rate changes, companies sometimes propose revisions to a classification system. Because the changes to classification plans can be significant and have large impacts on the consumers' rates, regulators should focus on these changes.

Some items of proposed classification can sometimes be deemed to be contrary to state laws and/or regulations, such as the use of education or occupation. One should be aware of the applicable state's laws and regulations regarding which factors are allowed and require definitions of all data elements that can affect the charged premium. Regulators are focused on identifying rating or underwriting characteristics that may violate state laws and/or regulations due to the increased use of predictive models.

Rating Tiers

Some states allow an insurer to have multiple rate levels, or rating tiers, within a single company. These rating tiers are another way of classifying risks for rating purposes. Typically, there are requirements for rating tiers: the underwriting rules for each tier should be mutually exclusive, clear, and objective. There should be a distinction between the expected losses or expenses for each tier, and the placement process should be auditable.

One particular concern with rating tiers would be the analyses of whether a plan produces unfair discrimination. Questions arise around the time-sensitive aspects of the underwriting criteria and any related re-evaluation of the tiers upon renewal. For example, consider two tiers where the policyholder is placed in the "high" tier because of a lapse of insurance in the prior 12 months. The question is: What happens upon renewal after there has no longer been a lapse of insurance for 12 months? Does the policyholder get slotted in the "low" tier similar to new business? Some statutes limit the amount of time that violations, loss history, or insurance scores can be used, and some statutes might only allow credit history to be used for re-rating at the policyholder's request. Regulators consider the acceptability of differences in rates between existing and new policyholders with the same current risk profile.

Insurers also can create different rating levels by using affiliated companies. While regulators examine rating tiers within an insurer to a high degree of regulatory scrutiny, there tends to be less scrutiny with differences in rates that exist between affiliated companies.

Rate Modifications

1. Individual Risk Rating

The rating system established with base rates and rating factors, sometimes called "manual rates," typically groups policyholders within classifications based on each policyholder's individual characteristics. However, there could be some policyholders, especially in the commercial lines of business, where it is appropriate to modify the manual rate based on the policyholder's own loss experience. The most common methods of rating based on individual actual loss experience are called experience rating, schedule rating, and retrospective rating. These plans are typically required to be filed with the state.

2. Experience Rating

Experience rating uses the actual loss experience of the policyholder to calculate a rating discount or surcharge. A typical process is that actual individual losses are capped at a maximum single loss, the actual capped losses are compared to similarly limited expected losses, and credibility is considered to develop the experience rating modification factor. (There are other detailed adjustments to data in the calculations.) The states typically place limitations on the amount that experience rating can impact the overall rate.

Typically, there is a requirement of the policy being a minimum size to qualify for experience rating and a requirement that all policies meeting that size requirement be experience rated.

3. Schedule Rating

Schedule rating is a method of pricing property and liability insurance. It uses charges and credits to modify a class rate based on the special characteristics of a risk. Regulated entities have been able to develop a schedule of rates because experience has shown a direct relationship between certain physical characteristics and the possibility of a loss. For example, implementation of an effective safety program should likely result in lower insurance rates but will not be fully reflected in loss experience for a few years. Companies who change their delivery drivers from experienced drivers to youthful drivers should likely pay more. Some examples of schedule rating categories might include:

- **Premises:** Condition, care.
- **Equipment:** Type, condition, care.
- **Employees:** Selection, training, supervision, experience.

Each state may establish limitations on schedule rating. Typically, there is a limitation on the overall percentage impact on the policyholder's rates from schedule rating, and there may be a requirement of the policy being a minimum size to qualify.

4. Retrospective Rating

Retrospective rating is where a policyholder pays an initial deposit premium (likely based on manual rates) at the time the policy is issued, but the premium is adjusted over time as claims emerge and more information is known about the true costs that have arisen from the insurance policy. Retrospective rating plans differ from typical insurance pricing. Typical pricing is prospective and does not allow for recoupment of past losses.

The analysis for retrospective rating is similar to experience rating in that actual losses are used, individual claim amounts can be capped, and resulting amounts are compared to expected amounts at the same level of capping and same point in expected development. The retrospective adjustment is usually limited to minimum and maximum premium levels. There is also a limitation in how many years of adjustments are made.

5. Dividend Rating Plans

Dividend rating plans are sometimes allowed. When loss experience is better than expected, the company can disperse extra profits to policyholders.

Predictive Modeling

The ability of computers to process massive amounts of data (referred to as "big data") has led to the expansion of the use of predictive modeling in insurance ratemaking. Predictive models have enabled insurers to build rating, marketing, underwriting, and claim models with significant predictive ability.

Data quality within models and communication about them are vital with predictive modeling. Depending on definitional boundaries, predictive modeling can sometimes overlap with the field of machine learning (ML). In the modeling space, predictive modeling is often referred to as "predictive analytics."

Regulated entities' use of predictive analytics along with big data has significant potential benefits to consumers and insurers. Predictive analytics can reveal insights into the relationship between consumer behavior and the cost of insurance, lower the cost of insurance for many, and provide incentives for consumers to better control and mitigate loss. However, predictive analytic techniques are evolving rapidly and leaving many state insurance regulators without the necessary tools to effectively review insurers' use of predictive models in insurance applications. Best practices have been developed to aid the regulator in the review of predictive models.

The term “predictive model” refers to a set of models that use statistics to predict outcomes. When applied to insurance, the model is chosen to estimate the probability or expected value of an outcome given a set amount of input data; for example, models can predict the frequency of loss, the severity of loss, or the pure premium.

To further complicate regulatory review of models in the future, modeling technology and methods are evolving rapidly. Generalized linear models (GLMs) are relatively transparent and their output and consequences are much clearer than many other complex models. But as computing power grows exponentially, it is opening the modeling world to more sophisticated forms of data acquisition and data analysis. Insurance actuaries and data scientists seek increased predictiveness by using even more complex predictive modeling methods. Examples of these methods are predictive models utilizing logistic regression, K-nearest neighbor classification, random forests, decision trees, neural networks, or combinations of available modeling methods (often referred to as “ensembles”).

1. Generalized Linear Models

The GLM is a commonly used predictive model in insurance applications, particularly in building an insurance product’s rating plan. Because of this and the fact most P/C regulators are most concerned about personal lines, the NAIC has developed an appendix in its white paper for guidance in reviewing GLMs for personal automobile and home insurance. (Refer to Appendix B in the NAIC white paper, *Regulatory Review of Predictive Models*.)

2. What is a “Best Practice”?

At its most basic level, a practice is a “tangible and visible behavior... [based on] an idea about how the actions...will solve a problem or achieve a goal.” (Refer to Bardach, E., and Patashnik, E., 2016. *A Practical Guide for Policy Analysis, The Eightfold Path to More Effective Problem Solving*. Thousand Oaks, CA: CQ Press. Refer to Appendix A in the NAIC white paper, *Regulatory Review of Predictive Models*, for an overview of Bardach’s best practice analysis.)

Best practices can maintain quality as an alternative to mandatory legislated standards and can be based on self-assessment or benchmarking. (Refer to Bogan, C.E., and English, M.J., 1994. *Benchmarking for Best Practices: Winning Through Innovative Adaptation*. New York, NY: McGraw-Hill.) Therefore, a best practice represents an effective method of problem solving. The “problem” regulators want to solve is probably better posed as seeking an answer to this question: How can regulators determine whether predictive models, as used in rate filings, are compliant with state laws and/or regulations? However, best practices are not intended to create standards for filings that include predictive models.

Best practices are based on the following principles that promote a comprehensive and coordinated review of predictive models across the states:

- State insurance regulators will maintain their current rate regulatory authority and autonomy.
- State insurance regulators will be able to share information to aid companies in getting insurance products to market more quickly across the states.
- State insurance regulators will share expertise and discuss technical issues regarding predictive models to make the review process in any state more effective and efficient.
- State insurance regulators will maintain confidentiality in accordance with state laws and/or regulations regarding predictive models.

3. Best Practices for the Regulatory Review of Predictive Models

Best practices will help the regulator understand if a predictive model is cost-based, if the predictive model is compliant with state laws and/or regulations, and how the model improves the company’s rating plan. Best practices can also improve the consistency among the regulatory review processes across states and improve the efficiency of each regulator’s review, thereby, assisting companies in getting their products to market faster. With this in mind, the regulator’s review of predictive models should:

- Ensure that the selected rating factors, based on the model or other analysis, produce rates that are not excessive, inadequate, or unfairly discriminatory:
 - Review the overall rate level impact of the proposed revisions to rate level indications provided by the filer.
 - Determine whether individual input characteristics to a predictive model and their resulting rating factors are related to the expected loss or expense differences in risk.
 - Review the premium disruption for individual policyholders and how the disruptions can be explained to individual consumers.
 - Review the individual input characteristics to, and output factors from, the predictive model (and its sub-models), as well as associated selected relativities, to ensure they are compatible with practices allowed in the state and do not reflect prohibited characteristics.

- Obtain a clear understanding of the data used to build and validate the model and thoroughly review all aspects of the model, including assumptions, adjustments, variables, sub-models used as input, and resulting output:
 - Obtain a clear understanding of how the selected predictive model was built.
 - Determine whether the data used as input to the predictive model is accurate, including a clear understanding how missing values, erroneous values, and outliers are handled.
 - Determine whether any adjustments to the raw data are handled appropriately, including, but not limited to, trending, development, capping, and removal of catastrophes.
 - Obtain a clear understanding of how often each risk characteristic, used as input to the model, is updated and whether the model is periodically refreshed, so model output reflects changes to non-static risk characteristics.
- Evaluate how the model interacts with and improves the rating plan:
 - Obtain a clear understanding of the characteristics that are input to a predictive model (and its sub-models).
 - Obtain a clear understanding of how the insurer integrates the model into the rating plan and how it improves the rating plan.
 - Obtain a clear understanding of how model output interacts with non-modeled characteristics/variables used to calculate a risk's premium.
- Enable competition and innovation to promote the growth, financial stability, and efficiency of the insurance marketplace:
 - Enable innovation in the pricing of insurance through acceptance of predictive models, provided such models are in compliance with state laws and/or regulations, particularly prohibitions on unfair discrimination.
 - Protect the confidentiality of filed predictive models and supporting information in accordance with state laws and/or regulations.
 - Review predictive models in a timely manner to enable reasonable speed to market.

4. Confidentiality

Each state determines the confidentiality of a rate filing and the supplemental material to the filing. It also determines when filing information might become public, the procedure to request that filing information be held confidentially, and the procedure by which a public records request is made. Regulatory reviewers are required to protect confidential information in accordance with applicable state laws and/or regulations. State insurance regulators should be aware of their state laws and/or regulations on confidentiality when requesting data from insurers that may be proprietary or trade secret. However, insurers should be aware that a rate filing might become part of the public record. It is incumbent on an insurer to be familiar with each state's laws and/or regulations regarding the confidentiality of information submitted with a rate filing.

State authority, regulations, and rules governing confidentiality always apply when a regulator reviews a model used in rating. When the NAIC or a third party enters into the review process, the confidential, proprietary, and trade secret protections of the state will continue to apply.

Advisory Organizations

1. Advisory Organization Filings

Advisory organizations develop loss costs, policy forms, risk classifications, and other miscellaneous rating rules that may be used by insurer members of the organizations.

Allowable advisory organization activities are likely defined in each state's rating laws. The NAIC model rating laws define the advisory organizations' permitted and prohibited activities with the intent to prohibit anticompetitive behavior and discourage concerted rate action by insurers. Generally, advisory organizations are not allowed to publish fully developed rates, including all expense and profit loadings, for the insurance companies to use. They can, however, provide advisory prospective loss costs, which would be the recommended insurance charge prior to consideration of expenses (typically, other than loss adjustment expenses) and profit.

When an advisory organization makes a loss cost or rating rule filing, the state's resources applied to the filing are generally high given that the components of the filing will be used by many insurance companies and have a large impact on the market.

2. Insurance Company's Use of Advisory Organization's Loss Costs

Adoption of the advisory organization's loss costs requires development of a loss cost multiplier to add any missing expenses and profit. The NAIC developed model filing forms for states to use for loss cost multipliers.

The expense selection within the loss cost multiplier is often justified with a multiple-year analysis of previous expense levels, as well as a determination of the appropriateness of projecting those past historical numbers to the future policy period.

When a company files to adopt the loss costs of an advisory organization, they can adopt the loss costs without modification, or they can deviate from those loss costs in some respect. Some examples of deviation are adding, consolidating, or eliminating classes or other rating factors, changing the rating steps or formula, or using a percentage deviation from the advisory organization's overall rate level. The deviation from advisory loss costs should be explained.

3. Insurance Company's Use of Advisory Organizations' Rating Rules

In addition to filing prospective loss costs for companies to use to create rates, advisory organizations also impact policyholders' final premium through the rating rules. These rating rules sometimes contain rating factors (e.g., classification factors, increased limit factors, experience rating plans, etc.) that could significantly impact the final premiums of the policyholder. Because of the rate impact and also because of the need to analyze for unfair discrimination, the rating rules are important to consider, in addition to the overall rate level changes.

In addition to analyzing the advisory organizations' rating rules, there can be numerous rules where the insurance company needs to create its own rating manual rules. For example, minimum premiums are not established by the advisory organization, and, thus, the company should create rate manual pages that list the minimum premiums that will be charged. For deductibles, the advisory organization might issue the expected elimination ratios and then the company would consider the expense impact to create the deductible factors (because expenses would not be eliminated in the same proportion as loss amounts).

Premium Selection Considerations

1. Indicated Rate Change Versus Selected Rate Change

The indicated rate change should reflect the company's best estimate of its premium needs given their current or expected book of business. However, insurance companies also have other business considerations including competition, marketing, legal concerns, impact of the rate change on retention, etc. A company might wish to deviate from its indicated rate change and should justify those decisions within the constraints of the law.

2. Capping and Transition Rules

Capping and transition rules for individual policyholders can get quite complex. Where states permit premium capping or premium transition rules, the following may be considered:

- Which rates should get capped?
- Should rate decreases be capped? If so, what is the impact if the policyholder asks to be quoted as new business?
- Should all rate increases be capped or only above a certain percentage?
- How much time will lapse, or how many renewal cycles will occur before the new rates are in place or different rating plans are merged?
- Should the insured be told what the final premium will be once no more capping is applied?
- How would exposure change be addressed? If the policyholder buys a new car or changes their liability limits, what is the impact on their rate capping?
- How many rate capping rules can be implemented at any given time?

Installment Plans

States might require justification of the plan's costs, such as charges to policyholders associated with the installment plan. States might also develop benchmarks of typical charges for installment plans to assess the reasonability of filed fees.

Policy Fees

Companies sometimes charge policy fees that are considered by states to be premiums and, thus, subject to the same regulatory review as premiums. Policy fees are generally charged to cover fixed expenses that are not related to the loss exposure. Some states may require the return of some portion of these fees upon cancellation.

Regulatory Analysis

Every filing will be different and will result in different regulatory analyses. Questions should be asked of the company when it has not satisfied statutory or regulatory requirements in the state or when any current justification is inadequate and could have an impact on the rate change approval or the amount of the approval.

If there are additional items of concern, the company can be notified so it can make appropriate modifications in future filings.

The NAIC white paper, *Regulatory Review of Predictive Models*, documents questions that a state insurance regulator may want to ask when reviewing a model. These questions are listed as “information elements” in Appendix B of the white paper. (Note: Although Appendix B focuses on GLMs for personal automobile and home insurance, many of the “information elements” and concepts they represent may be transferable to other types of models, other lines of business, and other applications beyond rating.)

Additional Ratemaking Information

The Casualty Actuarial Society (CAS) and the Society of Actuaries (SOA) have extensive examination syllabi that contain a significant amount of ratemaking information on both the basic topics covered in this chapter and on advanced ratemaking topics. The [CAS](#) and [SOA](#) websites contain links to many of the papers included in the syllabi. Recommended reading is *Foundations of Casualty Actuarial Science*, which contains chapters on ratemaking, risk classification, and individual risk rating.

Recommended background reading:

- *Foundations of Casualty Actuarial Science*, Fourth Edition (2001):
 - Chapter 1: Introduction
 - Chapter 3: Ratemaking
 - Chapter 6: Risk Classification
 - Chapter 9: Investment Issues in Property-Liability Insurance
 - Chapter 10: Only the section on Regulating an Insurance Company
- CAS “Statements of Principles,” especially regarding P/C ratemaking
- CAS “Basic Ratemaking”

Summary

Rate regulation for P/C lines of business requires significant knowledge of state rating laws, rating standards, actuarial science, and many data concepts:

- Rating laws vary by state, but the rating laws are usually grouped into prior approval, file and use or use and file (competitive), no file (open competition), and flex rating.
- Rate standards typically included in the state rating laws require that rates shall not be inadequate, excessive or unfairly discriminatory.
- A company will likely determine its indicated rate change by starting with historical years of underwriting data (earned premiums, incurred loss, loss adjustment expenses, and general expenses) and adjusting that data to reflect the anticipated ultimate level of costs for the future time period covered by the policies. Numerous adjustments are made to the data. Common premium adjustments are on-level premium, audit, and trend. Common loss adjustments are trend, loss development, catastrophe/large loss provisions, and an A&O loss adjustment expense provision. A profit/contingency provision is also calculated to determine the indicated rate change.
- Once an overall rate level is determined, the rate change gets allocated to the classifications and other rating factors.
- Individual risk rating allows manual rates to be modified by an individual policyholder’s own experience.
- Advisory organizations provide the underlying loss costs for companies to be able to add their own expenses and profit provisions (with loss cost multipliers) to calculate their insurance rates.
- CAS’s *Statement of Principles Regarding Property and Casualty Insurance Ratemaking* provides guidance and guidelines for the numerous actuarial decisions and standards employed during the development of rates.

- NAIC model laws also include special provisions for workers' compensation business, penalties for not complying with laws, and competitive market analysis to determine whether rates should be subject to prior approval provisions.
- Best practices for reviewing predictive models are provided in the NAIC white paper, *Regulatory Review of Predictive Models*. The best practices, as well as many of the information elements and underlying concepts, may be transferrable to other types of models, other lines of insurance, and applications beyond rating.

While this chapter provides an overview of the rate determination/actuarial process and regulatory review, state statutory, or administrative rule may require the examiner to adopt different standards or guidelines than the ones described.

Chapter 4 Glossary

Adjusting and Other (A&O) Expenses: Those expenses other than DCC. A&O expenses include, but are not limited to, fees and expenses of adjusters and settling agents, loss adjustment expenses (LAEs) for participation in voluntary and involuntary market pools if reported by calendar year, attorney fees incurred in the determination of coverage, including litigation between the reporting entity and the policyholder, and fees and salaries for appraisers, private investigators, hearing representatives, reinspectors, and fraud investigators, if working in the capacity of an adjuster. (SSAP No. 55)

Advisory Organizations: As defined in the *Property and Casualty Model Rating Law (Prior Approval Version)* (#1780): “‘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 ...”.

Allocated Loss Adjustment Expenses: Loss adjustment expenses that are assignable or allocable to specific claims.

Base Rate: Premium rate for each risk classification.

Consumer Price Index (CPI): An index of the cost of all goods and services to a typical consumer.

Defense and Cost Containment (DCC): Includes defense litigation and medical cost containment expenses, whether internal or external. DCC expenses include, but are not limited to, surveillance expenses; fixed amounts for medical cost containment expenses; litigation management expenses; loss adjustment expenses for participation in voluntary and involuntary market pools if reported by accident year; fees or salaries for appraisers, private investigators, hearing representatives, reinspectors, and fraud investigators, if working in defense of a claim, and fees or salaries for rehabilitation nurses, if such cost is not included in losses; attorney fees incurred owing to a duty to defend, even when other coverage does not exist; and the cost of engaging experts. (SSAP No. 55)

Experience Rating: Statistical procedure used to calculate a premium rate based on the loss experience of an insured group.

Exposures: The basic rating unit underlying an insurance premium.

Loss Development: Difference in the dollar amount of losses between the beginning and end of a time period.

Loss Ratio Method: Modification of premium rates by a stipulated percentage for closely related classes of property or liability insurance policies. The objective of such modification is to more directly align the combined actual loss ratio of the classes of policies under consideration with the expected loss ratio of these classes. The resultant alignment should show no significant standard deviation or variation of the actual loss ratio from the expected loss ratio.

Manual Rate: Published cost per unit of insurance, usually the standard rate charged for a standard risk.

Pure Premium: Calculation of the pure cost of property or liability insurance protection without loadings for the insurance company's expenses, premium taxes, contingencies, and profit margins.

Pure Premium Method: Approach that reflects losses expected. It is a calculation of the pure cost of property or liability insurance protection without loadings for the insurance company's expenses, premium taxes, contingencies, and profit margins. The pure premium is calculated according to the relationship:

$$\text{Pure Premium} = \frac{\text{Total Amount of Losses (and LAE) Incurred Per Year}}{\text{Number of Units of Exposure}}$$

Retrospective Rating: Method of establishing rates in which the current year's premium is calculated to reflect the actual current year's loss experience. An initial premium is charged and then adjusted at the end of the policy year to reflect the actual loss experience of the business.

Unallocated Loss Adjustment Expenses: Loss adjustment expenses that are assignable or allocable to specific claims.

CHAPTER 5

The Basics of Life and Annuity Regulation

Introduction

Many states do not regulate life insurance premium rates and annuity purchase rates, except for credit life insurance. There are several states, however, that do require the filing of life insurance rates and any changes made to the rates. The rationale for not regulating life insurance premium rates and annuity purchase rates is that competition and market forces would adequately regulate the rates. The review of a life insurance or annuity filing would generally be a review of various contract provisions and of compliance with the corresponding nonforfeiture law. A life insurance filing might need to include premium rates to confirm compliance with the *Standard Nonforfeiture Law for Life Insurance* (Model #808). Some states may also require compliance with the provisions in the *Valuation of Life Insurance Policies Model Regulation* (Model #830).

Laws and Regulations

Each state legislature has enacted state insurance laws relating to the regulation of life insurance and annuities based on the following NAIC model laws and regulations:

- Model #805: *Standard Nonforfeiture Law for Individual Deferred Annuities*
- Model #806: *Annuity Nonforfeiture Model Regulation*
- Model #808: *Standard Nonforfeiture Law for Life Insurance*
- Model #820: *Standard Valuation Law*
- Model #830: *Valuation of Life Insurance Policies Model Regulation*

The insurance commissioner adopts the language needed to implement insurance rating laws. [NAIC model laws](#) are available on the NAIC website. Model laws that do not appear in a search on the [NAIC model laws](#) web page are accessible at the [NAIC Library](#).

Regulation of Life Insurance and Annuities

There are two types of life insurance policies and annuity contracts, based on how investment earnings on the supporting assets are credited to the contract:

- **Variable life insurance and variable annuity contracts** provide for benefits that vary to reflect the investment experience of the asset supporting the contracts. Variable contracts are regulated by the U.S. Securities and Exchange Commission (SEC), in addition to state insurance departments.
- **Equity-indexed life insurance and equity-indexed annuities** are products in which the interest credited to the policies is based on an outside index, usually a general index of equity returns. The supporting assets are typically debt instruments and equity options, not equities. These products are regulated by the state insurance departments.

All other types of life insurance and annuity products, including those that participate in divisible surplus and those with other nonguaranteed elements, are regulated by state insurance departments. Policies that participate in divisible surplus, known as participating policies, provide for the distribution of surplus, according to experience, including investment experience on the supporting assets.

Except for participating policies, contracts other than variable contracts do not reflect investment experience.

The Compact

The Compact has transformed the way asset-based insurance products are filed, reviewed, and approved—allowing consumers to have faster access to competitive insurance products in an ever-changing global marketplace. It promotes uniformity through the application of uniform product standards embedded with strong consumer protections.

The Compact serves as an instrumentality of its member states. The Compact provides a central point of electronic filing for certain insurance products, including life insurance and annuities, that are reviewed for compliance pursuant to comprehensive and detailed uniform product standards developed and adopted by member states as their product content requirements, affording a high level of protection to purchasers of asset protection insurance products.

Companies have the choice of filing rates and forms through the Compact or directly with the state insurance departments. If a company chooses to file with the state insurance department, the state regulator applies the respective state's existing product standard laws and review procedures. If a company chooses to file with the Compact, the Compact applies the specific uniform product standards and review procedures of the Compact.

Cash Surrender Values and Paid-Up Nonforfeiture Benefits

Under Model #808, many life insurance policies require paid-up nonforfeiture benefits and cash surrender values. Most term life insurance policies are specifically exempt from the nonforfeiture law. Under Model #805, many annuity contracts require paid-up annuity benefits and cash surrender benefits. Deferred annuities, whole life, and universal life insurance policies typically include surrender penalties. These types of penalties are limited under the nonforfeiture law. Form filings include an actuarial memorandum, which provides a product overview and demonstrates compliance with the appropriate nonforfeiture law or demonstrates the exemption from the nonforfeiture law.

CHAPTER 6

The Basics of Health Insurance Contract and Rate Regulation

Introduction

This chapter provides an overview of rate regulation for health insurance, including information about typical state rating laws and rate standards, ratemaking data, methods, and common regulatory issues.

Note that the terms “plan,” “policy,” “contract,” and “product” refer to the same concept.

Rating Laws and Guidance Manuals

Each state legislature has enacted state insurance rating laws, some of which are based on the following NAIC model rating laws and guidelines:

- Model #118: *Small Employer Health Insurance Availability Model Act*
- Model #119: *Model Regulation to Implement the Small Employer Health Insurance Availability Model Act*
- Model #134: *Guidelines for Filing of Rates for Individual Health Insurance Forms*
- Model #640: *Long-Term Care Insurance Model Act*
- Model #641: *Long-Term Care Insurance Model Regulation*
- Model #650: *Medicare Supplement Insurance Minimum Standards Model Act*
- Model #651: *Model Regulation to Implement the NAIC Medicare Supplement Insurance Minimum Standards Model Act*

States adopt the language to implement insurance rating laws. [NAIC model laws](#) are available on the NAIC website. Model laws that do not appear in a search on the [NAIC model laws](#) web page are accessible at the [NAIC Library](#).

In addition, the NAIC has occasionally published guidance manuals for specific lines of business, for example, the *Guidance Manual for Rating Aspects of the Long-Term Care Insurance Model Regulation*.

Types of Health Insurance

There are several product lines of insurance that are classified as health insurance:

- Disability income insurance provides periodic payments if the insured is disabled under the terms of the contract.
- Long-term care (LTC) insurance is designed to provide specialized insurance coverage for skilled nursing care and custodial care in a nursing home, assisted living facility, or home health care services required when the insured is unable to perform the specified activities of daily living or is cognitively impaired. LTC insurance typically covers specialized services that are not usually covered by comprehensive or major medical health insurance.
- Excepted benefits are supplemental-type benefits and are not intended to replace primary health insurance. Programs such as accident only, hospital confinement indemnity, specified disease (e.g. cancer), Medicare Supplement, and LTC insurance are considered excepted benefits or supplemental-type benefits.
- Medicare supplement policies cover balances left over after traditional Medicare has paid.
- Comprehensive or major medical health insurance pays for all or part of medical expenses incurred by an insured.

Health Insurance Market Regulation

The regulation of the health insurance market is divided into three parts:

- **Government-sponsored health benefit plans** are government programs that provide health insurance benefits. These programs may be funded entirely by government funds or by a combination of government funds and premiums paid by the covered individuals enrolled in the program. The risk of financial loss is borne by the government. These programs might provide comprehensive major medical health insurance benefits (such as Medicaid and Medicare), limited primary health insurance benefits (such as county health clinics), or limited specialized health insurance benefits. These health benefit plans are regulated by federal regulatory agencies, such as the U.S. Centers for Medicare & Medicaid Services (CMS), or other state agencies:
 - Medicare is a government-sponsored health benefit plan for individuals aged 65 or older and for individuals of any age with certain disabilities. Medicare has the following parts listed below. These Medicare benefits (Parts A, B, C, and D) are regulated by CMS:
 - Part A (Hospital Insurance) helps cover inpatient care in hospitals and skilled nursing facilities.

- Part B (Medical Insurance) helps cover doctors' services, as well as outpatient care and home health care.
- Part C (Medicare Advantage Plans) is a health option run by private insurance companies.
- Part D (Medicare Prescription Drug Coverage) is a prescription drug option run by private insurance companies.
- Medicare Advantage (also known as Medicare Part C) policies are specialized health insurance products authorized by CMS to replace the traditional federal Medicare program. These policies are sometimes called a health maintenance organization (HMO) because some require the insured person(s) to obtain services from a specific provider network.
- Medicare Advantage policies are sold as full replacement products. Instead of providing specialized coverage for the gaps in Medicare like a supplementary product (with Medicare still bearing most of the insurance risk), Medicare Advantage products replace Medicare completely and the health insurance company bears the full risk of financial loss (with Medicare bearing no financial risk other than paying the member's portion of the premium to the health insurer).
- **Employer-sponsored self-funded health benefit plans** are plans sponsored by an employer to provide health insurance benefits to the employer's employees. These plans may be funded entirely by the employer or by a combination of employer funds and amounts withheld from covered employees' wages. The risk of financial loss is borne by the employer. However, most self-funded plans purchase commercial "stop loss" coverage for added protection against high individual or overall group claims. These self-funded plans usually provide comprehensive major medical health insurance benefits and may provide benefits only to the employee or to the employee and the employee's dependents. These health benefit plans are regulated for the most part under the Federal Employee Retirement Income Security Act (ERISA) statute through the Department of Labor (DOL), CMS, and the Internal Revenue Service (IRS).
- **Commercially available insurance health benefit plans** are governed by state and federal law and are regulated by state insurance departments. These plans are marketed by insurance companies (which are licensed to sell insurance by each state in which they market) to provide health insurance benefits to insured persons. These types of plans are funded by the premiums collected from insured employers or individuals. The risk of financial loss is borne by the insurance company.

Commercial major medical insurance benefit plans can be issued as fee-for-service plans or managed care health service plans, either for profit or not for profit. Some plans require the use of a specific provider network. Usually, these plan designs are also referred to as managed care or HMOs. Usually, an insured person pays a copayment or coinsurance for covered medical services.

The health insurance benefits provided vary from comprehensive major medical health insurance to specified limited health insurance benefits, such as dental, vision, or specified disease. Commercial limited health insurance plans are not considered major medical insurance plans. Limited health plans usually cover lump sum benefits based on the type of service the member receives or the diagnosis.

Medicare supplement policies are regulated by state insurance departments. These policies are specialized health insurance products designed to complement the federal Medicare program and pay a portion of the balances left over after traditional Medicare has paid. Requirements for this business are specified in the federal Social Security Act and overseen by the CMS. These policies are sold as a supplement to the basic Medicare Part A and Part B programs and provide additional coverage beyond the basic Medicare benefits.

Rate Standards and Justification

Rate standards are included in the state laws and are the foundation for the acceptance, denial, or adjustment to rate filings. Typical rate standards included in the state laws require that the benefits are reasonable in relation to the premium charged.

This is usually accomplished by reference to a minimum expected loss ratio, which is the ratio of the expected incurred claims to the expected earned premiums. The loss ratio standards are either specified in law or set by the regulatory authorities and can vary based on the type of coverage and type of renewability provision contained in the policy. The renewability provision defines the insurer's rights to renew and change premium rates. For example, the minimum loss ratio for Medicare supplement insurance is set in the federal Social Security Act at 65% for individual business and 75% for group business.

The renewability provision specifies the insurer's rights regarding renewing policies and changing premium rates. Model #134 defines the renewability options for accident and sickness policies as:

- **Optionally renewable:** Renewal is at the option of the insurance company.
- **Conditionally renewable:** Renewal can be declined by class, by geographic area, or for stated reasons other than deterioration of health.
- **Guaranteed renewable:** Renewal cannot be declined by the insurance company for any reason, but the insurance company can revise rates on a class basis.
- **Noncancellable:** Renewal cannot be declined, nor can rates be revised by the insurance company.

The expected loss ratio is calculated by projecting earned premiums and incurred claims and determining the overall loss ratio. The period of the projection may vary by type of business. For major medical business, the projection period might be one or two years. For LTC or disability income insurance, the projection period might be 30 years or more.

The following is an example of an initial Medicare supplement filing. The projection period is the assumed lifetime of the business. Premiums and claims are adjusted for interest ("discounted"). The loss ratio over the entire period meets the 65% standard set in the Social Security Act.

Medicare Supplement Initial Filing			
Calendar Year	Discounted Earned Premiums	Discounted Incurred Claims	Loss Ratio
1	95,867	57,765	0.603
2	157,068	102,910	0.655
3	129,863	85,086	0.655
4	107,370	70,348	0.655
5	88,772	58,164	0.655
6	73,397	48,089	0.655
7	60,684	39,760	0.655
8	50,173	32,874	0.655
9	41,482	27,180	0.655
10	34,298	22,472	0.655
11	28,357	18,579	0.655
12	23,446	15,361	0.655
13	19,384	12,701	0.655
14	16,027	10,501	0.655
15	13,252	8,682	0.655
16	10,956	7,178	0.655
17	9,058	5,935	0.655
18	7,489	4,907	0.655
19	6,193	4,057	0.655
20	5,120	3,354	0.655
21	4,233	2,773	0.655
22	3,500	2,293	0.655
23	2,894	1,896	0.655
24	2,392	1,567	0.655
25	1,978	1,296	0.655
26	1,636	1,072	0.655
27	1,352	886	0.655
28	1,118	732	0.655
29	924	606	0.656
30	764	501	0.656
31	632	414	0.655
32	522	342	0.655
33	432	283	0.655
34	357	234	0.655
35	295	194	0.658
Total	1,001,285	650,992	0.650

Some of the assumptions that go into a projection are:

- **Morbidity:** Morbidity is a statistical projection of the future sickness level of a given group of individuals.
- **Trend factors:** This is the assumed annual increase in the morbidity costs due to increases in the frequency of claims and the cost of medical procedures. Trend factors are based on assumed future growth of medical claims developed based on generally accepted actuarial principles. Trend has a significant impact on medical insurance projections.
- **Selection factors:** These factors reflect the effect of underwriting on claim costs. Underwriting is the process an insurance company uses to examine risk and determine whether they accept the risk, and if so, how that risk will be classified. Depending on the type of policy, underwriting may consider factors such as age, gender, tobacco status, health status, or occupation. The impact of underwriting (i.e., selection factors) may wear off over time. For example, selection factors might be 0.90 in the first year, 0.945 in the second year, and 0.98 in the third year, followed by 1.00 thereafter.
- **Persistency:** Persistency means the percentage of insurance remaining in force or the percentage of policies that have not lapsed. This is the assumed rate at which policyholders will continue to pay premiums each year. Persistency varies by type of health policy. Persistency assumptions have had a significant impact on long-term care rates.
- **Interest rate:** This is the interest rate used to discount the projected earned premiums and the projected incurred claims. It is an after-tax rate based on the current and anticipated investment earnings.

Many of the assumptions—such as the trend rate, interest rate, and persistency—will vary over time and among issuers. Therefore, it is not possible to present reasonable ranges on the assumptions. Each state will have a means for evaluating critical assumptions used in the rating process.

Rates for many health insurance products can be adjusted as experience develops. Rate increases are usually limited to one a year. The process for a rate increase is similar to the initial rate justification, except there is past experience to consider. The experience from the time the plan was first issued is accumulated to the current time. Earned premiums and incurred claims are also projected from the current time.

A rate increase must meet the lifetime loss ratio target (reflecting experience results and projected results) and a future loss ratio target. Here is an example of a Medicare Supplement lifetime loss ratio projection:

Medicare Supplement Lifetime Loss Ratio Projection

	Discounted Earned Premium	Discounted Incurred Claims	Loss Ratio
Historical	\$6,476,974	\$5,163,748	80%
Future Projected	<u>\$9,130,829</u>	<u>\$7,505,003</u>	<u>82%</u>
Lifetime	\$15,607,803	\$12,668,751	81%

If the amount of business in force in a particular state is too small to be considered credible, that state may require the rate increase to be based on the business nationwide. To adjust for different premium rates in each state, the historical experience and the projection of future experience may be recalculated to reflect the premium rates in the filing state.

1. Disability Income Insurance—Rate Standards and Justification

Many states require prior approval of rates before allowing the disability income contracts to be marketed. Filings must include an actuarial memorandum that describes the assumptions used for any new features and the impact on rates that will be charged. Rates are usually included with the forms or separately for any changes to the previously approved rates.

Some states have developed minimum loss ratio requirements that must be met before approval. The minimum loss ratio requirements depend on whether the disability income contract is noncancelable or renewable.

Depending on the features provided, the reviewer might have additional requirements in order to determine if the contract meets the minimum loss ratio objective. Model #180 provides additional guidance for individual disability contract rate review.

2. Medicare Supplement Insurance—Rate Standards and Justification

There are multiple plans defined in Model #651. The model regulation provides that an issuer must annually file its rates, rating schedules, and experience by policy duration for approval by the states according to each state's filing and approval requirements. This filing is required whether or not an issuer is seeking a rate revision. Each insurer is required to file annually a refund calculation form for each type of standard benefit plan that it has issued. If the experience on a plan exceeds the benchmark ratio, a refund or credit might be required on that plan.

3. Small Group Insurance—Rate Standards and Justification

Small group business covered by Model #118 has additional requirements on the gross premiums by age. The federal Health Insurance Portability and Accountability Act (HIPAA) defines a small employer as one that employs two to 50 employees. The definition of small employer may vary by state.

4. Long-Term Care (LTC) Insurance—Rate Standards and Justification

Model #641 outlines the method for regulating LTC rates. LTC insurance was priced using the fixed lifetime loss ratio methodology method. This methodology was meant to ensure that premium rates were not too high. However, as experience evolved, the premiums set using this methodology proved to be inadequate. To address these concerns Model #641 was and continues to be amended.

Individual LTC insurance products may be filed with the Compact. The standards for the Compact are required to provide the same or greater protections as set forth in Model #641. In general, policy forms filed with the Compact should not be mixed with forms filed with the individual states. An initial rate filing must have uniform premiums for all states in the Compact. Premiums may vary by state in a rate increase filing if there is actuarial justification for the differences. The Compact has authority to approve initial rate filings and rate increases to a certain percentage for individual LTC insurance. The Compact's authority may vary by state.

CHAPTER 7

The Federal Affordable Care Act and Plan Management

Introduction

Both state regulators and health insurance marketplaces are required to handle the function of oversight activities, known as plan management, under the federal Affordable Care Act (ACA) and other related regulations. Plan management includes certifying (or re-certifying and de-certifying) qualified health plans (QHPs), as well as reviewing rate and plan benefit data and oversight duties. Terms to be familiar with are further defined at the end of the chapter.

In SERFF, plan management functionality was added to accommodate the filing of QHP and qualified dental plan (QDP) submissions. If a state determines that it wants to establish a state-based exchange or state-based marketplace (SBE/SBM), it carries out its own plan management functions. If a state chooses not to establish its own marketplace, then the U.S. Department of Health and Human Services (HHS) establishes a federally facilitated exchange (FFE) in that state. As primary enforcers of the federal Public Health Service Act (PHSA), states are responsible for enforcing the market-wide reforms found in the ACA. The market-wide reforms that fall under plan management include but are not limited to essential health benefits (EHB), actuarial value (AV), cost-sharing limitations, and the rules relating to rating. The ACA requires that all marketplaces ensure that QHPs are certified. In states that are effective rate review states, premium rates are examined and in prior approval states rates are approved before an issuer is allowed to put any increase into effect. States work with HHS throughout this process.

History

The ACA was signed into law in March 2010. Its major provisions went into effect Jan. 1, 2014. The ACA called for each state to establish a marketplace for the purchase of health insurance by individuals and small businesses. If a state failed to take steps to establish a marketplace, HHS would operate a marketplace in that state. States had to decide which business model made sense for their state.

An exchange provides tools for a shopper to compare options, select a health insurance plan, receive verification of coverage, and make payments. As required by the ACA, each exchange is expected to:

- Provide assistance to purchasers.
- Facilitate enrollment in QHPs.
- Facilitate eligibility for the advanced premium tax credit.
- Facilitate eligibility for the cost-sharing reduction plans.
- Provide individuals with access to other health benefit programs, such as Medicaid.
- Certify health plans meeting federal and, sometimes, state benefit standards.

Each of the levels must offer the same set of minimum EHBs. The basic difference among these plans is the cost-sharing mix picked up by plans and individual insureds. Plans offered in the marketplace are identified as:

- **Catastrophic:** A deductible equal to the total annual cost-sharing limit and first-dollar coverage of at least three primary care visits.
- **Bronze:** Actuarial value of 60%, equates to the consumer being responsible for on average 40% of covered benefits.
- **Silver:** Actuarial value of 70%, equates to the consumer being responsible for on average 30% of covered benefits.
- **Gold:** Actuarial value of 80%, equates to the consumer being responsible for on average 20% of covered benefits.
- **Platinum:** Actuarial value of 90%, equates to the consumer being responsible for on average 10% of covered benefits.

To help facilitate review and approval of these products, the NAIC/SERFF developed Plan Management Binders. Each binder includes multiple templates and identifies plans, metal levels, service areas, networks, prescription drugs, rates, forms, and examples for in-network versus out-of-network. CMS also has provided tools to assist in the review and approval of plans. The tools focus on key areas of regulation including but not limited to prescription drug coverage, cost-sharing, and nondiscrimination.

Categories of Regulatory Health Insurance Coverage Plans

All plans of health insurance coverage provided in the individual, small group, and large group markets are categorized into one of three regulatory categories. A plan's category defines the extent to which the ACA reforms apply, as well as which of the reforms apply. A plan can be a grandfathered plan, a non-grandfathered transitional plan, or a non-grandfathered ACA-compliant plan.

The federal transitional policy is a policy announced by CMS and the Center for Consumer Information and Insurance Oversight (CCIIO), which, when allowed by the state and opted by the issuer, provides a policyholder the option of keeping its non-grandfathered, non-ACA-compliant health insurance coverage in force for some period of time rather than being required to transition to a non-grandfathered, ACA compliant plan in 2014. Allowance of the federal transitional policy option will continue until CMS issues a bulletin to end the extension.

Transitional relief and/or the extension of transitional relief applies only in states where the insurance regulator opted to permit the relief and only in the markets specified. Further, an issuer has the option to provide transitional relief on a market-by-market basis in the markets permitted by the state. Lastly, the policyholder has the option to maintain the transitional relief plan. All three (the state, the issuer, and the policyholder) must opt-in for transitional relief to be provided/available. If a state does not permit the relief, or if an issuer does not opt to provide it in a state where it is permitted, or if a policyholder did not opt for it when offered, then the coverage issued the policyholder is a non-grandfathered, ACA-compliant plan that complies with all of the ACA market reforms.

States may have different definitions of small employer and/or large employer which use a different number of employees in the count. The chart below describes the three categories, some of the applicable ACA reforms, and other information about each category of plans.

	Grandfathered Plans	Non-Grandfathered Transitional Plans	Non-Grandfathered ACA-Compliant Plans
Definition	Plans in force as of March 23, 2010.	Plans that are non-grandfathered and were in force on Oct. 1, 2013.	Plans that are non-grandfathered and issued as of Jan. 1, 2014, or later.
Markets Affected	Individual, Small Group (1-50 employees) and Large Group (51+ employees).	Individual, Small Group (1-50 employees) and in some cases Large Group (51+ employees).	Individual, Small Group (1-50 employees) and Large Group (51+ employees).
Time Limit	None but ceases when changes are made to the plan specifications that are beyond those permitted in the regulation.	For plans in force on Oct. 1, 2013, and cannot be extended past Dec. 31, 2017. This continues to be extended by CMS.	None, but plans may be replaced by other plans of this same type within limits of federal regulations.
Notes	Refer to federal regulation (Title 45 CFR §147.140) for which provisions of the ACA apply, as the reforms can differ according to the plan's market.	Transitional relief was an option provided to the state insurance regulator, then the insurer, and then the policyholder. Refer to federal regulations for which provisions of the ACA apply, as the reforms can differ according to the plan's market.	Refer to federal regulation for which provisions of the ACA apply, as the reforms can differ according to the plan's market and whether the plan is offered on the marketplace.

Resources

The table below lists some helpful online plan management information and system resources. Please note that the URLs provided are current as of the July 2025 technical (nonsubstantive) updates to the 2024 Product Filing Review Handbook. Some of the URLs provided may require additional sign-on access.

Resource Name	Source Organization	Description	URL
SERFF Health Insurance Exchange Plan Management	NAIC/SERFF	Documentation is also provided regarding state plan management systems and process timelines, QHP templates, and technical specifications for state-based exchange systems.	https://serff.com/serff_health_insurance_plan_management.htm

Resource Name	Source Organization	Description	URL
SERFF System Online Help	NAIC/SERFF	Log in to SERFF and click the “Help” link to find instructions and information regarding SERFF System Plan Management functionality. Refer to the Appendix sections for state and for industry that are included in the “User Manual” for instructions on SERFF Plan Management functionality. Also refer to additional information from the links for “PPACA” and “Plan Management.”	https://login.serff.com/index.html
CCIIO– Qualified Health Plans	CMS.gov/CCIIO	Primary QHP certification resource for detailed QHP application requirements and materials. Application instructions, data templates, supporting documents and justification forms, and data review tools are accessible on this site.	https://www.cms.gov/CCIIO/Programs-and-Initiatives/Health-Insurance-Marketplaces/qhp.html
CCIIO- Regulations and Guidance	CMS.gov/CCIIO	Comprehensive topical listing of federal health care reform regulations and guidance. Includes chronological list of “Updates.”	https://www.cms.gov/ccio/resources/regulations-and-guidance/
Health Insurance Oversight System (HIOS) and Plan Management & Market Wide Functions Portal	CMS.gov/CMS Enterprise Secure Portal	HIOS is the CMS portal for access by issuers and state regulators (as applicable) to the HIOS system application modules and to plan management and market-wide functions.	https://portal.cms.gov/wps/portal/unauthportal/home/
REGTAP	CMS	Register for CMS resources and training regarding the QHP certification process and other ACA regulatory processes. The site also provides a portal to submit and track inquiries and includes searchable FAQs and library resources.	https://regtap.cms.gov/
RxNorm	U.S. National Library of Medicine/Unified Medical Language System (UMLS)	Accessible downloads of national Rx data, including normalized names, classifications, and unique identifiers (including the RxNorm Concept Unique Identifiers—RXCUIs—used in the QHP Rx Formulary Template) for medicines and drugs.	https://www.nlm.nih.gov/

The following modules are available in HIOS:

Acronym	Module Name	Module Purpose
HIOS-Portal	Health Insurance Oversight System (Portal)	The HIOS-Portal module houses all the HIOS consumer oversight modules and encompasses other functionality, such as manage account and manage an organization (company creation, issuer creation, and editing company information are for certain user roles only). Approvals will be done through the HIOS Portal.

Acronym	Module Name	Module Purpose
HIOS-PF	Plan Finder Product Data Collector	The HIOS-PF module collects state, issuer, and product information regarding the private health insurance industry. For state users, HIOS-PF collects data regarding the insurance companies within that state and the products sold to individual and small group markets to compare to the data filings of those issuers. Issuer submission users can download a pre-populated template, update product information, and then upload the file on the “Upload Finalized Data Template” tab.
HIOS-CAP	Consumer Assistance Program	The HIOS-CAP module is used by states and its case workers to provide beneficiaries and consumers insurance-related guidance and assistance. It provides state users with the capability to collect, manage, and submit information about the various cases handled by the case workers. The HIOS-CAP module allows data to be reported into the HIOS system.
HIOS-RRJ	Rate Review Justification	The HIOS-RRJ module allows issuers to report their premium rate increases with justifications. It also supports CCHIO and the state insurance departments’ (DOIs) ability to review these health insurance premium rates to protect consumers from unreasonable premium increases and track all rate changes and bring visibility to unreasonable rate increases submitted by issuers.
HIOS-RRG	Rate Review Grants	The HIOS-RRG module was created by HHS to support DOIs in their effort to track health insurance rate changes within their states. Participating states are provided grants toward this effort, and these states provide HHS with reports on how they use grant funding, metrics regarding rate change data submitted to them by health insurance companies, and states’ review of these rate changes.
HIOS-HPOES	Health Plan and Other Entity Enumeration System	The HIOS-HPOES module assigns unique Health Plan Identifier (HPID) and Other Entity Identifier (OEID) numbers. The system facilitates the submission and approval of HPID and OEID applications.
HIOS-MLR	Medical Loss Ratio	The HIOS-MLR module facilitates the upload of the MLR-annual form and supplemental materials after the user successfully confirms to the issuer association for their company. The system also allows specific users to attest to the uploaded data within a defined submission period.
HIOS-SSM	Supplemental Submission Module	The Plan Management (PM) Supplemental Submission Module is a web application built in the HIOS where issuers can submit the URL data associated with their QHP application.
RBIS	Rates and Benefits Information System	The RBIS module provides health insurance issuer users with the capability to submit and manage detailed product benefit and eligibility information about their product and plan offerings. Users are required to submit, validate, and attest to their product data, which is then made public on the consumer facing website www.Healthcare.gov .
DCM-FFM	Document Collection Module—Form Filing Sub Module	The DCM-FFM module allows users to create submissions based on issuer, market, and product information. Issuers then append supporting documentation to these submissions. HHS uses these documents to assess state regulatory compliance.
DCM-MCM	Document Collection Module—Market Conduct Sub Module	The DCM-MCM module allows HHS users to create requests to issuers for documentation in support of a market conduct examination (MCE). Issuers respond to the requests by providing required documentation and attesting to the accuracy of the information provided.

Acronym	Module Name	Module Purpose
DCM-MEC	Document Collection Module—Minimum Essential Coverage	The DCM-MEC module allows submitter users to create submissions on behalf of their organizations. These submissions consist of certifying official contact information and any documentation pertaining to their MEC plan(s). HHS will perform reviews based on the documentation to determine if the MEC plans meet the regulatory requirements.
DCM-SDC	Document Collection Module—State Document Collection	The DCM-SDC module is a sub-module within HIOS that provides states with the ability to submit the Effective Rate Review Survey via online submission for review by CCIIO and designated third-party contractors. Reviewers examine submissions based on established rate review policies to determine compliance with the rate review process.
NFGP	Non-Federal Governmental Plan	The NFGP module allows both self-funded and fully insured plans to register their organization within HIOS, but only self-funded plans may complete a HIPAA opt-out election.
ERE	External Review Election	If HHS determined that a state’s external review process does not meet either the NAIC-parallel or NAIC-similar standards, plans and issuers in the state must participate in a federally administered external review process by electing to either use HHS-administered external review process or by contracting with private accredited independent review organizations (IROs). The selection of a federally administered external review process is called an external review election (ERE). This module will facilitate the data collection and review process of external review elections data for all issuers belonging to states and territories that have been determined to have noncompliant external review laws.
AST	Assister	The AST module allows assister organizations to create, edit, attest, and certify assister records. Once assister records have been certified, the assisters will receive a certificate that will allow them to assist in their respective areas.
HIOS-MQM	Marketplace Quality Module	The HIOS-MQM module supports the Center for Clinical Standards and Quality (CCSQ) in its Health Insurance Marketplace Quality Initiatives (MQIs) to generate quality ratings for QHPs. The HIOS-MQM module supports the following activities: • Receipt, verification, and storage of clinical measure data and enrollee survey response data which are used to generate the quality ratings. • Preview of the quality.
	QHP Issuer Module	The QHP Issuer Module allows users to submit information pertaining to administrative data, program attestations, state licensure, good standing, accreditation, network adequacy, and essential community providers (ECPs).
	QHP Benefits and Service Area Module	The QHP Benefits and Service Area module allows users to submit health plans and benefits data to be evaluated for QHP certification. This module will collect data pertaining to network, service areas, prescription drugs, and plan benefits.
	QHP Rating Module	The QHP Rating module allows users to submit rate data information for plans and benefits of the issuers that wish to offer plans for a given exchange.
	Unified Rate Review Module	The Unified Rate Review Module allows users to submit a market-wide rate review template and other required information within an issuer’s single risk pool.

Acronym	Module Name	Module Purpose
	State Evaluation Module	The State Evaluation Module allows submission of a market-wide rate review template and other required information within an issuer's single risk pool.
	Financial Management Module	The Financial Management Module provides access to vendor management functionality in the marketplace. It provides access for both CMS and issuers.
	Edge Server Management	The Edge Server Management module allows organizations with the attributes of EDGE Server TPA to access the module under the financial management function.

Marketplace Types and Responsibilities

1. Marketplace Structure

Each state is required by the ACA to have a health care insurance marketplace. A marketplace, under the ACA, is where consumers (which may include small businesses) may shop for and enroll in health care coverage. Plans available on the marketplace must be QHPs or QDPs, meaning that the plans comply with the benefit and actuarial value requirements of the ACA.

There are four types of health insurance marketplaces. Each state marketplace is one of these types. They are presented here in order of the amount of responsibility the federal government has in administering them. As federal policy evolves, state-by-state results may vary from the four types of health insurance marketplaces described below. At one end of the spectrum is the FFE, administered entirely by the federal government. At the other end is the SBE, which is the responsibility of the state alone. In between are the state partnership marketplace (SPM) and SBE on the federal platform, where responsibility is shared between the federal government and the states.

A. Federally Facilitated Exchange (FFE)

FFE refers to a state's method of fulfilling its requirement to have a marketplace and also to the federal marketplace platform itself, www.healthcare.gov.

States have the option to enter into a "federal platform agreement" to use this federal marketplace platform as the marketplace for their QHPs and QDPs, rather than creating their own marketplaces. In such states, consumers shop for and enroll in coverage through www.healthcare.gov.

This platform includes a marketplace for individual QHPs. It also includes a marketplace for small business plans, called the federally facilitated small business health options marketplace (FF-SHOP).

The FFE has its own infrastructure that facilitates consumer shopping for health care plans and processes eligibility and enrollment. This federal platform is administered by CCIIO.

State and Federal Responsibilities in the FFE

The ACA contemplates that states be the primary regulators of issuers, including enforcement of market reforms. States can, however, notify CMS that they either lack statutory authority to enforce or are not otherwise enforcing one or more provisions of the ACA. CMS may also make a determination that particular states are not substantially enforcing the requirements. In these situations, CMS must enforce those provisions in those states.

Most states are enforcing the ACA market reforms themselves. These states are sometimes referred to as primary enforcement states. In the other states, CMS is responsible for enforcing the ACA either through a collaborative arrangement with the state or by direct enforcement.

Where CMS and a state have entered a collaborative arrangement, the state may lack authority to enforce the ACA but still seeks to enforce the ACA market reforms through voluntary compliance from its issuers. Only when unsuccessful does the state refer a potential violation to CMS for possible enforcement action.

In a direct enforcement state, the state either does not have the authority, chooses not to, or fails to enforce one or more ACA market reforms but does not have a collaborative arrangement with CMS. CMS must directly enforce the ACA requirements in that state. That means that issuers submit their policy forms directly to CMS, which conducts the reviews of these forms for compliance with the ACA market reform provisions and works with issuers to resolve concerns. CMS may also perform other enforcement activities, such as market conduct examinations and handling of consumer complaints having to do with the ACA requirements.

FFE states must abide by CMS requirements, which cover areas such as:

- Process and deadlines for applications to market QHPs using the FFE:
 - In states that use the FFE, QHP, and QDP, plan documents are filed with CMS via HIOS. However, some states with an FFE may require submission of the same material as part of the state's review of market-wide reforms such as AV, EHB, and cost-sharing limitations.
- Certification of plans (although an FFE seeks input from the state confirming whether the issuer's submitted plans have been accepted/approved by the state).
- Standards for training consumer assistants and processes for consumer assistance.
- Standards for contracting with producers (agents and brokers) (who wish to sell via the FFE).
- Standards of training and conduct for producers (who wish to sell via the FFE).
- Privacy and security of personally identifiable information.
- Procedures for eligibility determination, enrollment, re-enrollment (renewal), and termination of coverage.
- Processes for exemptions from the ACA shared responsibility payment.
- The functions of the FFE and FF-SHOP.
- Payment and collections handling.
- Administrative appeals for issuers.

Additionally, some marketplace standards relating to open and special enrollment for QHPs also apply market-wide, and states would be expected to enforce those standards on non-QHPs.

B. State Partnership Marketplace (SPM)

An SPM is a hybrid model where the state is responsible for some aspects of the marketplace, while HHS administers others. An SPM allows states to retain control of key decisions and tailor their marketplaces to their particular needs. It may also serve as a temporary option to allow for additional time and experience as a state develops its own SBE.

In states with an SPM, consumers shop for and enroll in coverage through the federal marketplace platform www.healthcare.gov.

State and Federal Responsibilities in SPMs

States with SPMs must fulfill the CCIIO requirements applicable to them, as well as their responsibilities as agreed in their individual partnership agreements with CMS.

There are two main models for SPMs. In a state plan management partnership marketplace, states create agreements with CCIIO regarding the responsibilities of each for plan review functions. SPM states recommend plans to CCIIO for certification as QHPs and QDPs (as well as for recertification and decertification) and retain responsibility for day-to-day administration and oversight of QHP and QDP issuers. In a state consumer partnership marketplace, CCIIO performs plan management functions, while the states retain responsibility for consumer assistance and outreach. CCIIO is responsible for funding and award of grants to Navigators, while the states are responsible for day-to-day oversight of the Navigators. States with this type of SPM are responsible for developing and administering their own consumer assistance programs (and may choose also to be responsible for outreach and education) regarding the marketplace and the plans available to state residents. However, these programs must use the federal training standards and training program required of Navigators. They have the option to add state-specific training.

States may also choose to retain responsibility for a combination of plan management and consumer outreach activities regarding QHPs and QDPs, ceding responsibility for others to CCIIO.

In states with a state consumer partnership marketplace (where CCIIO performs the plan management functions), QHPs and QDPs are filed with CMS using the HIOS system. In states with a state plan management partnership marketplace (where the state performs the plan management functions), QHPs and QDPs are filed with the state using SERFF.

C. State-Based Exchange on the Federal Platform (SBE-FP)

Under this model, states are still considered to have an SBE, because these states are responsible for administering all of their own marketplace functions. States do not create their own marketplace platforms. Instead, these states use the federal marketplace platform www.healthcare.gov as the marketplace where their consumers shop for and enroll in coverage. In this way, states retain all their own regulatory control over insurance plans and the state insurance market but avoid spending the resources necessary to create and maintain their own marketplace websites.

State and Federal Responsibilities in an SBE-FP

- An SBE-FP looks much like an SPM where the state has retained both plan management and consumer assistance functions. Like an SPM, an SBE-FP or SBM requires a federal platform agreement with the state, setting forth the responsibilities of each party.
- According to the Notice of Benefit and Payment Parameters, the terms of federal platform agreements between CMS and SBE-FPs specify certain expectations. SBE-FPs retain primary responsibility for overseeing QHPs and issuers according to requirements that are no less strict than those for QHPs and issuers on the FFE. These requirements include requirements and standards for:
 - Publishing the formulary drug list on the issuer's website.
 - Network adequacy.
 - Essential community providers.
 - Meaningful difference.
 - Changes of ownership of issuers.
 - Adherence of issuers and downstream entities to CMS requirements.
 - Records maintenance.
 - Compliance reviews.
 - Casework.
 - Consumer assistance.

In addition, SBE-FPs are required to comply with all of the same eligibility and enrollment rules as FFE states.

D. State-Based Exchange (SBE)

An SBE is a marketplace in which all marketplace functions are performed by the state. In such states, consumers shop for and enroll in coverage through websites established and maintained by the states.

SBEs are subject to some, but not all, of the requirements to which the FFE and the FF-SHOP are subject. SBEs may create their own processes and requirements for plans offered on these marketplaces. This includes setting deadlines for some activities that are different from the FFE and FF-SHOP deadlines, though they must comply with the federal open enrollment period. SBEs can also establish its own risk adjustment program. Each SBE will have its own unique requirements.

A few states use the federal marketplace platform www.healthcare.gov for sale of individual QHPs and operate their own SHOP marketplace. The model under which these states use the federal marketplace platform varies.

E. Multistate Plans (MSPs)

MSPs are not a type of marketplace. They are a type of health plan created by the ACA. MSPs are administered by the federal Office of Personnel Management (OPM), which is the office that administers the federal Employee Health Benefits program for federal employees. The purpose of the MSP program is to work toward establishing a set of health care plans that will be offered nationwide. OPM's goal is that MSP issuers will offer at least two MSP options (one silver level and one gold level plan) through every state's marketplace.

OPM does not have authority to require issuers to offer multistate plans.

A reading of these descriptions of the marketplace structures demonstrates that while they loosely fit into the general categories above, each marketplace is unique in terms of the precise responsibilities performed by the state and those taken on by CCIIO, nor is the list of states using each model stable. Since the marketplaces began their first open enrollment for QHPs in 2013, several states have changed their models. Some changes were due to technological issues with SBEs that required states to abandon their own marketplace platforms in favor of the federal platforms. As discussed, SPMs can be a temporary stop on the road to an independent SBE. As the health care landscape continues to evolve, additional changes can be expected.

Marketplace Requirements

The federal requirements for establishment and administration of marketplaces, including technical requirements specific to states and issuers in marketplaces that use the FFE, are largely found in Title 45 CFR Parts 144, 146, 147, 153, 154, 155, 156, and 158. The FFE also has an application process that includes several processes and submission requirements.

Each year since the marketplaces became operative, CCIIO has released two documents that set forth requirements for marketplaces for the coming plan year and may also include market-wide requirements, such as rating, special enrollment opportunities, and clarification of EHB provisions. One document is the Notice of Benefit and Payment Parameters Rule (NOTICE), and the other document is the Letter to Issuers.

1. The Notice of Benefit and Payment Parameters

The Notice communicates a set of new or amended federal regulations regarding several ACA programs. As federal regulations, these rules are binding on all marketplaces, regardless of structure, unless a specific rule, by its terms, applies only to certain types of marketplaces.

Every rule, as this set of regulations is frequently called, includes certain parameters for the following year. Every rule sets the dates for the annual enrollment period for the following year. It also sets the parameters for the ACA premium stabilization programs (risk adjustment, reinsurance, and risk corridors—3Rs) for the following year. The rule includes updates to the HHS risk adjustment model (for the Risk Adjustment program), including the risk adjustment factors. The FFE user fee for the following plan year is set in the rule. The rule also annually sets the maximum annual limitations on cost-sharing for standard and reduced cost sharing health plans, as well as for standalone dental plans that offer the EHB for pediatric oral services.

In addition to the provisions that are included in every year's rule, changes also have been included each year in different areas of ACA regulation. For example, CMS has used the rule to make updates and changes to the technical processes by which the information and payments flow in the premium stabilization programs. This includes requirements for what data must be submitted to CMS and how it is to be submitted. CMS has also used the rule to set or change standards for rates, benefits, and networks. Additionally, it has set requirements in the rule for individuals and entities that provide consumer assistance with QHPs and QDPs, such as Navigators. The rule has set and updated requirements for rate review and disclosure. This includes, for effective rate review states, dates upon which all rate information for a particular plan year must be made publicly available.

2. The Annual “Letter to Issuers” from CMS

The Letter to Issuers is based upon the rules governing QHPs and the marketplaces. Some of the provisions that have been set forth in the Letter to Issuers are:

- Procedures and requirements for application to sell plans on the FFE.
- The extent to which CMS would perform rate and form review for FFE states, and the extent to which it would rely upon the FFE states to perform this review.
- Procedures and requirements for certification and recertification of QHPs to be sold on the FFE.
- Dates and deadlines for QHP certification on the FFE, such as:
 - The deadline for issuers to submit applications to CMS for certification of their QHPs or stand-alone QDPs.
 - The dates within which certain changes to applications may be made.
 - The schedule for “correction notices” and “corrections” of issues found during review of the submitted plans.
 - The deadline by which certification agreements between CMS and issuers must be signed.
- Clarification or changes to CMS expectations for activities such as provider contracting, claims handling, online provider directories and formularies, and language access.
- Registration and training requirements for producers (agents and brokers) in the FFE.

The Letter to Issuers notifies stakeholders which types of plans (QHPs and standalone QDPs) may be sold on the FFE. In it, CMS sets certification standards for QHPs and QDPs for the following year. CMS has used the Letter to Issuers to signal areas in which it will focus its review of rates, forms, and networks. CMS has also used the Letter to Issuers to explain how account management will be conducted and monitored and to set out program requirements.

Overall, a particular state can find the requirements and market-wide reform standards for its marketplace in Title 45 CFR, in the agreement (if any) between CMS and that state, in the technical requirements for plan certification set forth by the marketplace platform the state uses and in the annual CMS Notice of Benefit and Payment Parameters Rule and Letter to Issuers.

Form, Rate, and Plan Reviews Under the ACA

Under the ACA, states insurance regulators are charged with primary enforcement of the provisions of the federal law. Processes include: 1) the review of plan-level compliance; 2) the review of QHP certification standards reviews; 3) the use of computer-based tools to facilitate these reviews; and 4) the coordination with federal agencies on implementation, enforcement and interpretation of federal laws, regulations, sub-regulatory guidance, and requirements.

This section will explore the connection between insurance policy form, rate, and plan level reviews, as well as the tools utilized by state insurance regulators to check compliance. It also will touch upon the necessary state/federal coordination efforts that the ACA requires.

1. Policy Form Review

While the ACA makes sweeping changes to the substantive requirements with which the form review process is designed to verify compliance, the process itself remains the same in many respects. For most provisions of the ACA, form reviewers verify that the policy documents either contain required elements or do not contain provisions that violate prohibitions or restrictions in the law. State insurance regulators are already familiar with this type of review, even if the substantive requirements are new.

Other reforms in the ACA, however, require important changes to the way that issuers file policy forms and the states review them. Most significantly, while forms were filed and evaluated at the product level in the past, several provisions of the ACA require analysis at the plan level. Plan level review will be discussed in more detail in the Plan Review section in this chapter.

Insurance form filings typically include:

- **Contracts:** Also referred to as “evidence of coverage” or “policy.”
- **Certificates:** Also referred to as a “member handbook” or “benefit booklet.”
- **Schedule of benefits:** Also referred to as “explanation of benefits” or “schedule of benefits.”

In some states, the form filing may also be required to include the federal SBC, and the state may review such documents for compliance with applicable laws. In other cases, the marketplace may review these documents. Some states consider the SBC to be a marketing piece, and those states would review pursuant to that review process.

Processes for submission of insurance forms vary from state to state. Some states may permit the use of variable language in submitted forms to allow insurers ease of administration and to allow regulators to review common policy provisions in an efficient manner. Other states may not permit the intermingling of different products within a single insurance form and require submission of separate forms for each product. While some provisions lend themselves more readily to a merged form review, provisions dealing with the cost-sharing and actuarial value of plans must be reviewed on a plan-by-plan basis. For this reason, issuers will most likely need to submit the necessary information for review of these provisions on a plan-by-plan basis, indicating which product filings these plans are based on. The SERFF Plan Management system and the federal plan management templates (both discussed in the Plan Review section in this chapter) help facilitate the review of plan level requirements. States where form and plan review are both performed connect the two processes and typically consider the two processes dependent upon each other—deficiencies in one sometimes lead to deficiencies in the other or at least a need to address a deficiency in both. In addition to plan level compliance, state insurance regulators who review insurance policy forms for compliance must incorporate review of forms to be used with QHPs which are sometimes subject to unique statutory or regulatory provisions that do not apply to non-QHP plans (nor the insurance forms associated with them). These requirements are mainly related to procedures for enrollment and disenrollment through the marketplace, although the states may also impose their own QHP certification requirements. These standards may be located in federal regulation, federal sub-regulatory guidance, or state insurance or marketplace-related statutes and regulations.

State insurance regulators, whether the state has an FFE or SBE, also will review policy forms for compliance with federal ACA market-wide reforms, such as EHBs and cost-sharing limitations. Some states may have adopted these standards into state law, but other states may utilize federal statutes and regulations and the authority granted states as the primary enforcers of the federal provisions as authority to require compliance with ACA market reform standards.

2. Rate Review

The ACA includes several provisions that affect health insurance rating and rate review. These provisions include requirements for the review and disclosure of rate submissions above certain defined thresholds, rating and underwriting requirements and limitations, programs to mitigate adverse selection and pricing risk, and additional requirements placed on plans offered through marketplaces. State insurance regulators' processes related to rate review must allow for potential differences between:

- Grandfathered, transitional, and ACA-compliant plans.
- Plans inside and outside of the marketplace.
- Plans by market if the states have varying levels of review authority and effective rate review designations.
- Rate increases, where applicable, at or above defined thresholds versus those under the defined thresholds.

The ACA also creates roles related to rate review for the federal government and marketplace entities. Marketplace governance and functional responsibilities vary across the states and may include various combinations of state insurance regulators, marketplace entities, and the federal government. The federal government specifically plays a role in rate review in cases where a state does not have an effective rate review program.

Most of the states with rate review laws require that the issuer provide a qualified actuary's opinion that the rates are reasonable and comply with state and/or federal laws. This allows the states to rely on the Code of Professional Conduct and the Actuarial Standards of Practice that actuaries must follow. In addition, the states often look at the whole financial picture of an issuer, such as review of risk-based capital (RBC) levels and the issuer's profits, when reviewing rate filings.

Federal regulation recognizes and builds upon the traditional role the states have played in regulating insurance rates and complements existing state-based rate review processes. Title 45 CFR Part 154 provides that all proposed rate increases in the individual and small group markets that are at or above the threshold are subject to review, and issuers are required to provide a public justification prior to implementation of the increase to both the state and CCIIO. In the 2016 Notice of Benefit and Payment Parameters, the requirement to submit and post a rate justification was expanded to all rate submissions. States with effective rate review programs review rates to determine whether they are in accordance with state law and if the increase is unreasonable. In the states that do not have the legal authority or resources to review rates, CCIIO reviews proposed rates to determine whether they are reasonable, based on actuarial and other analyses that are used by many states to assess rate increases.

While the federal regulations do recognize the traditional role that state insurance regulators have played in rate review, the regulations have also established mostly uniform standards regarding: 1) what is required to be submitted; 2) when it is submitted; 3) the time a state has to review the rates and take action; and 4) what, when, and how a state (which has an effective rate review program) must uniformly disclose information about all rate filings in the ACA-compliant individual and small group markets. These standards, which have evolved over time, are generally established in federal regulation (Title 45 CFR Part 154) and through federal bulletins and sub-regulatory guidance (including the annual "Letter to Issuers in the FFE"). States with FFEs are then required to follow the federal timelines for review and public disclosure of rate filings in order to retain an effective rate review designation. Similarly, states with an effective rate review program and SBEs, must coordinate their reviews with the requirements of their SBEs, while also following applicable federal standards for the timing and reporting of the final determinations on rate submissions subject to reporting (10% or more annually).

Federal provisions relating to reporting and publication of rate filings differ depending on the market and the regulatory category of the plan. Additionally, CCIIO has two different modules in HIOS to collect the information about rate filings subject to reporting which vary based on those same criteria.

The federal regulations relating to reporting of rate increases of the threshold or more apply to all non-grandfathered health insurance coverage in the individual and small group markets. Therefore, states with an effective rate review program must accommodate federal provisions in their review of transitional (non-grandfathered) plan rates. But outside of the federal requirement to report increases of the threshold or more, states are free to adopt their own review process, data requirements, and implementation provisions for transitional and grandfathered business.

Federal rate review requirements set minimum standards for all states, and states can require more information from issuers and maintain existing processes that exceed federal standards.

3. Federal Rating Requirements for ACA-Compliant Plans

The ACA limits rating variations for non-grandfathered, ACA-compliant plans in the individual and small group markets to the following:

- **Geographic rating area:** The states are charged with defining standard geographic rating areas, subject to approval by the secretary.
- **Age:** Age factors are a ratio of 3:1 for adults; permissible age bands are defined in federal regulation through a standard federal default age curve. States may establish their own age curve as long as the 3:1 ratio is maintained.
- **Family structure:** Federal regulation establishes that in most cases an individual must be charged an age-appropriate rate for his or her coverage, with no recognition in rates given for a family unit. Therefore, a family's premium is the sum of the individual age-specific rate for each individual in the family, with each adult (whether the policyholder, spouse, or dependent child) 21 or older charged an appropriate rate for his or her age. The family's premium will include the individual rate for no more than the three oldest children under age 21.
- **Tobacco use:** Rating for tobacco use is limited to a ratio of 1.5:1 and must be applied to the individual's premium. States have the option to apply different tobacco rating factors if they don't exceed 1.5:1.

4. Rating of ACA-Compliant Plans Inside and Outside the Marketplace

Issuers offering QHPs on the marketplace must offer the "same premium rate" for plans offered inside and outside of the marketplace whether they are sold directly or through an agent. Since all rates for QHPs and non-QHPs must be established with the single-risk pool methodology, state insurance regulators review rates for both inside and outside the marketplaces. States may establish different or additional requirements than the federal requirements relating to rates, such as submission of federal rate templates (discussed in the Plan Review section in this chapter) which disclose all rate, age, and geographic area combinations for each plan and are utilized by the marketplaces to populate their "shopping" portals.

5. Rate Filing Justification

As required under Title 45 CFR §154.301, states with effective rate review programs must post to their websites Part I, Part II, and Part III of the federal Rate Filing Justifications and provide a means for public comments to be submitted on proposed rate increases. States can meet these requirements by providing links to www.healthcare.gov rather than posting the Rate Filing Justifications on their websites. Whether a state publishes on its own website or provides a link to the federal websites, federal regulation establishes that the Rate Filing Justifications must be publicly disclosed on a uniform basis when originally received (for filings subject to reporting) and when final for all rate filings (no matter the change in the rate). States using www.healthcare.gov for this disclosure avoid the issue of managing the uniform disclosure of rates, which can be hampered by state public disclosure laws and by a state's own global efforts for transparency of regulatory submissions (such as through direct public access to filings through a state filing system or a web public access (WPA)).

For transitional plans, which use a different module in HIOS for reporting rate increases subject to reporting, states with effective rate review programs must still make information available to the public as required under the federal regulations relating to reporting of rate increases, but they are not bound by standards relating to timing and uniform disclosure that apply to ACA-compliant plans.

6. Plan Review

In addition to form level compliance, the ACA establishes standards of compliance at the plan level which may not be readily confirmed by a state through form review only. Further, if a state insurance regulator is partnering with its marketplace (whether that is an SBE or the FFE) to perform plan management activities, then that insurance regulator will be confirming compliance with various plan level criteria, including QHP certification standards established by the FFE and/or the SBE. Additionally, some states that are not in partnerships with their marketplaces may still wish to confirm plan level compliance with certain market-wide ACA standards (such as AV, EHB, and cost-sharing limitations) as part of their regulatory oversight of the health insurance markets in the state.

The SERFF Plan Management module was designed specifically to assist Plan Management states with collecting, reviewing, and performing the plan management activities under their partnership agreements. In states performing plan management reviews for their marketplace, the binders facilitate submission of the QHP application and related federal or state data templates by issuers wishing to participate on the marketplace. In such a state, the state insurance regulator confirms that an issuer's plans are compliant at the plan level, including the QHP certification standards, and conveys the list of plans that meet such criteria to the marketplace for certification. The states use federal and/or state review tools on the federal or state data templates to facilitate and assist in the analysis of plan level compliance and to assist in making determinations for their recommendations.

In the case of issuers wishing to participate on the marketplace in a state that is not a plan management partner, the issuer submits the federal data templates and other QHP application materials in HIOS or the system required by the SBE. In some states, the state insurance regulator may request those same templates be submitted in a SERFF plan binder in order for the state to complete its regulatory duties. Some states may also require issuers who participate only off the marketplace to submit some of the federal data templates in a binder.

Federal data templates and the federal tools to facilitate review of them can be accessed on the [CMS website](#). SBE applications and related state-specific data templates should be accessed at the state's marketplace website.

State insurance regulators determine whether plan level compliance is part of their regulatory processes related to ACA plans and, if so, to what degree they use SERFF Plan Management functionality, federal or state data templates, and federal or state template analysis tools as part of those reviews. For a particular state, this determination may change over time.

Data templates include templates that provide information on plans and benefits, covered prescription drugs, networks, service areas, actual premiums for each plan/age/geographic area combination, and business rules for administration of the plan benefits and rating. In addition to assisting with plan level compliance reviews, the templates are also used by the marketplace to populate the online plan comparison tool.

Tools to review the templates are available for prescription drug formularies, cost-sharing limitations, meaningful differences in plan designs and discrimination in benefits. The tools are typically in Excel spreadsheet format and include instructions on their use within the spreadsheets themselves. State insurance regulators, however, must further develop standards and interpretation to fit regulatory needs and policies.

Chapter 7 Glossary

ACA: The federal Patient Protection and Affordable Care Act, a health care reform law enacted on March 23, 2010, as amended by the Health Care and Education Reconciliation Act of 2010.

ACA-Compliant Plan: A non-grandfathered plan issued on or after Jan. 1, 2014, that complies with all of the ACA market reforms.

Advanced Premium Tax Credits (APTC): A tax credit that can reduce the amount paid for health insurance.

Actuarial Value (AV): The percentage paid by a health plan of the total allowed costs of benefits. Plans inside or outside the marketplace must fit within one of the metal tiers: bronze, silver, gold, or platinum, which are defined by AV.

AV Calculator: The federal CMS tool that calculates the actuarial value and metal levels of all non-grandfathered plans in the individual or small group market.

Binder: A collection of templates and plan data in SERFF, sent by one company to one state. Information in the binders is reviewed by state regulators to see if it meets plan management requirements for the upcoming plan year. Sometimes these are also referred to as "Plan Binders."

Catastrophic Health Plan: A type of high-deductible health plan for individuals under the age of 30 or those who qualify for a hardship exemption.

CCIIO: The Center for Consumer Information and Insurance Oversight.

CMS: The federal Centers for Medicare and Medicaid Services.

Cost-Sharing Reduction (CSR): The subsidies that reduce the deductibles, coinsurance/copays, and other out-of-pocket charges. CSR is available only with the purchase of a silver category plan.

Effective Rate Review: A state program that CMS has determined meets the requirements set forth in §154.301(a) and (b) for the relevant market segment in the state. This means CMS has agreed to take the state's determination of whether a rate increase that is subject to reporting (those that are 10% or more) is unreasonable. (From Title 45 CFR §154.102.)

Essential Health Benefits (EHBs): The set of health care service categories: ambulatory patient services; emergency services; hospitalization; maternity and newborn care; mental health and substance use disorder services, including behavioral health treatment; prescription drugs; rehabilitative and habilitative services and devices; laboratory services; preventive and wellness services and chronic disease management; and pediatric services, including oral and vision care. These must be included in all ACA-compliant plans sold or renewed in the individual or small group markets. Large group plans may not apply annual or lifetime limits to EHBs if they offer them. EHBs are based on a benchmark plan identified by the state or the federal government.

Federally Facilitated Exchange (FFE) or Federally Facilitated Marketplace (FFM): The federal marketplace for the selling and buying of health insurance and includes a small business health options marketplace for small employers to purchase health insurance called the FF-SHOP.

Grandfathered Plan: A plan or policy that was in place (in existence) on March 23, 2010, and has not been changed in ways that substantially cut benefits or increase costs for plan holders. “In place” or also referred to as “in force” means a policy of health insurance coverage that is active, and the premium payments have been made as of a point in time.

Health Insurance Exchange or Health Insurance Marketplace: A website where individuals and small businesses can learn about health insurance, choose a plan, and enroll in coverage. Marketplaces can be run by a state or run by the federal government.

HHS: Refers to the U.S. Department of Health and Human Services.

Issuer: An insurance company, insurance service, or insurance organization (including an HMO) that is required to be licensed to engage in the business of insurance in a state and that is subject to state law that regulates insurance (within the meaning of Section 514(b)(2) of ERISA). Sometimes referred to as insurer, carrier, or company in the state regulatory environment. (From Title 45 CFR §144.103)

Navigators: Individuals or organizations that are trained and able to help consumers, small businesses, and their employees as they look for health coverage options through the marketplace, including completing eligibility and enrollment forms. These individuals and organizations are required to be unbiased. Their services are free to consumers.

Nondiscrimination: An issuer must not discriminate on the basis of race, color, national origin, disability, age, or sex under any health program or activity, any part of which is receiving federal financial assistance, as included in Section 1557 of the ACA.

Plan: With respect to an issuer and a product, refers to the pairing of the health insurance coverage benefits under the product with a particular cost-sharing structure, provider network, and service area. (From Title 45 CFR §144.103)

Plan Management: Activities associated with the QHP process, including certification, monitoring/oversight, re-certification, and de-certification.

Product: A discrete package of health insurance coverage benefits that a health insurance issuer offers using a particular product network type within a service area. (From Title 45 CFR §144.103)

Qualified Health Plan (QHP): A plan that is certified by the Health Insurance Marketplace, provides EHBs, and follows accepted limits on cost-sharing and complies with other requirements, such as accreditation and quality standards.

Qualified Dental Plan/Standalone Dental Plan (QDP/SADP): A standalone dental plan that is certified by the Health Insurance Marketplace.

State-Based Exchange or State-Based Marketplace (SBE/SBM): A state-based marketplace where the state has implemented a marketplace for the selling and buying of health insurance. This may include a small business health options marketplace (SHOP) for small employers to purchase health insurance.

State-Based Exchange or Marketplace Federal Platform (SBE-FP/SBM-FP): A state-based marketplace that is governed by the state but uses the federal marketplace platform.

Summary of Benefits and Coverage (SBC): A federally required document concisely detailing, in plain language, simple and consistent information about health plan benefits and coverage.

System for Electronic Rate and Form Filings (SERFF): A web-based application that facilitates form, rate, and plan management submissions from insurance companies to state regulatory entities.

Transitional Plan: A non-grandfathered plan of health insurance coverage that complied with the early market reforms under the ACA and was in place as of Oct. 1, 2013. It's also known as a "grandmothered plan."

Web Public Access (WPA): A link to SERFF that allows users to view information publicly available for form, rate, and/or plan management submissions. This is also referred to as SERFF Filing Access.

The NAIC is the U.S. standard-setting and regulatory support organization created and governed by the chief insurance regulators from the 50 states, the District of Columbia and five U.S. territories. Through the NAIC, state insurance regulators establish standards and best practices, conduct peer review, and coordinate their regulatory oversight. NAIC staff supports these efforts and represents the collective views of state regulators domestically and internationally. NAIC members, together with the central resources of the NAIC, form the national system of state-based insurance regulation in the U.S.

For more information, visit **naic.org**.