



SOCIETY OF ACTUARIES

**2010 Valuation Actuary Symposium  
Sept. 20- 21, 2010**

**Session # 23 PD: Model Audit –  
Documentation and Best Practices**

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## MAR- Implementation Issues

§ 2010 VAS Session 23 PD

§ Terry Boucher

§ Annuity Reserves and Earnings Analysis

§ 2<sup>nd</sup> VP and Actuary, Phoenix Life Cos.

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## MAR: Total Company Focus

§ The MAR impacts the whole company

§ It goes beyond Actuarial issues

§ Impact goes all the way to the Board

§ Audit Committee Rules

§ Selection of Independent Auditor/Lead Partner

§ Certification by CEO and CFO

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## Who is Coordinating?

- § Company needs someone to take the lead
- § Candidates:
  - § Internal Audit/Chief Compliance Officer
  - § Corporate Accounting/Chief Accounting Officer
- § Leader should:
  - § Identify scope
  - § Set schedule
  - § Disseminate information

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## Start with SOX

- § Most companies have controls in place for Sarbanes-Oxley compliance
- § Focus of SOX is GAAP
- § Need to adapt to statutory for MAR
  - § Many processes will overlap
    - § Data Feeds
    - § Valuation Systems
    - § Ledger Entry Process

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## Start with SOX (cont.)

- § Review SOX Key Controls/RC Matrix
  - § Applicable to Statutory?
    - § DAC controls won't be needed for MAR
    - § Change controls will be similar
- § Does Statutory need new Controls?
  - § Different methodologies
    - § E.g., SOP 03-1 vs. AG43
  - § Are the controls "key"?
    - § Consider critical path
    - § Consider problems encountered in the past

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## Things to Consider

- § Statutory Controls must cover the whole process:
  - § Data feeds from Admin. Systems
  - § Assumption change controls
  - § Valuation system to ledger interface
  - § Verify ledger entries tie to output files

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## Examples of Stat. Differences

### § Variable Annuity Block:

- § DAC, SOP 03-1, and SFAS 133/157 controls are more GAAP specific
- § AG43 controls needed to be added
  - § Standard Scenario is more straightforward
    - § Uses same valuation system as GAAP
  - § CTE reserve process presents challenges
    - § Uses modeling software, not valuation system
    - § Process was new for 2009 year-end

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## CTE Method Challenges

Had to build control structure from scratch

### § Existing Modeling culture:

- § frequent trial-and-error, quick changes

### § Needed to move to reporting culture:

- § Limited access to system
- § Change control protocols

### § Auditability & Documentation

### § Consider this for PBA on other lines

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## Year-end Considerations

- § Statutory Reporting requires extra work at year-end
- § Blue & Green Books by Feb. 1
- § MAR applies to Audited Statutory Financial Report, due by June 1
- § Audited Reports repackage Annual Statement information

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## Year-end Controls

- § Controls and documentation need to be in place for Annual Statement information.
- § **As shown in Audited Financial Report!**
- § Consider the following:
  - § Blue Book Exhibits 5, 6, 7, & 8
  - § Green Book Exhibits 3, 4, & 6
  - § Footnotes

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## Controls include Capital

- § Section 5B of MAR specifically mentions capital and surplus
- § Consider how RBC is shown in Audited Financial Report
- § Controls need to be in place for RBC:
  - § VA Interest and Market Risk: C3P1 and C3P2
    - § Memorandum will help
  - § Life products will soon have C3P3

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## Getting it Done

- § Corporate Compliance is taking lead at my company
- § Initial meetings to discuss project goals
- § Schedule walk-throughs to review draft MAR controls
- § Independent Internal testers review draft controls and evidence
- § Internal sign-offs to support CEO/CFO

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## After Implementation

§ Need ongoing maintenance!

§ Annual reviews

§ New products:

§ Assumptions

§ Features

§ New software:

§ Version updates

§ Modifications/major changes

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## Session 23 PD

§ Q & A

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## NAIC Model Audit Rule (MAR)

2010 VAS Session 23 PD

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- § Insurance Actuarial & Advisory Services
- § Financial Services Group
- § Ernst & Young, LLP



## NAIC Model Audit Rule (MAR)

§ Agenda

- § American Academy of Actuaries – MAR Practice Note
- § Overall MAR process – Top/Down Risk-Based Approach
- § MAR – Health Actuary Perspective
- § Q&A

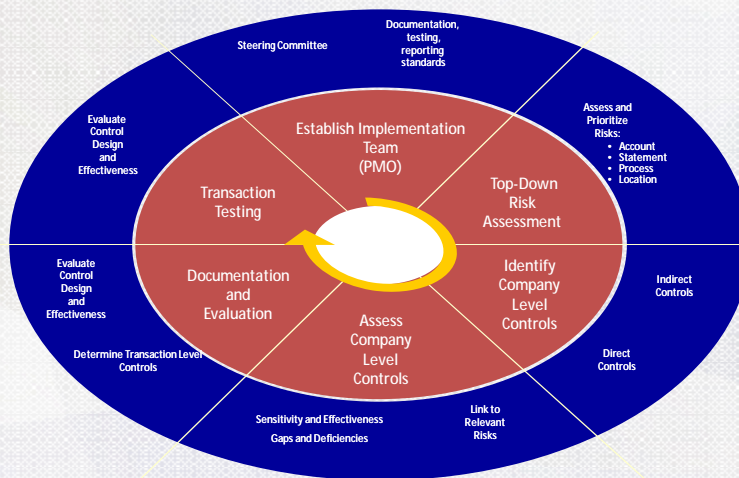


## American Academy of Actuaries – MAR Practice Note

- § Targeted draft release – Fall 2010
- § Contents of Practice Note
  - § Section 1 Introduction
  - § Section 2 Overview of Control Structure
  - § Section 3 Covered Processes in Determining Actuarial Balances
  - § Section 4 Documentation of Processes
  - § Section 5 Identify Risks
  - § Section 6 Identify and Design Key Controls
  - § Section 7 Testing of Controls
  - § Section 8 Input to the Attestation
  - § Section 9 End User Computing
  - § Section 10 Key Areas of Actuarial Involvement
  - § Section 11 Conclusion



## Overall MAR process – Top/Down Risk-Based Approach



## Overall MAR process – Top/Down Risk-Based Approach

### Issues you face

- § Compliance by 2010
- § Difficulty identifying material risks to financial reporting
- § Lack of requisite skills and approaches
- § Prone to control deficiencies in the more technical areas
- § Need for early remediation and implementation
- § Over-scoping
- § Need for consistent documentation across diverse functional areas



## Overall MAR process – Top/Down Risk-Based Approach

### Benefits to you

- § Early identification of potential weaknesses
- § Leverage for state financial exams
- § Maximize reliance on Company and Entity Level Controls
- § Minimize documentation and testing at the Transaction Level
- § Eliminate trial and error (filtering)
- § Focus on key risks and controls
- § Objective insight into remediation



## MAR – Health Actuary Perspective

### Key Areas of Actuarial Involvement

- § Documentation of reported liabilities/reserves and related actuarial items
- § Identify Key Risks
- § Designing and Documenting Controls



## MAR – Health Actuary Perspective

### Documentation of reported liabilities/reserves and related actuarial items

- § Process Narrative
- § Process Flowchart



## MAR – Health Actuary Perspective

### Process Narrative – should include

- § Who performs the process
- § Who peer reviews the process results
- § Who uses the results of the process or process sub-steps
- § Timing of the process results signoff
- § Process dependencies
- § Process outputs
- § The procedures for reporting of process outputs
- § Footnote references linked to the Process Flowchart and Risk-Control Matrix



## MAR – Health Actuary Perspective

### Process Flowchart – should include

- § Information/Data Sources
  - § Data Warehouse
- § Actuarial Analysis
  - § Complex decision trees for various actuarial methods and assumptions
- § Peer review
  - § Multiple levels and signoffs
  - § Multiple levels of adjustments to assumptions and results
- § Process Outputs
  - § Multiple Sources
- § Footnote references linked to the Process Narrative and Risk-Control Matrix



## MAR – Health Actuary Perspective

### Identify Key Risks

- § Preliminary data input
- § Analysis of model results
- § Reporting of the process results



## MAR – Health Actuary Perspective

### Preliminary data input – Common Risks

- § Data may be inaccurate or incomplete
- § Data integrity may not be consistent across regions and/or lines of business
- § Data (claims paid) may not reconcile to reported financial data
- § Data transfer from data warehouse (IT driven applications) to the actuarial data storage files may be inaccurate and incomplete
- § Data loading from the actuarial storage files to the reserving model/application may be inaccurate and incomplete



## MAR – Health Actuary Perspective

### Actuarial Analysis of Model Results – Common Risks

- § Inadvertent corruption of the model/application formulae by unauthorized personnel
- § Model/application is not up-dated correctly for current valuation
  - § Prior valuation balances
  - § Prior valuation actuarial assumptions
  - § Current valuation preparations
- § Model/application worksheets are not security protected (may be a IT protocol)
  - § Worksheet formulas are not password/range/protected
  - § Model/application stored on “open access” network drives
- § Improper actuarial assumptions/judgments/manual adjustments in analysis phases
  - § Lack of adequate documentation of subjective manual adjustments to model driven results (i.e., claims, trend, and completion factor manual adjustments)
  - § Lack of formal documentation of the peer review process (if it is not written the assumption is that the activities were not performed)



## MAR – Health Actuary Perspective

### Reporting of Process Results – Common Risks

- § Inaccurate reporting of actuarial reserve results
- § Inappropriate aggregation of actuarial reserve results based on reporting requirements
- § Lack of reconciliation of booked financial to actuarial reported/approved reserve numbers



## MAR – Health Actuary Perspective

### Designing and Documenting Controls

- § Objective is to identify the controls that provide reasonable assurance that:
  - § Errors relating to each of the relevant financial statement assertions are prevented (Prevent Controls)
  - § Any errors that occur during processing are detected and corrected (Detect Controls)
- § Identify controls related to the initiation, recording, processing, and reporting of transactions
- § Consider both prevent and detect controls

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## MAR – Health Actuary Perspective

### Designing and Documenting Controls

#### Risk-Control Matrix

- § Controls referenced to the risks highlighted in the process narrative and flowchart
- § Detailed descriptions of control activities
- § Type of control (detective or preventive)
- § Detailed descriptions of control objectives
- § Evidence of control (signoffs/documentation)
- § Gap analysis – remediation plans

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## MAR – Health Actuary Perspective

### Designing and Documenting Controls

#### Gap Analysis – Remediation

- § Most companies underestimated the number of control deficiencies
- § Sensitive/higher risk areas were often tested later in the year and resulted in more deficiencies requiring evaluation at year-end
- § Inexperience with evaluating the results of testing sometimes resulted in identifying deficiencies late in the year
- § Significant judgment was required to evaluate some deficiencies



## MAR – Health Actuary Perspective

### Control Deficiency

Does not necessarily indicate that poor actuarial work has been performed just that the actuarial work has been performed in an environment that might allow poor actuarial work to occur undetected



**Q & A**

**Questions ?**

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# NAIC Model Audit Rule (MAR)

September 20, 2010



## Agenda

### Summary of MAR provisions

- Auditor
- Audit Committees
- Management

### Q&A

# Summary of MAR provisions

## **New elements**

- Auditor independence
- Corporate governance
- Management reporting requirements

## Summary of MAR provisions

NAIC/AICPA Working Group formed Title II, III and IV subgroups consisting of the NAIC representatives and selected insurance companies.

- Auditor (Title II subgroup — Auditor Independence)
  - Effective January 1, 2010
  - Non-Audit services
  - Audit Partner rotation
  - Hiring former auditors
- Audit Committees (Title III Subgroup — Corporate Governance)
  - Effective January 1, 2010
  - Audit Committee composition
  - Pre-approval of services by auditor
- Management (Title IV Subgroup — Management Reporting Requirements)
  - Effective December 31, 2010
  - Internal Control (IC) certification requirements

## Auditor — Non-Audit services

- Permitted if pre-approved by Audit Committee and not one of the prohibited services
- 3 Principles of independence:
  - Cannot function in the role of management
  - Cannot audit own work
  - Cannot serve in an advocacy role for the insurer
- Prohibited services\*:
 

<ul style="list-style-type: none"> <li>– Bookkeeping or related services</li> <li>– Financial information systems design and implementation</li> <li>– Appraisal or valuation services</li> <li>– Actuarially-oriented advisory services involving determination of amounts recorded in the financial statements</li> </ul>	<ul style="list-style-type: none"> <li>– Internal audit outsourcing</li> <li>– Management functions or HR</li> <li>– Broker dealer or investment banking</li> <li>– Legal services and expert services</li> <li>– Other — specified by commissioner</li> </ul>
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\*Exemption can be requested if small insurer

## Audit Partner rotation

- Previously, rotation required after 7 years with a 2 year cooling-off period.
- As of 1/1/2010 rotation required after 5 years with a 5 year cooling-off period.
- 5 year cooling-off period includes not acting as lead audit partner for the same company, its insurance subsidiaries, or affiliates.
- Application for relief on the basis of unusual circumstances:
  - Small accounting firms
  - Premium volume of insurer
  - Number of jurisdictions in which the insurer transacts business

## Hiring former auditors

- A 12 month cooling-off period is required (i.e., can not have worked on the audit within a one-year period preceding the date the most current statutory opinion is due).
- Applies to partners and senior managers who participated in any capacity in the audit of the insurer during the preceding year.
- Restricted positions include:
  - President
  - CEO
  - CFO
  - Controller
  - Chief Accounting Officer
  - Any equivalent position

## Governance — Audit Committees

- Established by the board of directors to oversee the accounting and financial reporting processes and audits of financial statements.
- Holding company audit committee may act for subsidiary, if so designated and commissioner is notified.
- If no audit committee designated, entire board shall constitute the audit committee.
- Directly responsible for appointment, compensation, and oversight of the accountant for purpose of preparing or issuing audit report or related work.

## Governance — Audit Committees

### Model Audit Rule Sections 4 and 14

#### Section 14

- This section shall not apply to foreign or alien insurers licensed in this state or an insurer that is a SOX Compliant Entity or a direct or indirect wholly-owned subsidiary of a SOX Compliant Entity.
- Each member of the Audit committee shall be a member of the board of directors.
- The Audit committee shall be directly responsible for the appointment, compensation and oversight of the work of any accountant (including resolution of disagreements between management and the accountant regarding financial reporting) for the purpose of preparing or issuing the audited financial report or related work pursuant to this regulation.

This intro caused confusion, as many read it as written and concluded if sub of SOX registrant, the audit committee requirement at the insurer sub level was not applicable. This was not the intent and will be discussed in more detail on the next slide.

## Governance — Audit Committees

### Model Audit Rule Sections 4 and 14 (cont.)

- Differences in interpretation were clarified through the published Q&A for the MAR.
- The following wording was agreed upon between industry and NAIC to further clarify:
  - A disclaimer within Section 14 of the Model indicates that the section shall not apply to SOX Compliant Entities or wholly-owned subsidiaries of SOX Compliant Entities. This disclaimer was placed within the Model to avoid conflicts between the independence requirements of the Model and those required of public companies under Section 301 of the Sarbanes Oxley Act of 2002. The expectation of regulators in developing this disclaimer was that the same independent Audit committee required of public companies under Section 301 would be deemed to be the insurer's Audit committee for purposes of this regulation (pursuant to Section 4D of the Model) **or would participate in the oversight of the insurers within the group. Therefore, if material weaknesses, significant deficiencies and/or significant solvency concerns are identified at the legal entity level, the independent Audit committee should be involved in addressing these issues, regardless of their materiality at the consolidated, parent company level.**
- This compromise has allowed flexibility for insurance entities in designing their audit committee governance processes.
- The following slides discuss two possible scenarios

## Composition of Audit Committees

- Each member must be a member of the Board of Directors of the insurer or of the legal entity that directly or indirectly controls the insurer.
- Depending on premium volume, some members must be independent of the insurer.
- Independence defined:
  - May not accept any consulting, advisory or compensatory fee from the insurer (other than as a board or sub-committee member).
  - May not be an affiliated person of the insurer or subsidiary.
  - Exception where domiciliary law requires participation by otherwise non-independent member.



## Composition of Audit Committees (cont.)

The proportion of independent audit committee members for **non-SOX Compliant** entities subject to this regulation shall meet or exceed the following criteria. (Companies that are **SOX Compliant** are deemed to be in compliance with the subsection if they are in compliance with the related SEC requirements):

Prior Calendar Year Direct & Assumed Premiums (from non-affiliates)			
Filing Status	\$0-\$300 million	\$300-\$500 million	Over \$500 million
All reporting entities not included above	No minimum requirements. <b>Also See Notes A &amp; B.</b>	Majority (50% or more) of members shall be independent. <b>Also see Notes A &amp; B.</b>	Supermajority of members (75% or more) shall be independent. <b>Also see Notes A &amp; B.</b>

**Note A:** The commissioner has discretionary authority to require the entity's board to enact improvements to the independence of the audit committee membership if the insurer is in an RBC action level event, meets any one or more of the standards of an insurer deemed to be in hazardous financial condition, or otherwise exhibits qualities of a troubled insurer.

**Note B:** All entities with less than \$500 million in prior year direct and assumed premiums are encouraged to structure their Audit Committees with at least a supermajority of truly independent audit committee members.

## Pre-approval of services by auditor

- Audit and non-audit services shall be pre-approved by the audit committee.
- Audit committee can delegate authority to one or more members of the committee.
  - Decisions of delegate are to be presented to full audit committee at each scheduled meeting.
- Pre-approval exception for non-audit services:
  - Aggregate amount less than 5% of total fees paid to auditor,
  - Services not recognized by insurer to be non-audit services, and
  - Promptly brought to the audit committee (or delegate) and approved.

## Management — Internal Control reports

- Required for each insurer with direct written and assumed premiums in excess of **\$500 million**

OR

- As required by commissioner when:
  - Insurer has an RBC action level event or
  - Deemed to be in hazardous financial condition.

If required to file:

- May file report for **Group of Insurers** if common systems and controls:
  - Disclose specific insurers covered by report
  - Disclose which systems and controls are applicable to insurer
- SEC registrants or subsidiary of SEC registrant:
  - **Must file Section 404 report with additional report on material Statutory Accounting process.**

## Management — Internal Control reports (cont.)

- Management's report should include:
  - Statement of management's responsibility for establishing and maintaining adequate internal control over financial reporting (ICFR).
  - Statement that management has established ICFR and an assertion that to the best of management's knowledge and belief, after diligent inquiry, its ICFR is effective to provide reasonable assurance regarding the reliability of financial statements in accordance with statutory accounting practices (SAP).
  - Statement that briefly describes the approach or processes by which management evaluated the effectiveness of its ICFR.
  - Disclosures of any material change in the insurer's ICFR as of December 31.
  - Signature of CEO and CFO (or equivalent).
- Cannot conclude ICs are effective if one or more un-remediated material weaknesses exist.

## Accountants' — Internal Control reports

- No separate auditor attestation report is required.
- Auditor's responsibility under AU Section 325, *Communicating Internal Control Related Matters Identified in an Audit*, has not changed. Includes the requirement to communicate any significant deficiencies or material weaknesses identified to management and the audit committee.
- Un-remediated material weaknesses existing at year end are required to be reported to the Insurance Department
- If no un-remediated material weaknesses were noted, report should so state.

Q&A



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