

Captive Concepts for the Actuary Casualty Loss Reserve Seminar

September 16, 2013, 10:45am – 12:15pm
Boston, Massachusetts

Michael Serricchio, Senior Vice President
Norwalk, CT

Kyle Mrotek, FCAS, MAAA
Milwaukee, WI

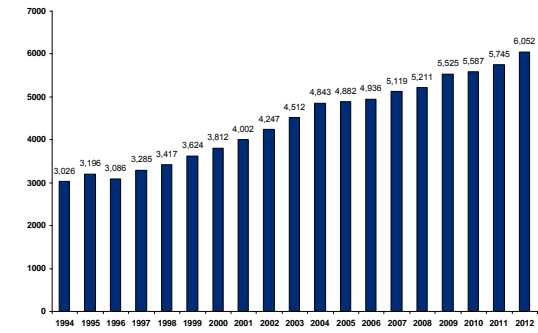
Speakers & Agenda

1. Kyle Mrotek, FCAS, MAAA
 - Actuarial Consultant, Marsh Captive Solutions Group
2. Michael Serricchio, SVP, Captive Advisory
 - Defining Captives
 - Captive Structures
 - The Role of the Actuary
 - Lines of Coverage in Captives
 - Tax Status
 - Domicile
 - Captive Formation
3. Eric Bishop, Vice President Finance, Administration, Fresenius Medical Care NA
 - Owner of 2 captive insurance companies
 - Background and Justification
 - Benefits
 - Actuarial Interface
 - What's Ahead

Introduction

- Actuaries are significant contributors to captive insurance industry
- Trend towards more actuarial consultation
- Health and EB actuaries getting involved
- Onshore migration
- Explosive middle market growth

Marsh Captive Solutions Group
Number of Captives Worldwide



Source: BI Survey, "Top Captives Worldwide," Business Insurance, March 11, 2013: 23
September 9, 2013



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Defining Captives



Definition of a Captive

- Licensed insurer
- May insure or reinsure the risks of its owner, affiliated parties, or chosen unrelated parties
- Located offshore or onshore
- Regulated under special captive legislation
 - Regulated by domicile regulators only
 - Not regulated by other state insurance department
- Non-admitted insurer
 - Not permitted to direct write lines requiring local licensing, e.g., WC, AL

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Types of Captives

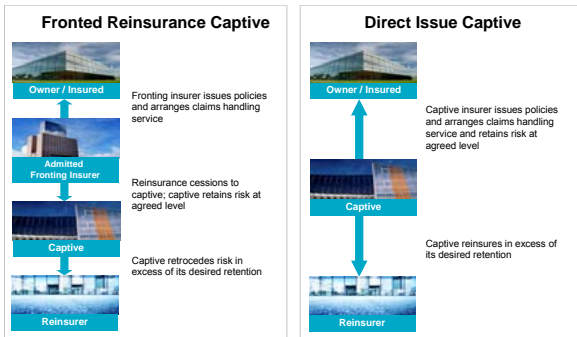
- Single-parent captive (largest sector)
 - Wholly owned by one parent company
 - Insures or reinsures the risks of its parent, affiliated entities, or chosen unrelated parties
 - Section 831(b) Small Captives* - Hot Topic for Actuaries
- Group/Association
 - Owned by multiple companies or an association, and insures or reinsures the risks of the group
- Rent-a-captive
 - Insures or reinsures the risks of unrelated parties, whereby insureds are "renting" capacity
 - Typically structured as Protected Cell Captives (PCCs)
- Risk Retention Group (RRGs)
 - Regulated under federal legislation, licensed in one state, and able to operate in all 50 states on a registered basis
 - Can only write liability lines of risk (not WC)
 - Pending legislation may permit for RRGs to directly insure property coverage
 - Reciprocal RRGs

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Potential Structures for Captives Fronted and Direct



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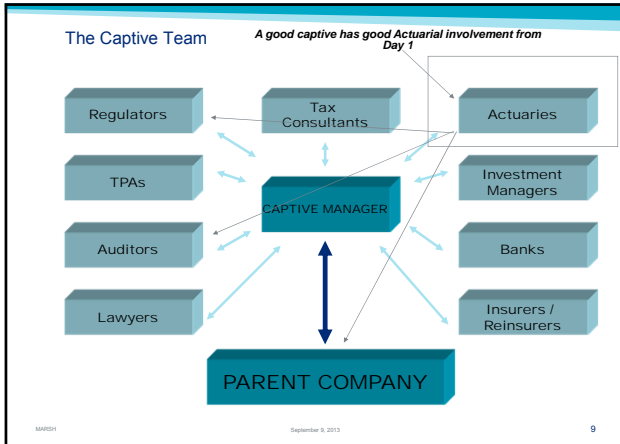
The Role of the Actuary

- Actuary
 - Individual that prepares the actuarial certification or actuarial feasibility study
 - Individual that prepares and certifies the annual loss reserve opinion
 - Ongoing interactions with the client on a monthly, quarterly or annual basis
 - Expected case scenario vs. worst case scenario and confidence level analysis
 - Solvency II testing – adequate capitalization levels (Now – 2015 and beyond...)
- Most domiciles require the following:
 1. Initial actuarial feasibility study to accompany the captive's application to the state or country of domicile to support the risks, assumptions, losses, and financial projections that are prepared along with the application
 2. Annual ongoing actuarial reserve opinion
- Client may ask an Actuary to interact with the company, the captive manager, the auditors, etc. on a quarterly or sometimes month basis

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- Risk Transfer Rules
 - 10/10 Rules – 10% chance for a 10% loss
 - Important for insurance "status"
 - Tax deductibility matters
 - Transfer pricing matters
- What have you seen?

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Captive Tax Treatment

- Federal income tax deductibility of premiums:
 - Must show risk shifting and risk distribution.
 - In determining the presence of risk distribution, the captive owner must present one or both of the following:
 - The required corporate organizational structure and risk allocation among the captive parent's subsidiaries (as outlined in Revenue Ruling 2002-90, and also known as the "Brother-Sister" approach), or
 - The presence of unrelated risk (as outlined in Revenue Ruling 2002-89).
- Based on past case law precedent, it should be noted that the IRS and the courts have generally looked favorably upon captive arrangements with the following facts:
 - The captive was set up for clear and valid (non-tax) business reasons;
 - The captive is adequately capitalized;
 - The captive secures its own obligations, including issuing its own letters of credit for example; and
 - The identity of the captive as a separate entity should not be eroded by parent guarantees or other similar agreements.
- We recommend all clients obtain a tax opinion and/or FIN 48 memorandum regarding the federal tax treatment of any proposed US captive.

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Perspective of "Insurance" by IRS

- How to qualify a captive as an insurance company for federal income tax purposes?
- Supreme Court defined insurance as involving:
 1. Risk shifting;
 2. Risk distribution.
- Two paths to obtaining tax deductibility:
 1. Brother sister risk distribution
 2. Third party risk within captive

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US Tax Considerations



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Tax-Advantaged Captives 1,000 and Growing

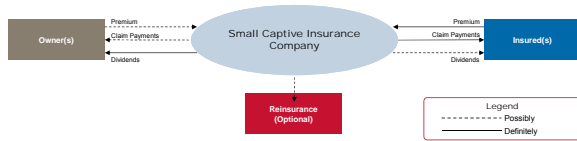
- 831(b) "mini" captive
 - Election available to captives that qualify as insurer for tax purposes—must have risk shifting and risk distribution
 - Allows captive to be taxed on investment income only, i.e., no underwriting income taxation
 - Can make election if "net written premiums" for the taxable year do not exceed \$1,200,000 in all captive entities under same ownership
 - Ideal for low-frequency/ high-severity losses (e.g., property)
 - Less ideal for captives designed to break even (e.g., WC)
 - Irrevocable election
- What does this mean for the Casualty Actuary?

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831(b): How it Works



- Premium(s) deductible.
- Premium income accumulated tax free.
- Investment income taxed as ordinary income.
- Dividends taxed capital gains rate.
- Claim payments are tax neutral.

Casualty Coverages

- Workers' Compensation
- General Liability
- Auto Liability
- Product's Liability
- Environmental Liability
- Professional Liability
- Medical Malpractice
- Others

Property Coverages

- Property
- Business Interruption
- TRIA
- Marine Cargo
- Others

Exotic Coverages

- Extended Warranty
- Medical liability
- Cyber Risk
- E&O
- D&O
- Crime
- Fiduciary
- Life
- Other 3rd Party Business
 - To follow

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Sources of Third-Party Business

- Extended warranties
- Employee benefits
- Voluntary benefits
- Multinational pooling
- Risk swapping with other captives
 - Green Island reinsurance pool (WC, GL, and AL loss pick—greater than \$5 million)
- Credit life
- Joint venture partner risks
- Suppliers/ contractors
- Customer/ tenant programs
- Owner Controlled Insurance Program and Contractor Controlled Insurance Program

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Domicile Selection



Domicile Selection

There are a number of factors which organizations should consider when selecting a captive domicile:

- Regulation – Captive domiciles should have firm but pragmatic regulation.
- Infrastructure – Ensuring that your domicile has captive managers, lawyers, banks, and auditors who understand the captive industry is an extremely important factor.
- Permitted Business – Access TRIA and US employee benefits can only be done using a US domiciled captive or a branch of an off shore captive.
- Convenience – Factors such as the requirement to visit a domicile to have board meetings, frequency of board meetings, and travel time are often taken into consideration when selecting a domicile.

Other factors to consider when selecting a domicile include:

- Capitalization
- Premium Taxes
- Industry Expertise
- Ability to enter into intercompany investments
- Operating Costs
- Time frame for licensing

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Fresenius Medical Care NA Captive Usage

Casualty Loss Reserve Seminar
Boston, Massachusetts
September 16, 2013



Topics

- Company Background
- Risk Approach
- Exposures
- Captives



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Fresenius Medical Care AG & Co. KGaA

“The Renal Company”

- World leader in providing services and products for individuals with kidney disease
 - Treat 264,290 patients in over 3,200 clinics in approximately 40 countries
 - North America – 168,160 patients in approximately 2,100 clinics
 - In 2012, provided 38.6 million treatments worldwide, 24.4 million in North America
 - Develop and manufacture a full range of equipment, systems and disposable products, sold to customers in more than 120 countries



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Growth strategy to ensure continued success

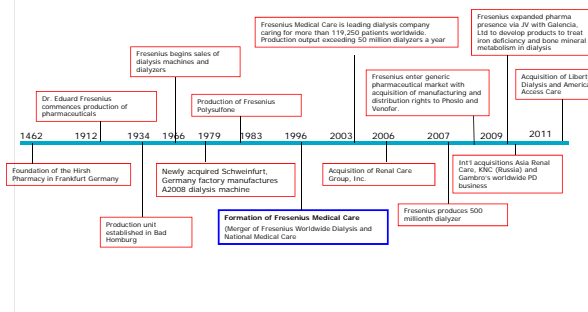
- Leader in growing market**
 - Dialysis market growing 4%cc and estimated to reach \$ 100 billion by 2020
 - Patient growth driven by age, life style and mortality reduction
- Provide highest standard of patient care**
 - Vertical integration
 - High quality products & services
 - Complete therapy offerings
- Consolidate position as global market leader**
 - Invest in our people
 - Continue to innovate
 - Global clinic acquisitions and service portfolio expansion
 - Expand into new geographies
- Deliver shareholder value**
 - Ensure continuous development of company
 - Deliver profitable growth
 - Control financial risks

cc – constant currency



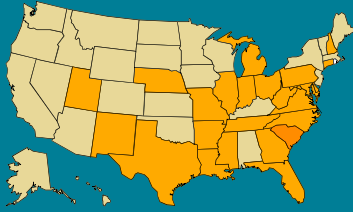
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Fresenius Medical Care - Our History



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Age-Adjusted Prevalence of Diagnosed Diabetes Among
U.S. Adults
1994



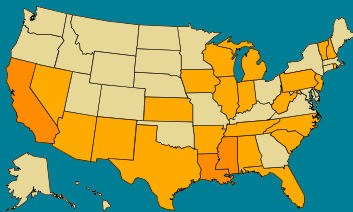
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Age-Adjusted Prevalence of Diagnosed Diabetes Among
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1995



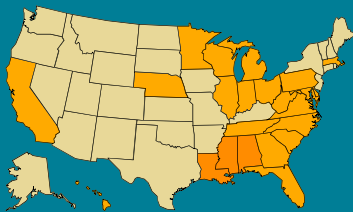
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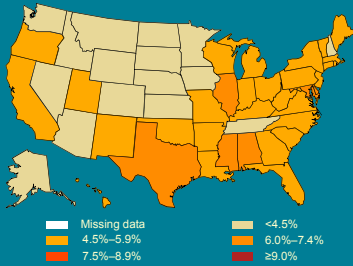
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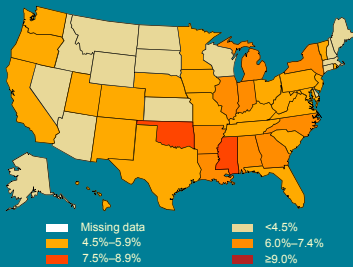
Age-Adjusted Prevalence of Diagnosed Diabetes Among U.S. Adults
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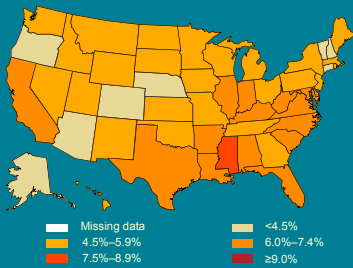
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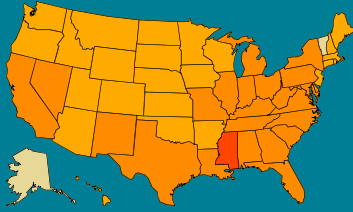
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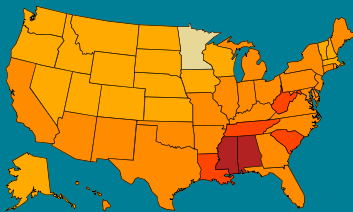
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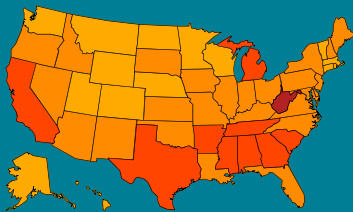
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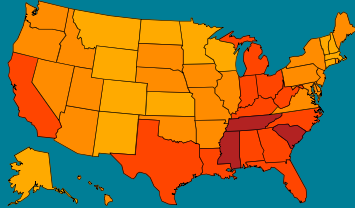
Age-Adjusted Prevalence of Diagnosed Diabetes Among U.S. Adults
2002



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Age-Adjusted Prevalence of Diagnosed Diabetes Among
U.S. Adults
2003



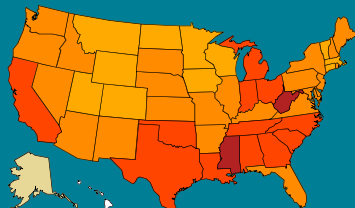
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Age-Adjusted Prevalence of Diagnosed Diabetes Among
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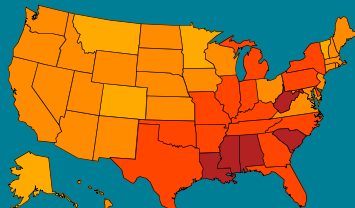
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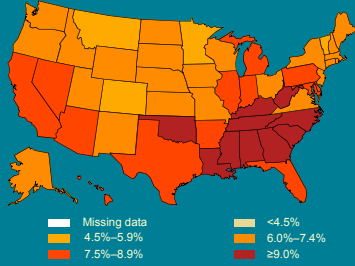
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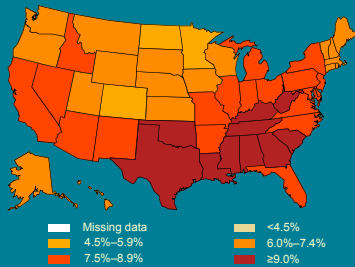
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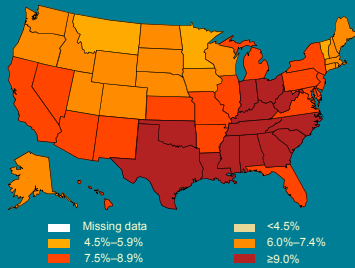
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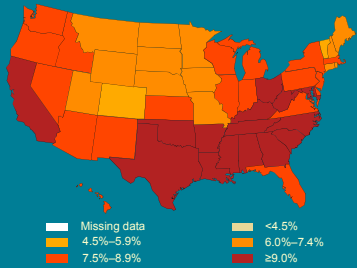
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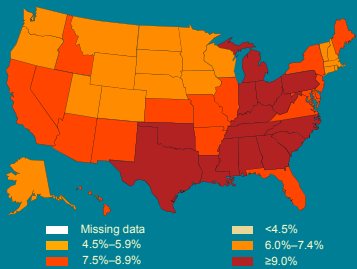
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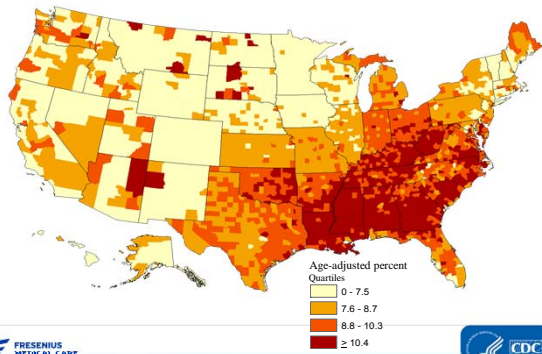
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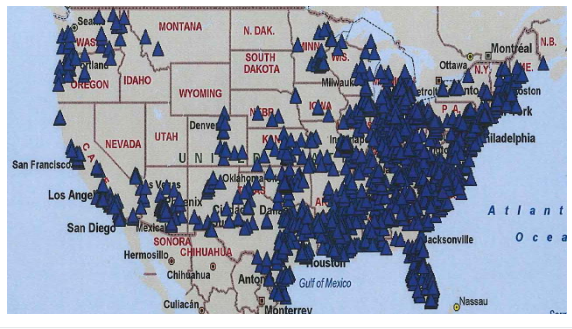
County-level Estimates of Diagnosed Diabetes among Adults aged ≥ 20 years:
United States 2008



PRESENUS MEDICAL CARE
www.cdc.gov/diabetes



Fresenius Medical Care – Footprint



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Fresenius Medical Care – Approach to Risk

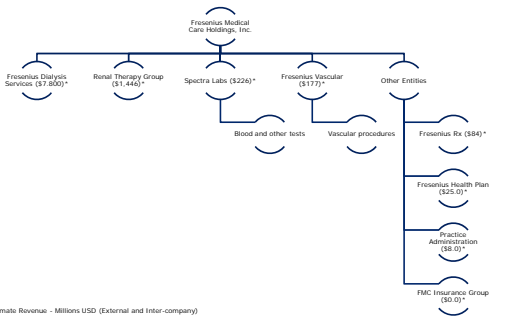
Risk Tolerance

- Operational – low
 - Cost to maintain quality
 - Focus on expense management
- Financial – medium
 - Higher tolerance for manageable risks
 - Higher frequency, lower severity
 - Lower tolerance for external risks
 - Foreign exchange
 - Interest rates



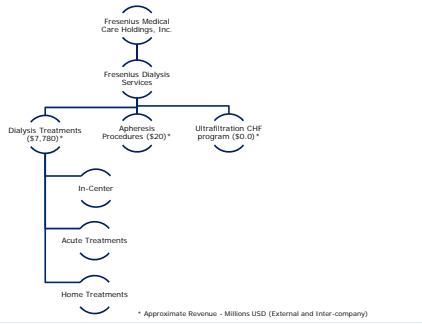
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Fresenius Medical Care – North America Exposure Chart

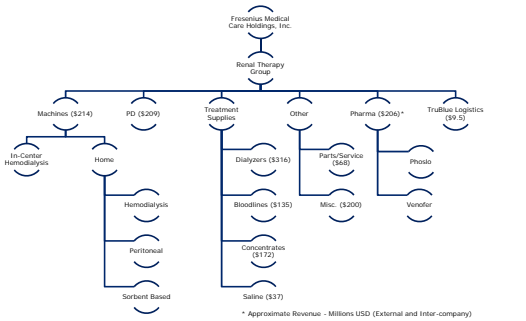


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Fresenius Medical Care – North America Exposure Chart



Fresenius Medical Care – North America Exposure Chart



Fresenius Medical Care – Use of Captives

- Manage Risk
 - Casualty Insurance Program (WC, Professional, General, Product, Vehicle)
- Assume Risk
 - Medicare Advantage Insurance product for ESRD patients
 - Professional Medical Malpractice Insurance

Fresenius Medical Care Reinsurance (Caymans), Ltd

Type	Single Parent Captive
Location	Grand Caymans
Coverages	Medical Reinsurance
Purpose	To assume risk for medical expenses for End Stage Renal Disease patients eligible for Medicare Part C coverage



FMC Physician Reinsurance (Caymans), Ltd

Type	Single Parent Captive
Location	Grand Caymans
Coverages	Medical Malpractice
Purpose	To assume risk for Professional/Medical Malpractice insurance for Nephrologists and their practices



Fresenius Medical Care Risk Management Group, Ltd

Type	Single Parent Captive
Location	Hamilton, Bermuda
Coverages	Workers Compensation Professional Liability Product Liability General Liability Vehicle Liability
Purpose	- Indemnify FMCH subsidiaries for exposure under the FMCH Casualty insurance programs (Deductibles) - Includes coverage of joint ventures



Other Areas Considered

- Intellectual Property
 - Global program
- Employee Benefits
 - Life
 - Disability
- Risk Arbitrage
 - Property



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EVERY DAY.

Thank you very much for your attention!





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Role of the Actuary



Actuarial Involvement

- In the beginning
 - Captive Feasibility
 - Retention
 - Loss projection
 - Premium determination
 - Required capital

Actuarial Involvement

- Annually
 - Appointed Actuary
 - Unpaid claim estimate analyses
 - Premium determination
 - Loss at higher confidence levels
 - Capital adequacy

Actuarial Involvement

- At the end
 - Commutation
 - Financial reporting support

Characteristics of Captives

- Little to no data
- Hard to price coverages
- 'law of large numbers'?
- Captive owners have varied backgrounds
 - Risk managers, general counsel, treasury, CFO...
 - Full spectrum of industries

Appointed Actuary Differences by Domicile

- Differences exist across domiciles
 - Arizona
 - Vermont
 - New York
 - Bermuda

Challenges for Actuaries in Captive Insurance

- Regulatory guidance can be ambiguous/light
 - Vermont Regulation 81-2 Captive Insurance Financial Regulation

(E) Certification of Loss Reserves and Loss Expense Reserves.

The annual audit shall include an opinion as to the adequacy of the company's loss reserves and loss expense reserves. The individual who certifies as to the adequacy of reserves shall be approved by the commissioner and shall be a Fellow of the Casualty Actuarial Society, a member in good standing of the American Academy of Actuaries, or an individual who has demonstrated his competence in loss reserve evaluation to the commissioner.

Certification shall be in such form as the commissioner deems appropriate.

Challenges for Actuaries in Captive Insurance

- Innovative developments pose challenges for actuary's boundaries
 - Captives can write property-casualty/life/health/employee benefits mix
 - Group/sponsored cell captives
 - 831(b) captives
- Proliferation of new captive domiciles

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Opportunities for Actuaries in Captive Insurance

- Fortune 500 companies mostly have captives
 - Could utilize more
 - Any retained insurance risk
- Generally underused
- Middle market
- Captive insurance becoming better understood

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Conclusion, Questions and Wrap Up