

Equity-Based Insurance Guarantees Conference

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Equity Based Insurance Guarantees Inforce Management

Stephen Gruber

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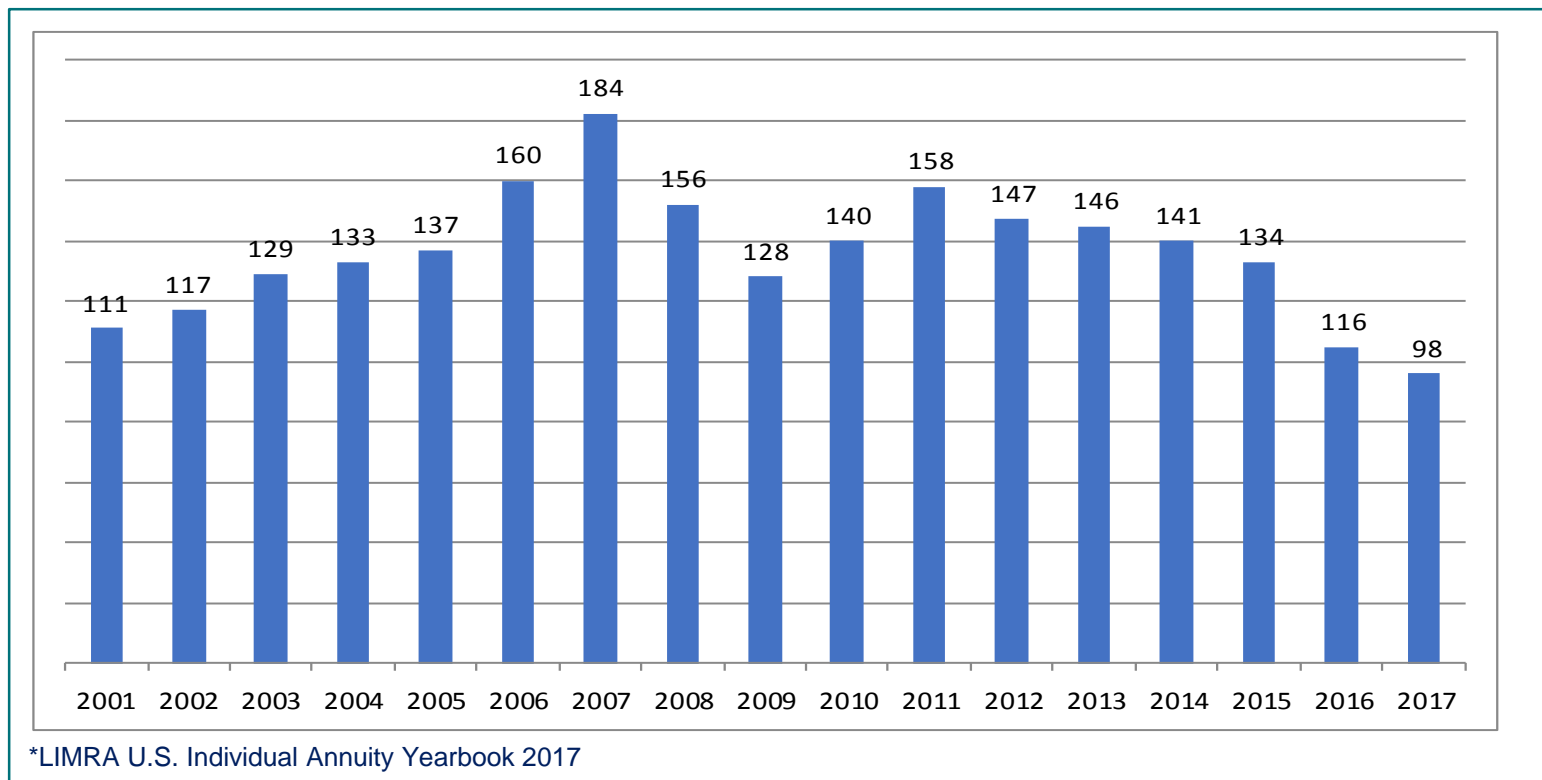
EQUITY BASED INSURANCE GUARANTEES INFORCE MANAGEMENT

Stephen Gruber, FSA, MAAA
Stephen.gruber@axa-equitable.com
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- History
- What is an Inforce Management Group?
- What does Inforce look like?
- What has been done so far?
 - Buyout Offers

Individual Annuity Sales Lowest in 17 years at ~100 Billion

- VA sales reached a pre-crisis high of \$184 billion and decreased and then been fluctuating for 6 years and a decrease in the last 2 years
- Immediately following the crisis, many companies began increasing their mix into the non-GMxB market and introducing several new Non-GMxB products
- Guaranteed benefits remain a large component of the VA market, and many moved to weaker guarantees / higher fees and other VA products



- Introduction of Floating Rate Rollup Product
- Introduction of Structured Annuities
- Asset Transfer Program becoming more wide spread
- Fund Substitutions – Move to Inactive Management (Index/Allocation) funds and to reduce basis risk
- Funds Embedded with a Volatility Tool
- Investment only VA (Tax Benefit)

- Annuity Inforce Management mission is to gain greater insights into understanding the important drivers of in-force annuity businesses while implementing actions that will:
 - Enhance and grow earnings and embedded value,
 - Reduce the overall size of legacy GMxB blocks of business,
 - Reduce Risk – Greeks / Hedging
 - Improve the performance of the remaining liabilities
 - Better understanding of Policyholder Behavior
- Measuring success is very simple
 - Delivery against various risk measures
 - Delivery of projects as predicted
 - Impacts on all parties – Company, Policyholders, Agents, Regulators, Public Markets
- Additionally, continue to partner with internal and external teams to better understand policy holders and what drives their behavior as it relates to their financial and retirement decisions.

What does an Individual Annuity Inforce Book Look Like?

Efforts differently across the Inforce GMxB book vs. other nonGMxB Annuity blocks

- Guaranteed Minimum “x” Benefit (GMxB) – reduce volatility and capital burden to support cash generation and new business
 - ❑ Variable Annuity Products
 - Evaluate the Block of business by
 - Policy Count
 - Account Value
 - GMxB Benefit Base / Net Amount at Risk
- Other inforce books – improve efficiency of capital usage, drive customer behavior to improve value creation (e.g. lapse, premium continuance, G/A usage, etc.)
 - ❑ Other includes NonGMXB VA, Individual, Single Premium Immediate Annuity, Single Premium Deferred Annuity (SPDA), Immediate Annuity (Payout), Structured Settlements

What is risk?



- Risk (as defined by Merriam Webster):
 - 1: possibility of loss or injury, peril
 - 2: someone or something that creates or suggests a hazard
 - 3a: the chance of loss or the perils to the subject matter of an insurance contract; *a/so* : the degree of probability of such loss

Market Trends – S&P, Interest Rates and Volatility

S&P 500



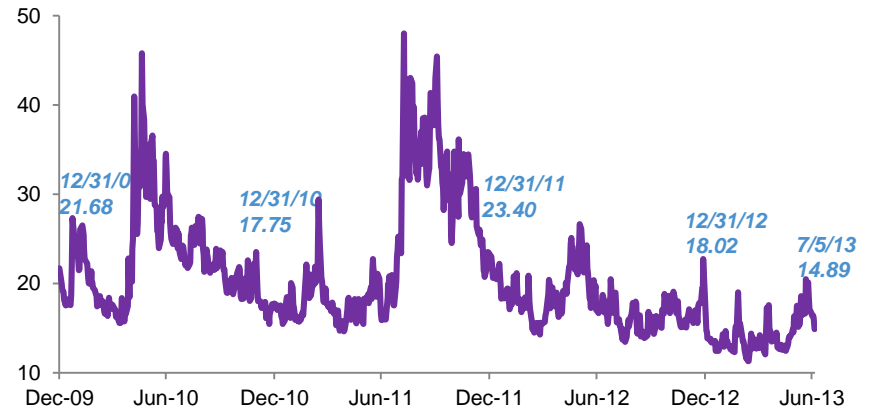
10 Year Treasury Rate



Just like any other profession...

Actuaries experience a roller coaster of emotions.

Equity Volatility (VIX)



Concepts to consider when Implementing an Inforce Plan

- The inforce pillar is composed of three specific action plans aimed at decreasing the risk posed by the legacy book of business

Inforce

Policyholder Offers

Continue to execute buyout initiatives and repeat offers aimed at legacy business

Initiatives

- Lump Sum Buyout
- Buyout Offers
- GWL Conversion

Policyholder Behavior

Enhance analytic capabilities to better understand policy holder behavior and help drive value from the inforce book

Initiatives

- Experience Studies
- Assumption Analysis
- Predictive Analytics
- Call / Advisor Analytics

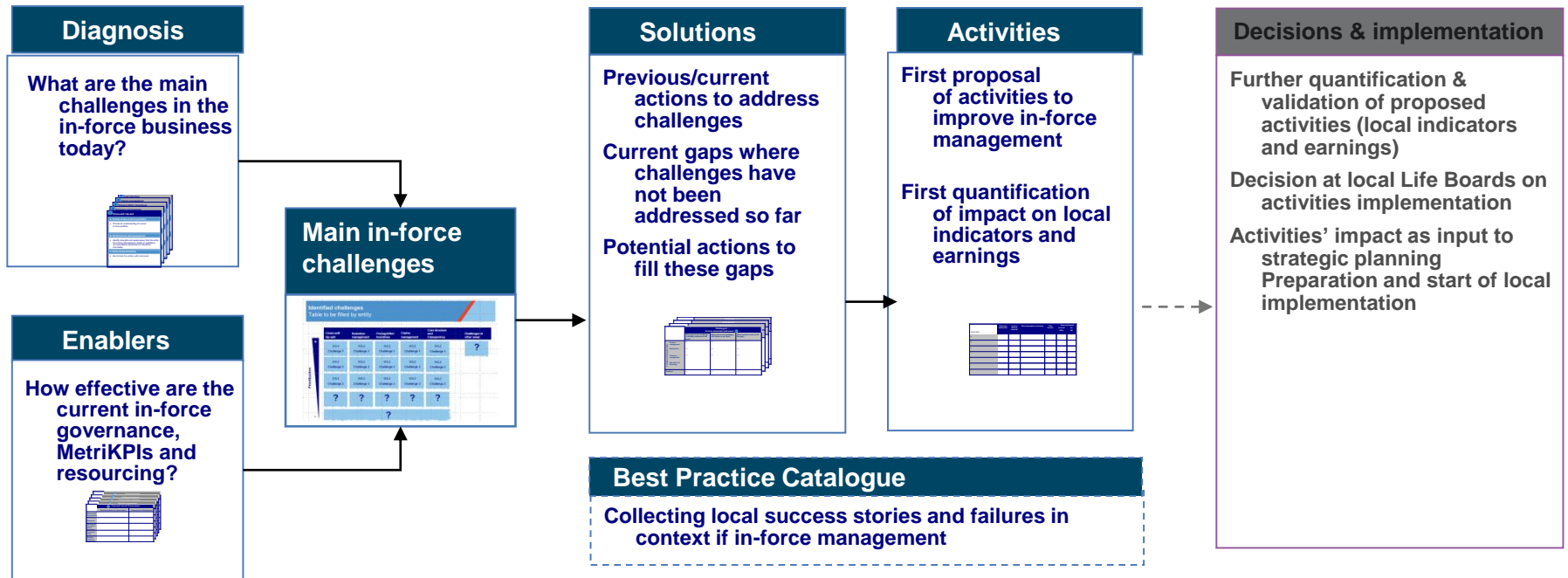
Risk Transfer

Further explore risk transfer options in order to unlock value within the inforce block and decrease the liability exposure

Initiatives

- Reinsurance Transactions
- Third Party Transactions
- New Business Reinsurance

Self-assessment and decision process



Initial Approach

Data Collection: Getting the Data

- Relies heavily on Finance and Valuation teams along with IT teams to get access to Data
- Review the economic impact to new ideas
 - DAC Issues, NBV, EEV , Reserve requirements. Most projects are initially developed from a financial / capital management perspective
- Review the potential legal impact of the project

Skillsets: Important Competencies

- Project Management / Implementation skills
- Analytics (consumer and actuarial)
- Competitive intelligence
- Product knowledge
- Teamwork

Initial Approach

Exploration: Where is the data?

- Partner with IT teams to get access to Data
- Measuring the Advisor / Policyholder reaction to new ideas

Analysis: What does it tell us?

- Developed Plausible Financial Impacts prior to Launch
- Feedback from potential users.
- “Test drive” dashboard with several small blocks to validate with business partners and identify priorities for larger blocks

Action: What opportunities are there?

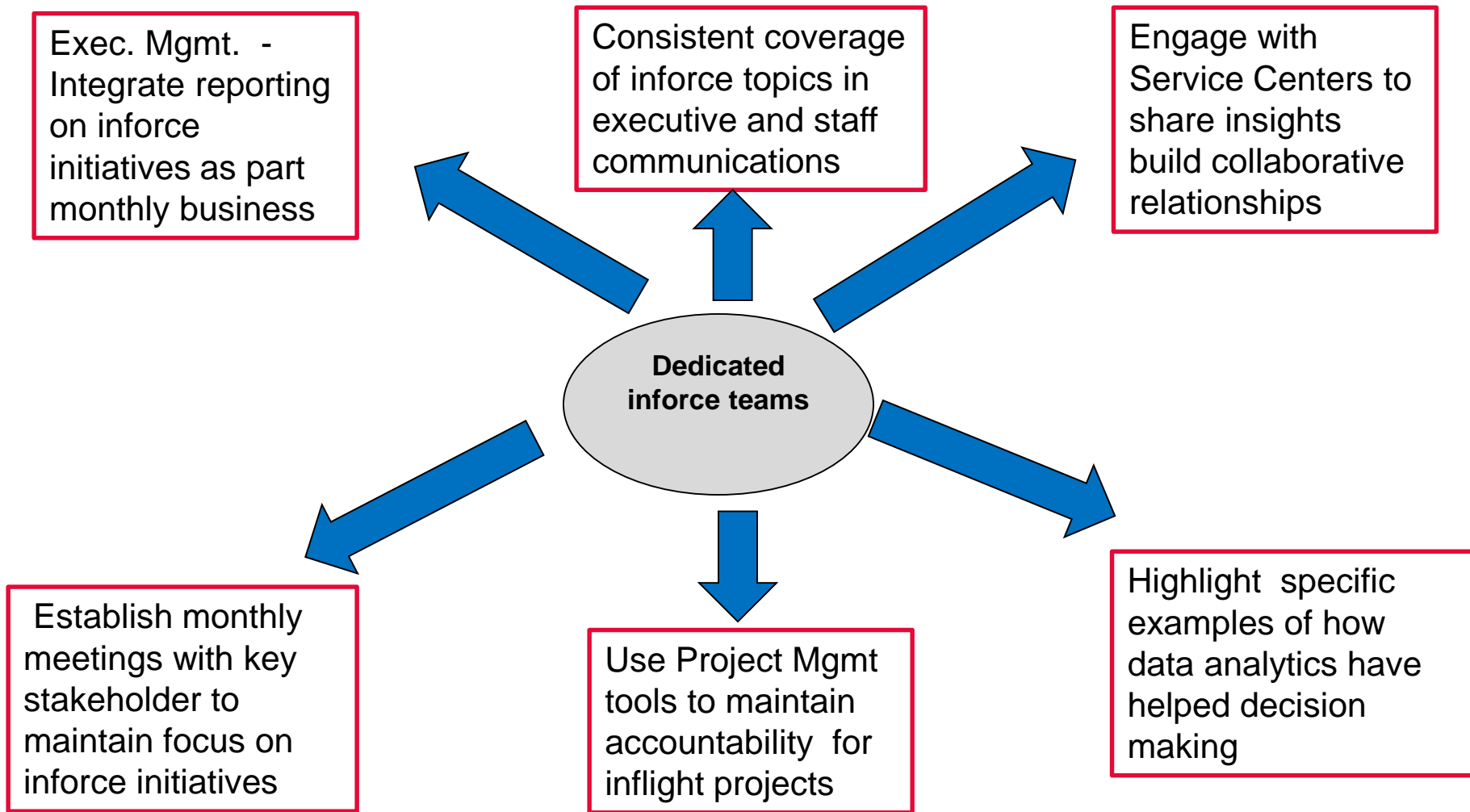
- Short vs. long term impacts/opportunities?
- Important sensitivities/environmental factors to track
- Focus on PRO-ACTIVE vs. reactive strategy

Initial Approach

Challenges: General areas

- Managing customer expectations / levels of satisfaction
- Clear communication plan for all stakeholders
- Training (service center, field training)
- Compliance and Legal requirements
- Managing IT and Operational Challenges

Leveraging the efforts of a small to team to institutionalize a focus on inforce across the enterprise



Metrics & Analytics

Reactive

Proactive

Current State -

- Standard reports provide historical view at a high level, deeper analysis requires manual intensive effort to extract data
- Ad hoc reports in response to specific questions or problems
- Differences in the way data is compiled make it difficult to compare
- Information produced for silos and not widely distributed
- Service data is at the policyholder level therefore impact of changes at the product level are not easily seen.
- Significant volume of reports and unclear how they are being used to manage the business

Transition

- Streamline process for capture of financial data for analysis
- Established a knowledge store - a comprehensive inventory of all data, metrics, analysis and reporting that currently exists for the Life In-force.
- Partnering with Service Centers, and Customer Analytics to identify key operational and customer metrics

Future State -

- Identify key profitability drivers and levers, by product and block, and necessary metrics and analysis to track and manage performance
- Integration of financial and operational data facilitates holistic view
- Broader access to financial and operational data increases transparency and accountability across the enterprise
- Pinpoint the source of variances and perform statistical analysis to identify impact if current trends continue
- Leverage predictive modeling to estimate the impact of changes in features or customer behavior
- Identify redundant, unnecessary, or unused data, analysis, and reports to be discontinued

Identified 6 levers to create impact

Lever	How can it impact profitability?	Potential issues
Cross-Sell and Up-Sell	<ul style="list-style-type: none"> • Additional product sales • Improve inforce economics 	<ul style="list-style-type: none"> • Impact on distribution • Cost to execute
Customer / Advisor Behavior	<ul style="list-style-type: none"> • Lapse • Utilization of benefits • Additional premium contributions • Asset allocation • Execute options against the company (e.g. utilization) • Trigger lapse/rollover 	<ul style="list-style-type: none"> • Very difficult to influence • Waking of 'sleeping dogs' with any proactive outreach • Ensuring a fair deal for consumers • Willingness and ability to pay compensation • Ensuring tri-party alignment of interests • Ability to execute any programs at sufficient scale
Financial management	<ul style="list-style-type: none"> • Direct costs (e.g. hedging) • Overall risk profile and financial flexibility (both hedging and reinsurance) 	<ul style="list-style-type: none"> • Limited supply of capital currently • Many options may be cost prohibitive or contain limited benefits
Funds	<ul style="list-style-type: none"> • Manage separate account economics and risk profile 	<ul style="list-style-type: none"> • Legal and compliance
Pricing and Offers	<ul style="list-style-type: none"> • Manage our fee levels (product, rider, convenience) as appropriate 	<ul style="list-style-type: none"> • Many products are limited • Legal and compliance • Cost of execution
Rates	<ul style="list-style-type: none"> • Managing crediting rates to improve spreads 	<ul style="list-style-type: none"> • A large portion of the business is at minimum • Crediting strategy as environment changes

Project Concepts

✓ **Crediting Rate Action:**

- ❖ Management of crediting rates by reducing to contractual and or regulatory minimums.

✓ **Premium Suspension:**

- ❖ Suspend the acceptance of subsequent premiums to inforce contracts.

✓ **Rider Fee Increase (on Reset):**

- ❖ Riders fees will increase upon certain circumstances

✓ **Buyout Offer:**

- ❖ Offered certain clients the opportunity to increase their AAV in exchange for terminating their riders

Offer – Comparison to other companies

	AXA EQ	Transamerica	Hartford
Rider	Greater of Roll or Annual Ratchet GMDB (Standalone)	Family Income Protector, Managed Annuity Program, Managed Annuity Program II or Guaranteed Minimum Income Benefit.	Lifetime Income Builder II (GWBL)
Number of contracts	~22000	~25,000	?
Regulatory Filings	<ul style="list-style-type: none"> State filing in all jurisdiction where the rider was sold SEC Filing 	<ul style="list-style-type: none"> SEC Filing 	<ul style="list-style-type: none"> State filing in all jurisdiction where the rider was sold SEC Filing
How offer amount is calculated	~70% of IFRS reserves or 2 years of rider fees whichever is greater.	80% of minimum annuitization value or income base under Eligible rider minus the cash surrender value.	a) Contract value on the full surrender date. Any applicable fees are waived upon surrender <u>or</u> b) Contract value on the Surrender date plus 20% of Payment Base subject to a cap of 90% of Payment Base
Impact to base contract	GMDB rider is terminated and the Offer amount is added to AAV; client have option of maintaining base contract with a Return of AAV as the new death benefit	Once offer is accepted, client must surrender contract and transfer to Transamerica or external carrier's product	Once offer is accepted, client must surrender contract and transfer to external carrier's product
Impact to surrender charge and other fees	Existing surrender charges remain as is and if applicable are not waived if client surrenders contract. Prorated death benefit charges are waived.	Surrender charges are waived however rider charges are prorated	Surrender charges and other fees are waived
Impact to other riders	<ul style="list-style-type: none"> If the Earnings Enhancement Benefit (EEB) is elected, it is also terminated. The standard death benefit (ROP) is also terminated. 	Any death benefit is terminated	Any death benefit or other living benefit is terminated
Marketing Support	Client letters, prospectus supplement, Brochure; microsites; dedicated service desk	Client letters, prospectus supplement	
Offer period	October 2012 – February 2013	May 2012 – September 2012	

Offer Comparison and Examples

	AXA EQ	Transamerica	Hartford
Example 1	GMIB BB = \$100,000 AV = \$60,000 Offer = \$ 17,500 Total Offer = \$77,500	GMIB BB = \$100,000 AV = \$60,000 Surrender Charge = \$2,000 Pro-Rata fees = \$150 (assumes 1/3 of annual) CSV = \$57,850 Total Offer = \$ 80,000 = 80% of BB Total Offer = \$77,500 Offer = \$22,150	GMIB BB = \$100,000 AV = \$60,000 Offer = \$ 20,000 = 20% of BB Total Offer = \$80,000 Offer = \$20,000
Example 2	GMIB BB = \$100,000 AV = \$54,000 Offer = \$ 20,500 Total Offer = \$74,500	GMIB BB = \$100,000 AV = \$54,000 Surrender Charge = \$2,000 Pro-Rata fees = \$150 (assumes 1/3 of annual) CSV = \$51,850 Total Offer before fees= \$ 80,000 = 80% of BB Total Offer after fees = \$77,500 Offer = \$25,650	GMIB BB = \$100,000 AV = \$54,000 Offer = \$20,000 Total Offer = \$ 74,000 Offer = \$20,000
Example 2	GMIB BB = \$100,000 AV = \$72,000 Offer = \$ 11,500 Total Offer = \$83,500	GMIB BB = \$100,000 AV = \$72,000 Surrender Charge = \$2,000 Pro-Rata fees = \$150 (assumes 1/3 of annual) CSV = \$69,850 Total Offer before fees= \$ 80,000 = 80% of BB Total Offer after fees = \$77,500 Offer = \$7,650	GMIB BB = \$100,000 AV = \$72,000 Offer* = \$20,000 Total Offer = \$ 90,000, capped at 90% of BB Offer = \$18,000

GMDB Buyout

First Offer of it's kind - 2012

The Buyout

Full buyout of the GMDB benefit bases

- Eligible contract holders = Certain Accumulator contract holders who purchased a contract between 2002 and 2008 and elected the stand along GMDB
- Offer: Greater of 70% of IFRS Reserves or 2x rider fees
- GMDB will terminated (EEB if elected will also be terminated)
- Offer amount will be credited to base contract
- New death benefit: Return of AAV
- Adjustment factors to roll-forward the daily buyout value based on changes to interest rates or AV

Lessons Learned

- A simple valuation method is helpful. Advisors feel they need to understand the calculation to better explain it to their clients.
- Waiving CWC on the base contract is important
- Third party firms suitability process.
- Engaging the distribution organization is critical to success.
- Clients and reps want to see the “number” We provided the offer amount in letters to clients as well as via a micro site.
- Over communication is a necessity and reduces the opportunity for misinformation.
- Clear and transparent client and advisor communication is also a key requirement.

Fee Increase

- Increase the fees of certain riders from current levels to the maximum amount permitted under the contracts when a reset occurs
- The fee increase is valuable, but may have a negative impact to earnings impact due to the reserve construct
 - Higher NAR due to increased fund drag
 - Rider Margins may decrease due to increase in fund drag (higher fees)
- On average, GMIB rider fees and the GMDB rider fees would increase by a few basis points
 - The rider charge is a percentage of the benefit base , but deducted from the annuity account value
 - The new fee will apply at the time of a reset or ratchet and that new fee will apply in all subsequent years whether or not a reset or ratchet occurs.
- Clients must be notified at least 90 days in advance
 - This has become common in the industry

GMIB Buyout

First Offer of it's magnitude

Full buyout of the GMIB benefit base

- Eligible contract holders = Certain Accumulator contract holders who purchased a contract and elected the GMIB with any GMDB
- Offer: Greater of 70% of IFRS Reserves or 2x rider fees (For EEB used 2x Fees)
- Large Withdrawal Takers: Greater of 25% of IFRS Reserves or 1x rider fees (For EEB used 1x Fees)
- GMIB & GMDB will terminated (EEB if elected will also be terminated)
- Offer amount will be credited to base contract
- New death benefit: Return of AAV
- Adjustment factors to roll-forward the daily buyout value based on changes to interest rates or AV
- Withdrawal Charges were waived

Lessons Learned

- Anti-selection of the non electing block
 - Lapses and withdrawals decrease
- Some policyholders lapsed during the buyout period
 - Gave them the buyout
- Accrued fees was not charged and was a cost

Analysis of Results

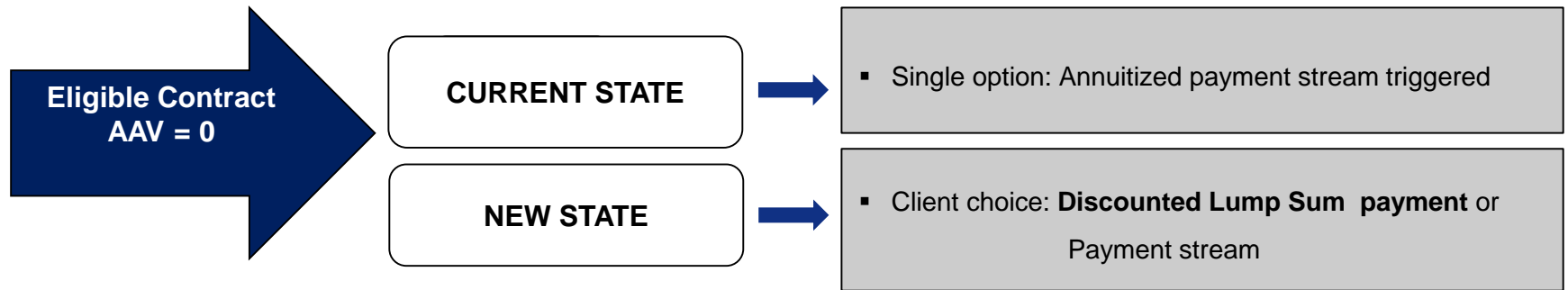
- Acceptance of the offers should be closely monitored or the duration and track details including but not limited to:
 - Impact on attribution
 - Policy Surrender/lapse and Mortality
 - Analysis of buyout takers to identify for sensitivity points and try to correct / modify behavior.
 - Offer acceptance by policy count, AAV and Benefit Base values
 - Acceptance by Channel and Firm
 - Acceptance by Age and Gender
 - Acceptance by ITM Ratio
 - Acceptance by DB Type

- At the close of the each Offer, we conducted a detailed “post mortem” of all aspects of the Offers should be conducted to solidify results and determine lessons learned.

The Guaranteed Benefit Lump Sum Payment Option will provide a newly created payout option to certain contract holders following specific events

- **Program Objective:**

- Offer certain contract holders who elected either the Guaranteed Minimum Income Benefit (GMIB) or the Guaranteed Withdrawal Benefit for Life (GWBL), an additional payout option at the time the AAV falls to zero



- Contract holders whose AAV fall to zero as a result of an excess withdrawal are excluded from the program. Additionally contracts issued with external reinsurance or issued without a No Lapse Guarantee were also out of scope

- **If a contract holder accept the lump sum payment option, they can choose to :**

- I. Receive Cash (paid directly to client) **OR**
- II. Exchange or transfer proceeds internally or externally

DAY II (additional option):

- I. Credit to base contract. Riders only will terminate, base contract continues with new death benefit = Return of AAV



INSURANCE RISK VARIABLE ANNUITIES BEHAVIOR & ASSUMPTIONS

Assumption Drivers – Cross drivers

- Look at Withdrawal Behavior
 - Identifying systematic Withdrawals vs Non-Systematic Withdrawers
 - What makes someone a systematic withdrawer
 - ABM or Predictive Analytics
 - 2nd order impacts to Lapse / Pro-rata Withdrawals
 - Non Systematic Drivers – RMD ?
 - Could Impact IB Election ?

- Rider LB / DB Type
 - Could impact mortality
 - Election

- Prorata impact Lapses