



SOCIETY OF ACTUARIES



Session 72 PD, Chronic Illness Acceleration Riders

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CHRONIC ILLNESS ACCELERATION RIDERS

SESSION 50PD (LIVE) & SESSION 72PD (LIVE + WEBCAST)

Jim Filmore, FSA, MAAA
VP & Actuary, Individual Life Pricing

SOA Life & Annuity Symposium
May 20, 2014



Agenda

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- Overview/Definitions
 - Risk Management – Rider design
 - Risk Management – Underwriting
 - Risk Management – Claims
 - Lessons learned
 - Audience participation
 - Conclusion



- What is a chronic illness acceleration rider?
- Typically involves acceleration of part of the base life death benefit upon:
 - Loss of 2 or more Activities of Daily Living (ADL's)
 - Severe cognitive impairment

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- Chronic illness acceleration rider vs. LTC rider
 - Chronic illness falls under the NAIC Accelerated Benefits Model Regulation (Regulation 620)
 - If doesn't meet that criteria, then it defaults into the health regulations (and treated as LTC)
 - For example, if the rider is designed as a “reimbursement type”

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- Typically the policyholder is charged one of the following ways:
 - 1) Lien against death benefit
 - Often used for whole life contracts
 - 2) Separate rider premium
 - Potential additional source of revenue
 - Potential upside profitability
 - Lower exposure on portfolio
 - 3) Pay discounted amount of death benefit accelerated

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- In the discounted method, rider payment reduces future payment upon death
 - Impaired life expectancy
 - Loss of interest
 - Loss of future premiums/COI's on portion accelerated
 - Expense/admin charges

Question: Would the policy otherwise have lapsed?

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- Common benefit limitations:
 - Annual \$ cap
 - Monthly % cap
 - Maximum lifetime \$
 - Other design considerations
 - Maximum issue age

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- Decline applicants current ADL or IADL dependent
 - Determine likelihood of ADL-deficiency/cognitive impairment
 - Ensure capture of relevant information
 - Starting point = approved life application

Consider using a supplemental application for the rider

TIA's

Memory
Problems

Strokes

Parkinson's

Huntington's

Multiple Sclerosis



Lung Disease + Oxygen

Diabetes + PVD

Degenerative
Disc

Durable Medical Equipment Use



Head Injury

Mobility
limitations

Shunt

Systemic Lupus

Thrombocytopenia

Spinal cord injury/spinal muscle atrophy



When should cognitive testing be performed?



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- Periodic payments
 - Confirm benefit eligibility
 - Expertise in living benefit claims

Lessons learned

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- Are loss of ADL's permanent?
 - Ex: Fractured heel claim on an otherwise healthy 40 year old male
 - Physician certification isn't necessarily more accurate
 - "Hypertension" may be considered a chronic condition by a physician
 - Life underwriters typically think in terms of mortality not morbidity

Audience Participation Time – First Question

Are these riders more costly on males or females (in terms of the loading expressed as a percentage of the base life mortality?)

- 1) Males
- 2) Females
- 3) The same
- 4) Not sure (just tell me the answer)

Audience Participation Time – Second Question

Are these riders more costly on smaller or larger face policies (in terms of the loading expressed as a percentage of the base life mortality?)

- 1) Smaller face policies
- 2) Larger face policies
- 3) The same
- 4) Not sure (just tell me the answer)

Conclusion

-
- Key items to focus on:
 - Risk Management – Rider design
 - Risk Management - Underwriting
 - Risk Management - Claims



THANK YOU!

Jim Filmore, FSA, MAAA
VP & Actuary, Individual Life Pricing

SOA Life & Annuity Symposium
May 20, 2014



Chronic Illness Accelerated Benefit Riders

John L. Timmerberg, ASA, MAAA
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Life & Annuity Symposium 2014
Sessions 50, 72



SWISS RE
150
YEARS

Rider Benefit Costs

- Early Payment of Portion of Death Benefit
 - net cost: make a payment today as an advance of the death benefit
 - make a smaller benefit payment at time of death
- Foregone premiums:
 - death benefit is decreased at time of acceleration payment
 - premiums are decreased in proportion (do not collect premiums from time of acceleration until time of death)
 - for UL, WL, Term: (COIs, gross premiums, post-level term)
 - Reinsurer may forego YRT mortality charges on Net Amount at Risk
 - costs for direct vs. reinsurer could differ substantially

Rider Benefit Costs

- Fundamental Assumption
 - chronically disabled policyholders have much higher mortality as compared to other active policyholders
 - at time of acceleration, life expectancy is relatively short
- Pricing Risk
 - higher than expected frequency of acceleration requests, by policyholders with relatively long life expectancies
 - policyholder's accelerated death benefit payment request is discretionary
 - policyholders may maximize the utility of their benefits

"Do It Yourself" (DIY) Product Development and Pricing -References and Sources

- *"Standards for Accelerated Death Benefits Compliance Checklist"* (IIPRC-L-08-LB-I-AD-3) -
http://www.insurancecompact.org/us_checklists/us_checklist_accelerated_death_benefits_compliance.pdf
- *"Standards for Accelerated Death Benefits"* (from IIPRC) -
http://www.insurancecompact.org/rulemaking_records/record_stndrds_acceldeathbens.pdf
- *US Code 26 sect 101[g]* -
[http://uscode.house.gov/view.xhtml?req=\(title:26%20section:101%20edition:prelim\)%20OR%20\(granuleid:USC-prelim-title26-section101\)&f=treesort&edition=prelim&num=0&jumpTo=true](http://uscode.house.gov/view.xhtml?req=(title:26%20section:101%20edition:prelim)%20OR%20(granuleid:USC-prelim-title26-section101)&f=treesort&edition=prelim&num=0&jumpTo=true)

DIY References and Sources (continued)

- *US Code 26 sect 7702B* - [http://uscode.house.gov/view.xhtml?req=\(title:26%20section:7702B%20edition:prelim\)%20OR%20\(granuleid:USC-prelim-title26-section7702B\)&f=treesort&edition=prelim&num=0&jumpTo=true](http://uscode.house.gov/view.xhtml?req=(title:26%20section:7702B%20edition:prelim)%20OR%20(granuleid:USC-prelim-title26-section7702B)&f=treesort&edition=prelim&num=0&jumpTo=true)
- *Model Regulation 620, Accelerated Benefits Model Regulation* from the National Association of Insurance Commissioners - <http://www.naic.org/store/free/MDL-620.pdf>
- For **actuarial pricing assumptions** - “*Long-term Care Experience Committee Intercompany Study Report 6, 1984-2007*” - <http://www.soa.org/Research/Experience-Study/ltc/default.aspx>

Model Regulation vs. IIPRC (Compact)

- Comparison of Benefit Triggers
 - Model Regulation 620
 - continuous confinement (permanent)
 - medical condition requiring extraordinary medical intervention
 - terminal illness
 - other, as approved
 - Compact adds 7702B triggers to these
 - modified: requires condition to be permanent
- Filing through Compact facilitates approvals in some states where a regular filing would be disapproved

Actuarial Assumptions

Incidence Rates

- Incidence Rates
 - probability that a policyholder is chronically ill **and** elects to accelerate their life insurance death benefit
 - may vary by gender, attained age and other policyholder characteristics
 - product type, chronic illness certification type (90 day vs. Permanent), other product characteristics or environmental factors (interest rates)

- Raw Data Sources: LTCI policy data
 - SOA's Long-term Care Experience Study, 1984-2007 (published 2011)
 - Appendix B-D, interactive pivot table
 - gender, age-at-claim grouping, underwriting type, elimination period, issue year cohort, policy duration

Actuarial Assumptions

Incidence Rates (continued)

Adjustments or Additional Considerations

- Benefit Eligibility
 - number who meet LTCI benefit triggers > the number that file a claim
 - if a policyholder says that they cannot bathe or dress themselves, how do you prove that they can?
- Adjustments or other Considerations
 - attractiveness of cash payment without restrictions vs. reimbursement for services (LTCI)
 - decrease in death benefit paid to beneficiaries vs. cash today
 - life mortality underwriting and its impact on chronic illness incidence
 - annual mortality improvement → chronic illness morbidity improvement
 - presence of other accelerated payment riders

Actuarial Assumptions

Disabled Life Mortality

- Disabled Life Mortality
 - mortality rates for chronically ill policyholders who have elected to take an accelerated death benefit payment

- Data Sources for constructing Disabled Life Mortality Rates
 - LTCI claim terminations: recovery, exhaust benefits, death
 - example of disabled life mortality study: remove recoveries from policies with unlimited benefits; only deaths remain
 - SOA LTCI Experience Study – tables J-7 (new)
 - mortality rates for LTCI claimants
 - by gender; grouped by age at time of claim; by claim duration
 - pattern of Disabled Life Mortality Rates - Convex
 - ratio of cognitive to non-cognitive claims increasing with claim duration

Actuarial Assumptions

Disabled Life Mortality

Adjustments or Additional Considerations

- Mortality in the first claim duration
 - adjustment for presence of terminal illness rider
 - impact of certification that the condition is expected to last at least 90 days vs. permanent
 - removes short-duration LTCI claims which end in death (and recoveries)
 - potential for policyholder anti-selection at time of acceleration
 - policyholders with longest life expectancy will want to accelerate their death benefit
- Variations by type of chronic illness rider
 - incentive to accelerate vs. not
 - claim begins early; will last longer

Underwriting

At Issue

- May impact both Incidence Rates and Disabled Life Mortality Rates
- Mobility
 - spine, joints, arthritis
 - joint replacement (90 day vs. Permanent Certification); back surgery
 - supplemental application (seven or eight questions) effective?
- Stroke
 - life underwriting should mitigate this risk
- Cognitive or dementia
 - desire sensitive test for early identification; value at 55 and over
 - full delayed word recall, over phone; sometimes face-to-face
 - intrusive; another hurdle to completing the sale; expensive

Risk Control - through Product structure

- Amount of Death Benefit Available to Accelerate
 - lifetime maximum as % of death benefit; or increasing with attained age
 - annual limit as percentage death benefit (20% - 25%)
- Acceleration Payment – "dollar for dollar" or discounted?
 - dollar for dollar with death benefit reduction; example: death benefit reduced by \$50,000, acceleration payment of \$50,000
 - discounted amount of death benefit reduction
 - objective method based upon DLM tables (gender, age at claim); may be updated as experience emerges
 - more subjective, based upon medical condition, gender and age at acceleration

Reserves

- Discounted Benefit version of rider
 - rider has no premium cost ("discounted" accelerated payments pay for cost) but, does modify cash flows
 - "provide actuarially equivalent benefits", no additional reserves
- Benefit Reduction version ("dollar for dollar" accelerated payments)
 - additional premium for rider ; incremental claims due to rider
 - model base plus rider jointly, to determine cash flows for reserve factors
- In practice, base product reserves released as death benefit decreases

Monitoring Performance - Financial Reporting

- Financial Reporting
 - Advance of Death Benefit
 - lump sum vs. monthly (generates claim reserve)
 - Decline in paid premiums
 - Release of policy reserves as death benefit is reduced

- Tracking Disabled Life Mortality Experience
 - are the mortality rates for chronically ill policyholders tracking your assumptions?
 - time to update your table for new accelerated benefit payments (Discounted Benefit version of rider)?
 - are you experiencing anti-selection at time of acceleration?

Summary

Chronic Illness Accelerated Benefit Riders

- Rider Benefit Costs
 - advance payment of death benefit; foregone premiums
- References and Resources
 - product development and actuarial assumptions; starting point
- Actuarial assumptions
 - LTCI experience, with a number of important adjustments
 - policyholders will maximize the utility of their benefits
- Underwriting
 - conditions that could result in an early accelerated benefit payment request, by policyholder with a long life expectancy
- Financial Performance
 - reserves and monitoring impact of accelerated payments; disabled life mortality

A large cable-stayed bridge with multiple tall, A-frame pylons and numerous stay cables. The bridge spans a wide body of water. The sky is clear and blue. The text "Thank you!" is overlaid in white on the left side of the image.

Thank you!

Legal notice

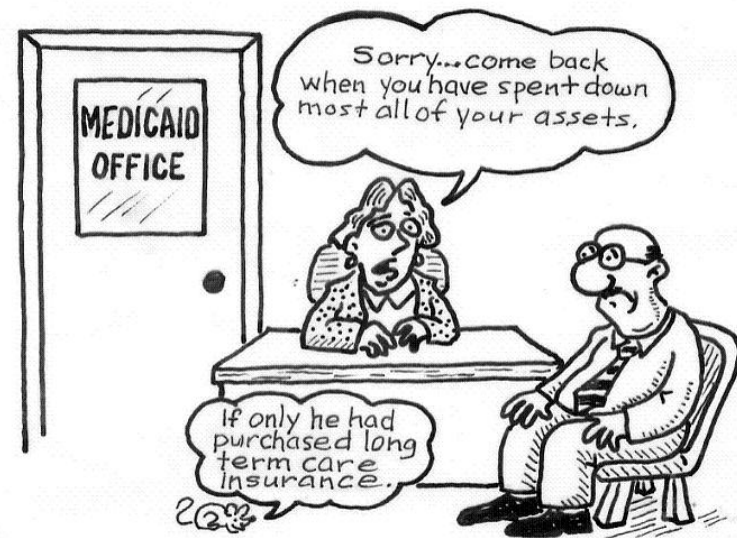
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Jeff Koll

**Marketing and Selling
Chronic Illness Riders**



Jeff's Perspective on this Product

Employee Benefits – Worksite/Voluntary Sales

- Small, simple policies

Rider on Life Plans – Whole Life, ISWL, and UL

Variations of Chronic Illness Riders

- Base Accelerated Death Benefit Rider
- Restoration of Benefits (Life Policy Death Benefits) Rider
- Continuation of Benefits Rider
- Restoration and Continuation of Benefits Rider

Recent **Risk Reviews** of this Business

Need for Chronic Illness Coverage

People purchase this coverage because.....

- How does the sales pitch sound?

Key Differences between Rider and Stand Alone

- Product
- Target Market
- Sales Process
- Underwriting



Polling Question

Who should be purchasing Chronic Illness Riders?

- 1) Everyone who can qualify for coverage
- 2) Older Americans (age 65+)
- 3) People who can't afford stand alone LTC
- 4) Everyone who buys the base life plan
- 5) Nobody, the product cost too much

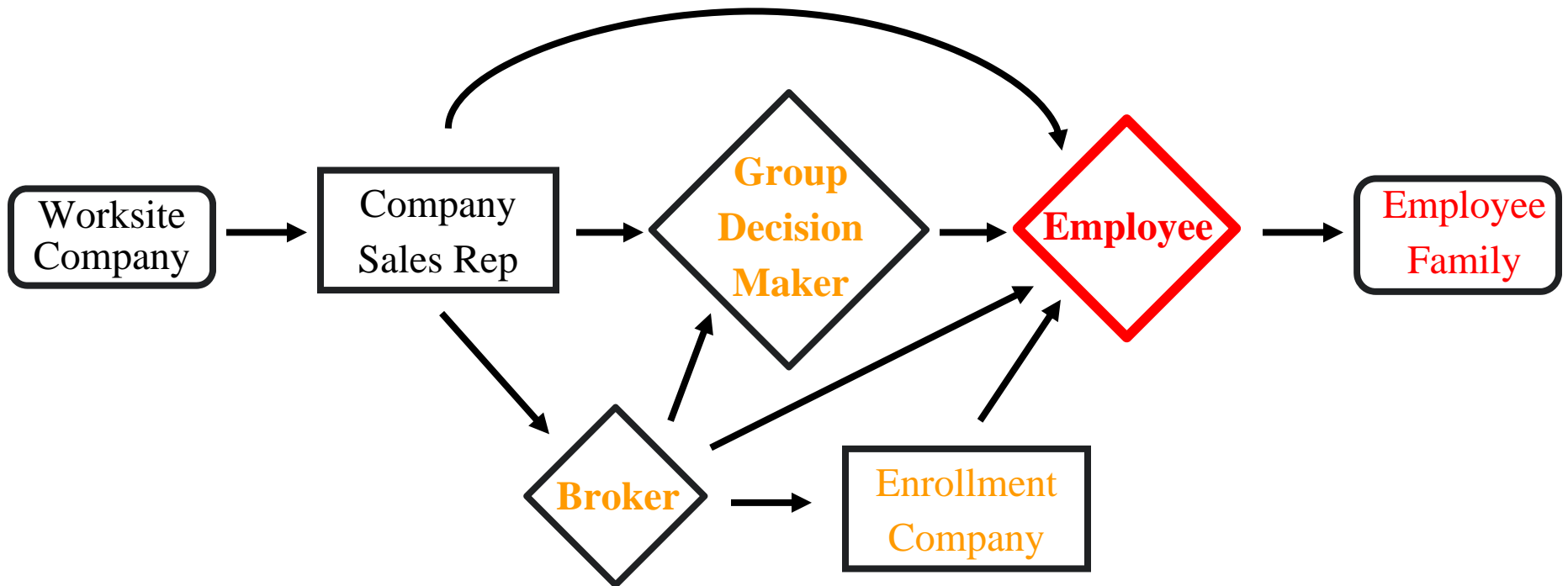
Who will purchase?

Who should be purchasing Chronic Illness Riders?

- 1) Everyone who can qualify for coverage
- 2) Older Americans (age 65+)
- 3) People who can't afford stand alone LTC
- 4) Everyone who buys the base life plan
- 5) Nobody, the product cost too much



Worksite Distribution Model



Who is buying the product?

Enrollment Methods

- 1 on 1 – face to face
- Group meeting
- Call center
- Self enroll

Chronic Illness Riders Sales Results

How the rider is sold with the base life product will drive sales results

- Chronic Illness Rider Purchaser Demographics
- Underwriting approach for the rider



Polling Question

How does the Marketing/Sales approach with a rider **Impact** the Persistency, Morbidity and Investment Experience?

- 1) **Low impact** – Experience similar to stand alone LTC plans
- 2) **Medium impact** – Experience different than stand alone LTC, but not in line with base life plan
- 3) **High impact** – Experience tends to follow base life plan experience
- 4) **I don't know the impact**

Impact?

Marketing/Sales Impact?

What is the Marketing/Sales **Impact** on Experience?

- 1) **Low impact** – Experience similar to stand alone LTC plans
- 2) **Medium impact** – Experience different than stand alone LTC, but not in line with base life plan
- 3) **High impact** – Experience tends to follow base life plan experience
- 4) **I don't know the impact**



Questions

