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## Hot Topics: Life/LTC Combo Products & Lab Scoring Models

Tony Laudato, Vice President & Actuary, Mortality Solutions Pricing

Ben Carson, Vice President & Actuary, Mortality Solutions Pricing

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## Agenda

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- ▶ Life/LTC Combo Products
  - ▶ How do the Products Work and What do They Cover?
  - ▶ Why are These Products Gaining Traction in the Market?
  - ▶ How do We Manage the Key Risks?
  - ▶ Recent Success
- ▶ Lab Scoring models
  - ▶ Overview of three lab scoring systems
  - ▶ Implications of Preferred Criteria
  - ▶ Spectrum of Risks

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## Life/LTC Combo Products

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## How do the Products Work and What Do They Cover?

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## How do the Products Work and What Do They Cover?

	Chronic Illness Acceleration Rider	LTCI Linked Benefit Riders
Benefit Triggers	<ul style="list-style-type: none"> <li>In general, trigger condition must be <b>permanent</b></li> <li>Must cover terminally ill and chronically ill individuals (typically a standard LTC 2/6 ADL Definition)</li> </ul>	<ul style="list-style-type: none"> <li>Covers chronically ill individuals (typically a standard LTC 2/6 ADL Definition)</li> </ul>
Benefit Type	<ul style="list-style-type: none"> <li>Acceleration of Life Insurance policy Death Benefit</li> <li>Typically classified as Life Insurance, <b>not</b> Individual Health Insurance</li> <li>Typically governed by Section 101(g) and Model Regulation 620; may decide to be governed by Section 7702B and the LTC Model Act</li> <li>Most riders offer a one time discounted death benefit payment or monthly (or annual) indemnity payments with annual recertification (typically within HIPAA limits)</li> </ul>	<ul style="list-style-type: none"> <li>Structured to pay benefits beyond the acceleration of the Life Insurance policy Death Benefit through a linked Extension of Benefit ("EOB") rider</li> <li>Product (<i>LTC Combo Products</i>) is a mix of Life Insurance (Acceleration component) and Individual LTC (EOB component)</li> <li>Governed by Section 7702B and the LTC Model Act</li> <li>Benefits are typically paid monthly on a reimbursement or indemnity basis</li> <li>Inflation protection must be offered</li> <li>Non-forfeiture benefit must be offered (1 month or sum of charges)</li> </ul>
Benefit Structures	<ul style="list-style-type: none"> <li>Rider uses one of the following structures:                             <ul style="list-style-type: none"> <li>Discounted Death Benefit Approach</li> <li>Lien Approach (Similar to a Policy Loan)</li> <li>Indemnity Dollar-for-Dollar Face Reduction Approach</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>Reimbursement Dollar-for-Dollar Face Reduction Approach</li> <li>Indemnity Dollar-for-Dollar Face Reduction Approach</li> </ul>
Waiting Periods	<ul style="list-style-type: none"> <li>Maximum Waiting Period is 30 days</li> </ul>	<ul style="list-style-type: none"> <li>Acceleration Component : Effective immediately</li> <li>EOB Component : Effective upon exhaustion of Acceleration Component (minimum 2/3 years)</li> </ul>

Source : Milliman, *Chronic Illness Accelerated Benefit Rider – April 2012*

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## Why are These Products Gaining Traction in the Market?

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## Why are These Products Gaining Traction in the Market? Client Need – Review of Long Term Care Costs

Rate Type	Nursing Homes		Assisted Living Community	Home Health Care		Adult Day Services
	Semi-Private Rooms	Private Room		Home Health Aide	Homemaker	
	Daily		Monthly	Hourly		Daily
2012 Average Rate	\$222	\$248	\$3,550	\$21	\$20	\$70
2011 Average Rate	\$214	\$239	\$3,477	\$21	\$19	\$70
2010 Average Rate	\$205	\$229	\$3,293	\$21	\$19	\$70
\$(%) Increase (2012 to 2011)	\$8 (3.7%)	\$9 (3.8%)	\$73 (2.1%)	\$0 (0%)	\$1 (5.3%)	\$0 (0%)
<b>2012 Annual Rate</b>	<b>\$81,030</b>	<b>\$90,520</b>	<b>\$42,600</b>	<b>\$21,840</b>	<b>\$20,080</b>	<b>\$18,200</b>

### Key Statistics

- ▶ The median age of Nursing Home residents is 82.7 years old; 66% are Female
- ▶ Nearly half (46%) of Nursing Home residents die within 28 months of admission
- ▶ The average length of time since admission for Nursing Home residents is 27.5 months
- ▶ The median age for Assisted Living residents is 86.9 years old
- ▶ The median length of stay for Assisted Living Residents is 25.6 months
- ▶ 79% of Home Health Care Agencies provide Alzheimer's training to their employees
- ▶ Nearly one-third (31%) of Home Health Care recipients die within 28 months of initial care

Sources: MetLife : Market Survey of Long Term Care Costs – 2012; November 2012  
LifePlans : Cognitive and Functional Disability Trends for Assisted Living Residents – March 2009  
CDC : The National Nursing Home Survey; 2004 Overview – June 2009

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## Why are These Products Gaining Traction in the Market?

### Client Need – Marketing Story

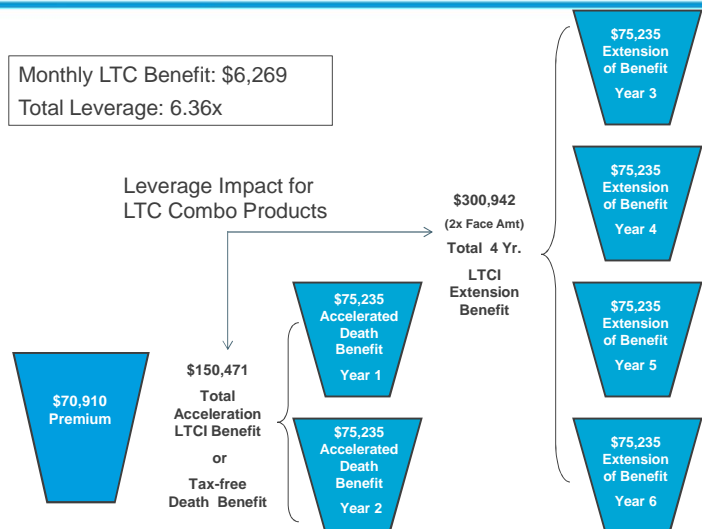
- ▶ Products market away from the most common objection to stand-alone LTC products: it is a “use it or lose it” sale:
  - Chronic Illness Acceleration Rider : Low or no embedded cost; add-on feature to life insurance policy
  - Linked Benefit Rider : Provides integrated Death Benefit and Guaranteed Cash Value protection features. Typically includes a Return of Premium Feature.
- ▶ Products are generally marketed to those who have decided to self-fund their LTC needs
  - If the client does not own stand-alone LTC, they **ARE** self-funding
- ▶ Products can help client leverage the assets they are allocating to LTC protection need
  - Acceleration Rider\* : Ave. Premium: \$6,597; Ave. Face Amount : \$326,063  
On average could provide 4+ years of Semi-Private Nursing Home Care
  - Linked Benefit Rider\*\* : Ave. Premium: \$70,910; Ave. Face Amount : \$150,471  
Potential Additional EOB Coverage : \$300,942  
Total Potential Coverage : \$451,413 (**-6x Leverage**)  
Provides benefits over a minimum 6-year period

Source : LIMRA Individual Life Combination Products – 2012 Annual Review  
\* - Acceleration Rider Averages based on Recurring Premium Products  
\*\* - Linked Benefit Averages based on Single Premium Products

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## Why are These Products Gaining Traction in the Market?

### Client Need – LTCI Leverage



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## How do we Manage the Key Risks?

### What are the Key Risks?

- ▶ Both Chronic Illness Acceleration Riders and LTCI Linked Benefit Products are more complex than either stand-alone LTC or life products
- ▶ Risk profiles must be developed for Mortality, Morbidity, and Lapse
- ▶ The interaction between each of these factors must also be determined and understood

## What are the Key Risks?

### Risk Profile

- ▶ The profiles for Mortality, Morbidity and Lapse are developed based on the following:
  - Underwriting Package
  - Product Design and Marketing
  - Maximum Size
  - Product Design
  - Overlap with Other Products
  - Target Market
  
- ▶ The specifics for each of these factors will drive the overall risk level of the product

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## How do we Manage the Key Risks?

### Underwriting Package – Chronic Illness Acceleration Riders

- ▶ Chronic Illness Acceleration Riders
  - Life underwriting follows current guidelines for life product
  
  - LTC Underwriting
    - Upfront Method
      - Additional questions related to Activities of Daily Living and possible Cognitive Impairment testing
      - Nothing done at claim submission
      - Typical for “Indemnity” riders
  
    - Back-End Method
      - Underwrite policy holder at time of claim submission to determine life expectancy based on current condition
      - Typical for “Discounted Death Benefit” riders

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## How do we Manage the Key Risks?

### Underwriting Package – LTCI Linked Benefit Products

#### ▶ LTCI Linked Benefit Products

- Simplified Issue life underwriting and LTC underwriting:
  - Tele-Underwriting
  - Medical Information Bureau Screen
  - Prescription Drug Screen
  - Motor Vehicle Report
  - Cognitive Testing (e.g. MCAS)
  - Typically no APS Reports
- Market demands a streamlined underwriting process to facilitate the “simplified” sales process

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## How do we Manage the Key Risks?

### Product Design and Marketing

#### ▶ There are two main approaches:

1. Marketed as an add-on to a life product portfolio
  - Little or no cost option to the policyholder
  - Maybe automatically added to the policy
  - Has very low expected utilization
2. Marketed as an alternative to stand-alone LTC Products
  - Conscience decision by policyholder to allocate assets towards LTC protection
  - More cost efficient than stand-alone LTC protection when bundled with existing life benefits
  - Higher expected utilization than “add-on” riders, but lower than stand-alone LTC protection

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## How do we Manage the Key Risks?

### Maximum Size

#### ▶ Chronic Illness Acceleration Riders

- Typically the lesser of the base life insurance protection or \$2M - \$5M
- Need to consider benefit payment method (Discounted DB, Lien, Reimbursement or Indemnity)

#### ▶ LTCI Linked Benefit Products

- Maximum Face Amount is \$500k - \$700k
- Maximum LTC Exposure is generally \$1.5M to \$2.0M (multiple of Face Amount)
- Inflation Protection Options may increase this significantly

- ▶ In general, the maximum amount of any periodic payment (reimbursement or indemnity) is capped at the per diem limit allowed in HIPAA (roughly \$115k per year)

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## How do we Manage the Key Risks?

### Overlap with Other Products

#### ▶ Chronic Illness Acceleration Riders

- Which products will the rider be offered on?
- Does this determination drive certain segments of population to alternative products adjusting the risk profile of both products?

#### ▶ LTCI Linked Benefit Products

- Does the simplified issue nature of the product attract less healthy lives that would normally go to fully underwritten products?

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## How do we Manage the Key Risks?

### Target Market

#### ▶ Chronic Illness Acceleration Riders

- Addition of the rider typically does not change the target market for the base life policy

#### ▶ LTCI Linked Benefit Products

- Product designed for an older (65+) age, higher socio-economic group than typical life coverage
- Females currently dominate this market (>60%)

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## Recent Success

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## Recent Success

### 2012 Sales Results

- ▶ Total Premium : \$2.4B
  - 10% growth over 2011
  - Represents 11% of Total Individual Life Premium
  - 86,000+ Policies Issued (19% growth)
  
- ▶ Average Premium
  - Single Pay : \$70,910 (Ave. Face - \$150,471)
  - Recurring Premium : \$6,597 (Ave. Face – \$326,063)
  
- ▶ Product Mix
  - Acceleration Products Grew by 27%
  - Extension (Linked Benefit) Products Contracted at 1%
  - 24% Extension Products / 76% Acceleration Products
  - Universal Life is Dominating (85% of policies sold)
  
- ▶ General Movement Towards Flexible Payment Products

Sources: LIMRA Individual Life Combination Products – 2012 Annual Review

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## Recent Success

### Conclusions

- ▶ Both the Chronic Illness Acceleration Riders and LTCI Linked Benefit Products offer a unique way for insurance companies to differentiate themselves in today's market
  
- ▶ Products fill a distinct client need as baby-boomers continue to age and lack long-term care coverage
  
- ▶ Products provide a multi-faceted solution in comparison to the stand-alone LTC market which has been declining sharply
  
- ▶ The major risks underlying the products can be mitigated by solid policy / product design, underwriting, claims management processes, and newly designed reinsurance structures
  
- ▶ These products can help an insurance company significantly grow the top and bottom lines while effectively managing their overall risk profile

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## Lab Scoring Models

### Lab Scoring Models

- ▶ CRL
  - ▶ SmartScore
    - ▶ Generally Univariate
    - ▶ Essentially assigns debits and credits for each analyte
- ▶ ExamOne
  - ▶ Risk IQ
    - ▶ Percentile ranking of mortality risk relative to peers (by age, gender, cotinine status)
    - ▶ Multivariate (144 variables)
- ▶ Heritage
  - ▶ Open Mortality Scoring System
    - ▶ Multivariate with 5 modules
    - ▶ Result of score is a relative mortality risk

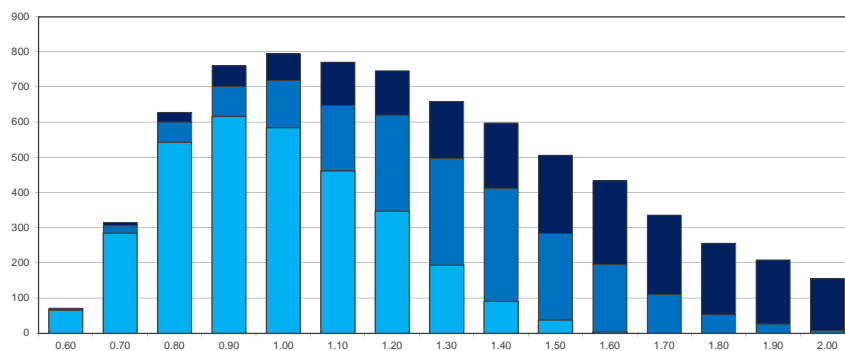
## Potential Uses of Lab Scoring Systems

- ▶ Excluding/Including lives previously Included/Excluded
  - ▶ Hidden Healthy
  - ▶ Hidden Unhealthy
- ▶ Replace some aspect of traditional underwriting
  - ▶ Preferred
  - ▶ Substandard Rating
- ▶ Triage/Audit Underwriting Risk Classifications

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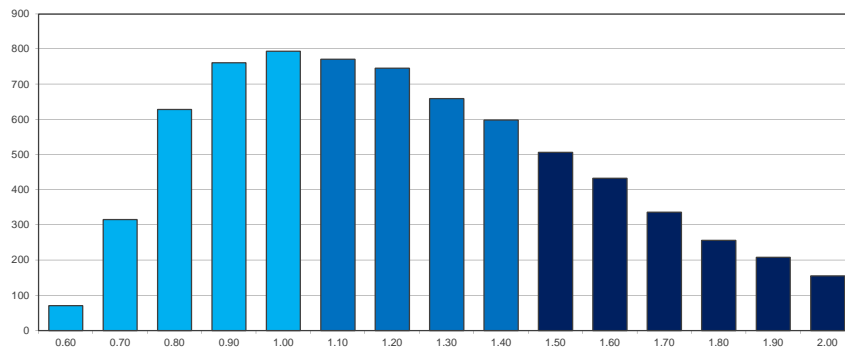
## Traditional Knockout Criteria



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## Debit Credit preferred/Potential Lab Scoring



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## Spectrum of Risks

- ▶ Preferred Concordant
  - ▶ Preferred with Traditional Criteria, Preferred with Lab Model
  
- ▶ Hidden Unhealthy
  - ▶ Std or better with Traditional Criteria, Highly Substandard w/Lab Model
  
- ▶ Hidden Healthy
  - ▶ Ratable with Traditional UW, potentially Std or even better w/ Lab Model
  
- ▶ Ratable Concordant
  - ▶ Ratable with Traditional UW, Ratable w/ Lab Model

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## Preferred Concordant

- ▶ Reviewed two of the models in detail
  - Generally effective in segmenting risk
    - Better mousetrap than traditional knockout
    - More analysis to be completed
  - Any given life could have a questionable result
- ▶ Could be some movement within the standard or better spectrum
  - ie, Preferred to Preferred Best, Preferred Best to Std
  - If Changes implemented there would be pricing implications

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## Hidden Unhealthy

- ▶ Analysis shows that pricing impact is real
  - Can exclude (or rate) certain lives to improve risk selection/price more accurately
- ▶ Identified certain analytes with mortality impact
  - Resulted in updates to UW manuals in some cases
- ▶ User beware
  - Certain analyte results a product of temporary medical condition (ie pregnancy) without mortality implications, so must underwrite entire file.

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## Hidden Healthy

- ▶ Lab scoring models demonstrate based on blood profile, more lives might qualify
  - Depending on threshold (ie Smart Score below 100 or 150), potentially qualifies another 5%+ to standard or better.
- ▶ What happens when the entire file is reviewed?
  - Findings: Ratable impairments found outside the blood panel
  - Could still potentially use lab scores to credit since there are positive cardiovascular risk factors
    - Use caution in double dipping from other credit programs

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## Ratable Concordant

- ▶ Least amount of time spent here
- ▶ Smallest subset
- ▶ Another anchor point for setting ratings

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## Conclusions

- ▶ If used appropriately, lab scoring models can add value
- ▶ Must underwrite the entire file
- ▶ Challenges with accepting blindly
- ▶ Challenges with Communication – this is a major hurdle
  - Distribution, applicant, doctor, and lab

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## Questions?

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