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Alzheimer's Disease as a Critical Illness Trigger: **Does it Really Make Sense?**

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Gen Re has reinsured Critical Illness since its inception in South Africa in 1983. In the years since its development, we have watched and helped as the product has migrated around the world. Surprisingly, the United States was one of the last of the sophisticated insurance markets to embrace Critical Illness insurance. Perhaps this was reflective of our historically rich medical plans. Fueled in part by the more recent changes such as High Deductable Health Plans, Health Savings Accounts, and ongoing Health Care Reform concerns, the product has recently begun to take hold. The Gen Re/NACII *2011 Critical Illness Market Survey* shows new business premium of more than $220 million for the year 2010. I think we can safely say that the product has finally arrived.

Despite this quiet "arrival," few individuals have yet to be approached to buy this product and fewer yet have actually purchased it. If questioned about it, their more likely response would be, "What is Critical Illness?" As such, this market is rich with opportunity. How often does an insurance agent get the chance to provide real personal value and educate their clientele on something they've never heard of but could truly benefit from?

With more than 700,000 policies or certificates in-force at the end of 2010, it's reasonable to assume that truly competitive situations are rare for this product. Given this, it is rather surprising that nearly every new critical illness product on the street is looking to add more payouts, more benefit eligibility triggers, and more complexity in order to "beat the competition" and avoid being easily "spread sheeted." What competition?

That being said, some of the ingenuity we've seen in critical illness products may add true value. For example, the inclusion of total paralysis as a benefit eligibility trigger, allowing for a subsequent payout, or providing a wellness benefit may make sense for certain markets. But the one that is the most perplexing is the addition of Alzheimer's Disease as a benefit eligibility trigger.

Let's start by reviewing how we select which triggers to include.

Determining Which Benefit Eligibility Triggers to Cover

This can be either the simplest exercise of the product development process or the most complex. Nearly every critical illness policy covers the core benefit eligibility triggers of invasive cancer, heart attack, stroke, end stage renal disease, and major organ transplant. In addition, most policies provide partial payments for carcinoma in-situ, coronary artery angioplasty, and coronary artery bypass grafting.

Beyond that, a number of insurers offer one or two additional triggers that may include such conditions as paralysis, severe burns, loss of vision, etc. Each may make sense depending upon the insurers market. For instance, including paralysis makes perfect conceptual sense when the insurer plans to co-market critical illness with its disability product.

Regardless of the benefit eligibility trigger under consideration, insurers should ask themselves these six important questions before including it in their product:

1. *Is the condition normally "critical"?* Is it a significant medical event that would likely have considerable financial consequences for the insured?
2. *Can the condition be well defined?* Will the consumer understand exactly what they are purchasing and will the insurer have a firm understanding of what it is they are pricing and adjudicating?
3. *Can reliable incidence rates be developed?* Are there good population incidence rates that can be studied in order to help price the risk?
4. *Can the risk be appropriately underwritten?* Do we have the tools to determine if the proposed insured has had the condition or is highly predisposed to it? Can we screen out those who are selecting against us?
5. *Can the benefit eligibility be objectively determined at time of claim?* Will our claims departments be able to properly adjudicate the claim, paying all that should be paid and denying those that don't meet the criteria?
6. *Will inclusion of this benefit likely have a favorable impact on sales?* Will more people purchase the

CONTINUED ON **PAGE 18**

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policy because the trigger is included? If so, will these be the right people?

If the answer to all of the above criteria is "Yes," then this may well be a benefit that makes sense to include in a critical illness policy. If any of the above criteria are not met, insurers may want to reassess inclusion of the eligibility trigger.

Alzheimer's Assessment

Of all the unusual benefit eligibility triggers we've been asked to consider, Alzheimer's Disease ranks among the lowest when measured against the above criteria. Sure, whooping cough and rabies seems silly and unnecessary, but fortunately neither has gained any traction in the critical illness market. What raises concern is that Alzheimer's Disease seems to have gained a foothold in this product line.

Let us now analyze Alzheimer's Disease and see how it fits our criteria:

1. **Is the condition normally critical?** Alzheimer's Disease is a horribly debilitating disease that has tremendous emotional and financial consequences.

2. **Can the condition be well defined?** Alzheimer's Disease can be fairly accurately diagnosed by medical professionals today, but the only current way to unequivocally diagnose Alzheimer's Disease is through an autopsy. Some insurers strengthen their criteria by covering only "Severe Alzheimer's Disease." Even this is difficult to define as patients can often exhibit some elements of the mild, moderate, and severe stages and never completely meet all the criteria of a single stage.

   Some would argue that reliance should be placed on the records of the attending physician. This too has its limitations as the accuracy of clinical diagnosis may vary from one physician to another and may be influenced by any number or combination of factors.

3. **Can reliable incidence rates be developed?** Incidence rates of most illnesses are gathered by the government for a number of reasons. All, however, are reliant upon clinicians, insurers, etc., reporting and correctly coding the impairment. This is where historical incidence rates for Alzheimer's Disease (and other forms of dementia) become highly questionable.

   Generally speaking, clinicians are more likely to address, diagnose, and report conditions that they can actually treat than conditions they cannot. Prior to the advent of Aricept (whose clinical efficacy is once again being questioned) there was little if anything a physician could do to treat a patient suffering with a form of dementia. Add the emotional strain and stigma that has far too long accompanied the disease, and it's easy to see why many cases were never formally diagnosed or reported. This problem likely persists, but to a lesser degree, today as effective treatment of the disease remains elusive.

   As such, it is believed that reliance on reported incidence rates would materially underestimate the actual population prevalence. Estimates could be made as to how far off these have been historically and remain today, but there is little basis on which to make an educated estimate for pricing purposes. To the degree that historical rates have any reliability, they would be more suited to all forms of dementia rather than specific to Alzheimer's Disease.

Price determination, however, is based on more than incidence rates alone. As a lapse supported product, like long-term care, our actuaries need to determine if inclusion of a benefit designed for older insureds will cause the product to persist more like LTC than CI. If so, the additional persistency will need to be factored into the price for all of the benefit triggers, not only Alzheimer's Disease, thus increasing the premium beyond the cost of the Alzheimer's Disease incidence alone.

4. **Can the risk be appropriately underwritten?** It is unlikely that an insurer would ever detect early cognitive impairment from a basic application or telephone interview. There are commonly available, but imperfect, cognitive screens utilized for long-term care and some Life underwriting at advanced ages that may offer limited protection. For economic and time service reasons, these test are normally reserved for applicants at age 70 and above and would leave unscreened the 5 percent to 10 percent of individuals who begin experiencing symptoms in their 60s, 50s, or even 40s.

   Records from attending physicians may be of minimal help as well. Most individuals would have progressed well into dementia before any indication of the disease appears in their medical records, and then normally at the behest of family members rather than the patient. For the few who are cognizant of their declining cognitive function, predisposed due to family history, or who have tested genetically positive for the Apolipoprotein E (APOE) marker, detection is highly unlikely. Furthermore, whereas we could assume a high degree of anti-selection for these individuals, actual symptoms are likely years away and the normally protective provisions such as pre-existing condition limitations or contestability clauses are unlikely to be of any value.

5. **Can the benefit eligibility be objectively determined at time of claim?** There are two issues at play here. The first being that of dementia vs. Alzheimer's Disease. The second being diagnostic capabilities.

   Dementia is not a single disease, but a non-specific illness syndrome (a combination of signs and symptoms that are indicative of a particular disease or disorder) which impact areas of cognition. Alzheimer's Disease is only one of many forms of dementia. Other common forms of dementia include vascular dementia, frontotemporal dementia, semantic dementia, dementia with Lewy bodies, and dementia resulting from traumatic brain injury. It would be extremely difficult, if not impossible, for an insurance claims adjudicator to differentiate Alzheimer's dementia from other common forms of dementia at claim time.

   Even if an insurer chooses to charge for and cover all forms of dementia (of which Alzheimer's Disease represents roughly 70 percent) some process would need to be in place to help determine if the claim is valid of not. Some of the more common screens available today are the Abbreviated Mental Test Score, the MiniMental State Examination, the Modified Mini-Mental State Examination, the Cognitive Abilities Screening Instrument, and the Clock Drawing Test. All of these can be problematic for the insurance environment in that the scores must be interpreted in the context of the person's educational and other background which we rarely have available to us.

   The other major drawback, especially for a lump sum payout product, is that all of these tests were designed with the assumption that the individual being tested wants to pass the test. In other words, they have no way of protecting for a person who may choose to deliberately fail the test in order to gain access to the policy proceeds.

   For a more definitive assessment of dementia, insurers may choose to obtain a complete neuropsychological evaluation. These are very expensive tests that normally consist of a full-day marathon of paper-and-pencil tests and address all the domains

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CONTINUED ON **PAGE 20**

of cognitive function. Even with these, the exact selection of tests and the interpretation fall to a Ph.D. psychologist and psychologists differ on the exact menu of tests to include.

6. **Will inclusion of this benefit likely have a favorable impact on sales?** It's clear that this would not be a topic for discussion if some insurers didn't believe so. But would it really? The average buyer of critical illness insurance is in their early 40s. The average age for a buyer of long-term care insurance today is early to mid 60s. This begs the question of why this benefit would help drive critical illness sales when our target age group has shown little to no historical interest in purchasing similar protection.

   Unless this provision is likely to move the masses, we need to ask ourselves who it will motivate. The lower the interest in the provision, the greater the likelihood that those who understand that they are predisposed to this illness through family history, genetics, or early indications will disproportionately purchase or opt in as a result of this benefit's inclusion. Anti-selection may run very high for this product and with an expected incidence at age 60 (for example) of only two claims per 100,000 lives insured, we have little wiggle room for any anti-selection.

Insurance Need

As with any insurance product, it is important to keep in mind why the product is needed in the first place. In the case of critical illness insurance, it is to help pay for the out-of-pocket costs associated with surviving critical illnesses that are not normally covered by other insurance products. These costs may include such items as paying for high deductibles and co-pays, out-of-network care, travel expenses, and even experimental treatments.

In the case of Alzheimer's Disease, consumers already have the option of purchasing long-term care insurance that has been specifically designed, and is ideally suited, for protecting people who develop Alzheimer's Disease by providing them with the care and supervision often required to prevent harm to themselves or others.

Summary

Alzheimer's Disease is a devastating illness with tremendous emotional and financial consequences. There are existing products that are specifically designed to help with the cost of living with it. Unfortunately, when using the aforementioned criteria to assess it, Alzheimer's Disease falls far short of other critical illness benefit triggers offered today. As such, our answer to the subtitle of this article, "Does it Really Make Sense?" is "No." ◻