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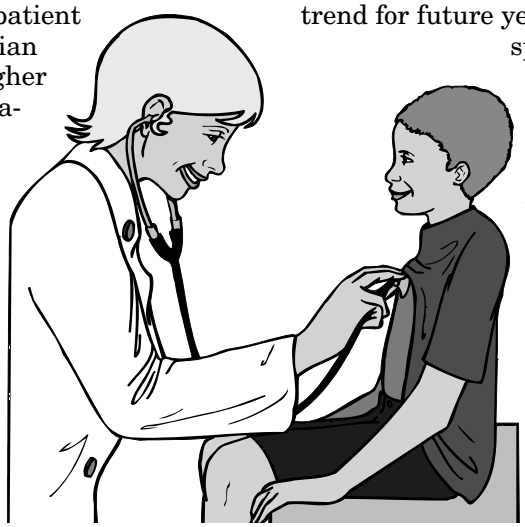
effectiveness of the school's SHS in managing physician care and referrals to specialists and sub-specialists, the distribution of a student health insurance claim dollar is lower than employer-sponsored plans in the categories of inpatient care and physician services, but higher in the more inflation prone categories of outpatient and prescription drugs.



Because of variations in plan designs school by school, it is not possible to generalize with any specificity, but it is safe to say that in student plans, inpatient care, as a proportion of the health insurance claim dollar, is often close to one half of what it would be in an employed population. (A high degree of the variability in inpatient care in student plans is maternity admissions, which are less predictable in student populations because of the relatively low number of dependents covered under the plan.)

While the student population has relatively greater exposure to the higher trend components of health care, the impact is somewhat offset by its better morbidity profile relative to the employed population. Medical conditions for students tend to be more acute than chronic and are often of a lower severity level. Because of their relative young age, students are simply not exposed to certain medical conditions (e.g. multiple organ system disease) that require invasive, expensive medical treatment.

Putting this all together, the projected trend for student plans for the 2002 – 2003 school year is anticipated to be comparable to employer-sponsored plans in the same geographic area unless plan design features are already in place to control prescription drug costs and outpatient care. Without these kinds of limits, trend for many schools is likely to be in the mid-teens.

What can be done to moderate trend for future years? Employer-sponsored plans are taking four approaches: first, substantially greater cost-shifting to employees through increased premiums, deductibles, copayments and benefit caps, particularly on prescription drugs. Second, more selective physician networks, particularly specialists. Third, enhanced disease and demand management through nurse "800" phone systems, computer information systems and one-to-one case management. Finally, some are considering bold plan redesigns where the first $1000 to $2000 in expenses is the employee's responsibility through funded medical spending accounts (MSA's).

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Unfortunately, most of these strategies have little applicability to student plans. The student, or more likely, their parents, already pay 100% of the premium. Schools' SHS currently are quite disciplined about specialist referrals. There is relatively little serious or chronic morbidity for assignment to case management. And, it is an open question as to whether the medical spending account model would be an appropriate choice for students, many of whom are just learning how to manage their own finances.

What, then, is left? Three opportunities should be considered. First, schools should revisit all aspects of plan design to ensure that appropriate cost sharing and plan limits are in place. We do not recommend those benefit caps which would leave the truly ill and injured exposed, but we do suggest, for example, a prescription drug program with strong incentives to use generics.

Second, Student Health Services should consider bringing some specialty and subspecialty care into the Student Health Service on a salaried or "sessions" basis and negotiate with their insurers to pay for this through capitation, or direct cost reimbursement. Third, Student Health Services might consider more careful oversight over outpatient care, particularly outpatient surgery.

Conclusion

Trend in health costs and insurance premiums is likely to continue to be in double digits for the next three to four years. This is a national issue and one that will be difficult for an individual program to moderate substantially. Despite that, rationalizing the delivery system, having plan designs which encourage appropriate utilization and continuing to enhance the role of the SHS as the care manager will make sense even if the results are only measured in a percentage point or two.

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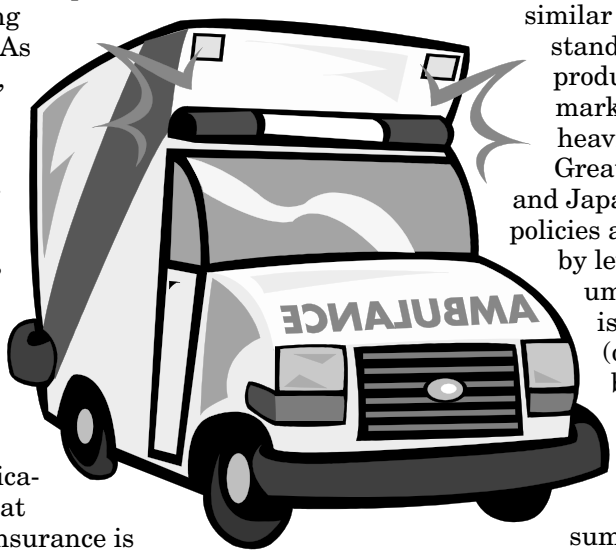
All Aboard the Critical Illness Insurance Express!

by Loretta J. Jacobs

After witnessing strong sales of similar products in Japan and the United Kingdom, a number of U.S. insurers have recently jumped aboard the "critical illness" insurance express and are developing this product for sale in the United States. While the critical illness (CI) insurance concept is not new to the U.S., the current products being sold introduce new wrinkles that pose interesting issues for insurers in pricing, underwriting and marketing. As can be expected, insurers thus far have struggled to find the right balance of the three P's (product design, positioning and price) to address these wrinkles, but now with the kinks worked out, market indications suggest that critical illness insurance is ready to take off in the United States. What is critical illness insurance and why is now the time for insurers to enter the CI marketplace?



Product Design

In the simplest terms, critical illness insurance pays benefits when the insured person becomes ill with one or more specified conditions. This concept is not new to the U.S. market. For many years, direct and affinity marketers have sold indemnity hospital benefit policies for cancer, heart attack and/or heart disease, stroke and other conditions. Some insurers even offered products or riders that paid relatively modest (up to $5,000 or $10,000) lump sum benefits upon diagnosis of serious cancer, coma or paralysis. The stand-alone policies of this type went by several names, including "dread disease" insurance, "cancer" insurance and "limited benefit" insurance. While they are still commonly sold today in the direct marketing arena, these policies have not typically been viewed favorably by regulators and have not sold well in more traditional insurance sales distribution channels.

Most of the stand-alone critical illness products being designed for sale in the USA today are similar to the stand-alone CI products being marketed heavily in Great Britain and Japan. These policies are funded by level premiums from issue age (or age band) and pay out a substantial lump sum benefit of $10,000 to $50,000 upon diagnosis of one or more critical diseases or conditions. They may also offer riders that reimburse insureds for certain extraordinary medical expenses incurred for treatment of these conditions. In addition, a number of insurers are also now offering critical illness riders for sale with annuity and life insurance policies. There are even critical illness riders being added to other health insurance products, including disability and accidental death and dismemberment insurance. The list of disorders covered under a critical illness policy or rider varies by insurer, but following are some of the more commonly covered conditions:

- Cancer, other than skin cancer
- Heart attack and/or heart surgery
- Multiple sclerosis
- Stroke
- Paralysis
- Major organ transplant
- Renal failure
- Coma
- Loss of limb(s)
- Blindness
- Alzheimer's disease
- "Terminal" illness

The conditions covered and the benefits payable for each covered condition have significant ramifications for the product's marketing strategy/positioning, target buyer profile and of course, pricing. For example, an insurer offering a $50,000 lump sum critical illness benefit upon diagnosis of Alzheimer's disease, multiple sclerosis, stroke and paralysis may have unintentionally created a high-end supplemental insurance product that competes with Long-Term Care (LTC) insurance. On the other hand, an insurer offering a $10,000 lump sum benefit upon diagnosis of cancer should expect its product to compete with the mass marketers for the lower-end consumer buyers. A CI rider to a life insurance policy that advances a portion of the death benefit upon diagnosis of "terminal illness" is not anything new to the market; these accelerated benefit riders have been available for years. However, a CI rider to a life insurance policy that advances a portion of the death benefit upon a paralyzing accident is a new twist on an old concept and may be viewed favorably in the market.

Another important aspect of CI policy or rider product design is whether to include a survival waiting period requirement after a critical illness diagnosis has been made. In order to prevent consumers from viewing a CI policy as a life insurance policy, some carriers require that the insured must survive at least 14 – 30 days

after diagnosis of the covered critical illness to be eligible for benefit payment. If the individual dies before the 14 – 30 day waiting period, no benefit is paid. Such a requirement reinforces the premise that critical illness insurance is designed to cover the plethora of expenses associated with diagnosis of a serious illness not covered by other insurance products, and is not a substitute for, among others, life insurance (see positioning). This requirement also reduces the policy's cost. On the other hand, the carrier risks serious dissatisfaction and perhaps even a lawsuit if a policyholder dies from complications of a covered critical illness during the waiting period. The carriers who do not require a survival waiting period generally cite legal, regulatory and policyholder / beneficiary dissatisfaction concerns as their reasons for their decision.

Another product design consideration for stand-alone CI products is how much up-front medical underwriting will be performed, and how to limit adverse selection risk through product design specifications. Until now, most carriers have designed their stand-alone CI products for sale in markets that do not view long-form medical underwriting favorably (small employer work-site marketing, direct and affinity marketing, true large group marketing), so the products utilize a simplified underwriting screen. This is, of course, dangerous since many critical illnesses are hereditary in nature and applicant adverse selection can present a serious problem. Using such a simplified underwriting approach means that claims risk must also be controlled through product design limitations and marketing approach. The most common product design limitations in use are pre-existing exclusion clauses, graded benefit provisions and attained age benefit limitations. When a pre-existing condition exclusion is included in the policy, benefits are not payable for critical illness claims incurred within the first two policy years that resulted from conditions which existed before the policy was issued. A graded benefit provision limits the benefits payable for covered critical illnesses diagnosed or treated within the first two years of policy issuance to only a small amount, such as two times the premiums paid-to-date. An attained age benefit limitation reduces the amount of benefit that will be paid (typically 50% of face amount) when a critical illness diagnosis is made after the insured has reached a certain age (typically 70 or 75). The pre-existing condition clause and graded benefit provisions are designed to reduce up-front insured adverse selection while the attained age benefit limitation is designed primarily to reduce ultimate claims exposure, and thus premiums, to more marketable and manageable levels.

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As a means to reduce up-front insured adverse selection, both the pre-existing condition clause and the graded benefit provision can be effective, but not without downsides. Pre-existing condition clauses are difficult to administer, particularly in determining the scope and definition of a pre-existing condition, and often result in policyholder dissatisfaction and perhaps litigation when a claim is denied. On the other hand, graded benefit provisions can essentially eliminate all critical illness claims in the first two policy years, even ones that are clearly not related to any pre-existing condition (such as when an automobile accident leaves an insured paralyzed). Many insurers would prefer to use more comprehensive up-front medical underwriting to combat adverse selection, but thus far, the market has not moved this way. Including attained age benefit reduction provisions in the policy will keep premiums lower, and should appeal to the typical middle market insurance buyer attempting to provide for a family. Such provisions also fit neatly into positioning CI for sale in the work-site, where the focus is on insuring against contingencies that impact the working, as opposed to retired, population. However, these provisions also make the policy less appealing to individuals in their later working years (50+) and can lead to serious dissatisfaction from claimants who develop a critical illness in their sunset years.

A significant advantage of selling a CI rider rather than a stand-alone CI policy is that the medical underwriting process used for the base policy may be used for the CI rider, perhaps without significant modification (obviously depending on the type of base policy being sold and the covered conditions of the CI rider). When long-form medical underwriting is used, pre-existing condition exclusions and graded benefit provisions may not be needed for risk control purposes and the rider may be viewed more positively in the marketplace and by regulators.

Positioning

Since critical illness insurance has enjoyed strong sales in the traditional middle-class insurance markets of Japan and the United Kingdom, many U.S. insurers have focused their recent critical illness product design efforts on this market as well. If this is the market that U.S. insurers intend to pursue, they must be very clear in their

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marketing materials as to why critical illness insurance makes sense for an individual to purchase in light of other insurance the individual may already have. As demonstrated by somewhat disappointing sales results to date, this is where most insurers have fallen short. They have not effectively communicated the need for, and utility of, the CI product to the U.S. consumer insurance buying population.

It must be very clear that critical illness insurance is *not a substitute* for, but rather is a *supplement* to, major medical insurance, life insurance, disability insurance and LTC insurance (although there are arguably instances where critical illness insurance may be a substitute for LTC insurance). This may be an awkward message for some insurers to relate to consumers since they may have little experience touting the benefits of "supplemental" coverage as opposed to "primary" coverage. Similar to the marketing of Group LTC insurance, given the newness of the critical illness insurance concept to most Americans, a significant amount of the marketing effort must actually focus on educating consumers on the utility and flexibility of CI coverage. The education process needs to focus on all the miscellaneous hidden costs associated with the serious illness of a family member and how useful a large lump sum payment can be to tide the family over until the infirm person recovers.

In marketing critical illness as a supplemental benefit, some key messages need to be made. As a supplement to major medical insurance, critical illness coverage can pay the cost of deductibles, co-payments/co-insurance, prescription drugs, experimental, custodial/convalescent or non-traditional treatment options not typically covered by the medical plan. The CI benefit might enable an insured in an HMO to receive necessary care completely out-of-network.

Comprehensive LTC policies do cover the cost of custodial care mentioned above, as long as the ill individual meets certain benefit eligibility criteria related to functional and/or cognitive capacity. So, in certain instances, a CI policy might be considered a substitute for LTC insurance rather than a supplement to it. This should be helpful to insurers who do not offer LTC insurance currently, as they can position CI as a lower cost, more readily understandable substitute for it. For insurers who do offer LTC today, there may be some advantage to cross-selling CI to the younger LTC insureds, assuming the CI policy does not

'It must be very clear that critical illness insurance is not a substitute for, but rather is a supplement to, major medical insurance, life insurance, disability insurance and LTC insurance...'

contain an attained age benefit reduction provision, since the LTC buyers have already shown a commitment to buying supplementary insurance and are probably financially suitable for the coverage. LTC insurers may suffer cannibalization, however, if the LTC insureds lapse in order to buy CI rather than keeping both policies in-force. Another option for LTC writers to consider may be to develop a combination CI/LTC product for sale in the middle market.

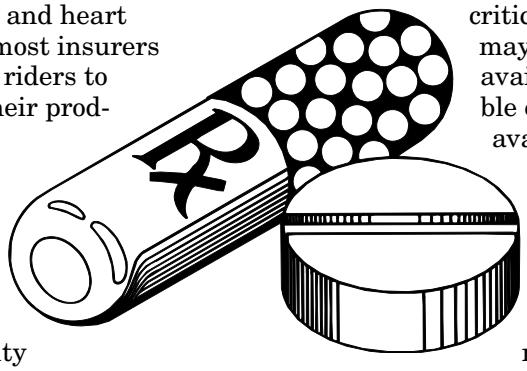
As a supplement to disability insurance, critical illness insurance provides additional family income needed because the infirm person only collects a portion (usually 50% or 60%) of his or her salary while on long-term disability. In addition, CI supplements the family's diminished income resulting when a healthy family member(s) needs to either take extended leave from work to care for the infirm person, or needs to hire someone else to provide this care so he/she can go to work.

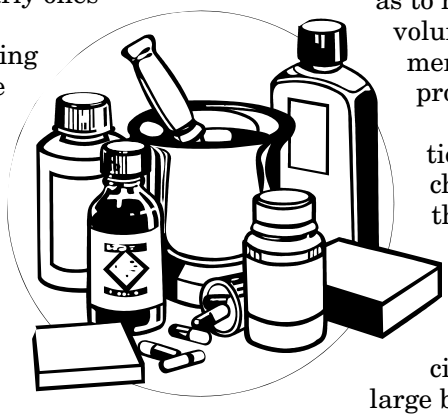
CI benefits can also be used to defray the additional child-care costs incurred when healthy adult family members visit the ill family member in a hospital, rehabilitation center or nursing facility. CI benefits may be used to pay the travel and hotel accommodation costs incurred when relatives come to town on short notice to visit with a sick relative or when infirm individuals and their family members travel out-of-town to receive medical treatment. Finally, the CI benefit can serve as a supplement to life insurance if the claimant dies before his lump sum benefit has been exhausted paying for any of the other above-mentioned costs. When framed this way, it is easy to see how a family could easily incur $20,000 or more in illness related expenses, not covered by primary insurance, due to a serious illness befalling a close family member.

Until now, the most successful marketing of stand-alone CI insurance has taken place in the small employer work-site arena. This is understandable when you consider that the work-site marketing channel appears to have all the ingredients necessary for the CI insurance sale. First, the on-site insurance agent or benefits specialist probably can gain a basic understanding of the overall benefits package offered by the employer, and can speak to, and thus market CI to cover the gaps in these other coverages. In addition, the all-important marketing education process that is needed can be accomplished through face-to-face

contact with the on-site insurance agent and/or human resource benefits specialist. Finally, an on-site agent should be able to efficiently determine an employee's financial suitability for CI insurance, and thus direct the CI sales process effectively. In contrast, standard group and direct marketing channels offer neither the personalized sales approach nor the product education effort needed to successfully market the merits of CI insurance. These channels will become more viable when consumers become more aware of the benefits of and need for CI insurance. Traditional individual agent marketing should also become more prevalent and successful when consumer awareness is heightened, although the availability of high commissions from insurers who want to remain in the individual health insurance market place with a product that is less subject to the adverse selection of individual disability income insurance and the trend costs of major medical insurance could speed along the process.

Positioning of CI riders is less problematic than positioning CI policies. By definition, riders are supplementary to the base policy being sold, so the insurer doesn't need to apologize for the supplementary nature of the CI coverage. CI riders, particularly ones covering coma and paralysis, are growing in popularity in the life insurance market, where marketing of other riders such as waiver of premium, AD&D and terminal illness accelerated benefit has been accomplished successfully for years. In addition, more and more annuity writers are including a lump sum Alzheimer's disease benefit rider on retirement annuities to compete with LTC insurance. Also, disability carriers have recently started offering CI (and LTC) riders on their individual disability income policies, where the covered conditions range from coma and paralysis to stroke and heart disease. Thus far, most insurers have developed CI riders to help distinguish their product offerings from those of their competitors and showcase their product development innovations while touting the flexibility and utility of the CI benefit rider to the consumer. As CI riders become more commonplace in the market, they will obviously no longer be considered innovative, so insurers will need to adjust their positioning to focus primarily on the flexibility and value of the CI benefit to the consumer.





Price

As with any new product, pricing is a challenge. As mentioned earlier, most of the newer stand-alone CI products are being funded with level premiums from issue age (or age band). Thus, to establish premium rates, the pricing actuary must project product line income, benefits and expenses over a fairly long period of time, such as 20 or 30 years. Assumptions must be made as to morbidity, mortality, voluntary lapse, investment earnings and product line expenses.

Morbidity assumptions are clearly a challenge. Where can the pricing actuary obtain reliable, credible critical illness incidence data? Since CI policies and riders pay large benefits upon very low incidence rate events, such as organ transplants, it could take 10 years or more for even insured claims experience data to be considered credible. Even insurers who have access to substantial amounts of major medical claims experience are not necessarily at an advantage over carriers who do not offer health coverage since the incidence rate data for covered critical illnesses may not be readily available, or credible even if available. Health insurers must not only have incurred a substantial number of CI claims, they must also have good exposure data to determine their experienced incidence rates for these claims. Since the claims themselves are rare, and the exposure data may not be collected or validated if collected, it is quite possible that the insurer's medical claims experience, while voluminous, may be inappropriate or useless for CI product or rider pricing. Pricing actuaries will probably need to turn to government population data and statistics (which, in turn, needs to be adjusted to an insured environment) to develop a baseline morbidity scale, and validate it against the pricing data warehouses of major consulting firms and re-insurers to gain a stronger measure of confidence in their pricing morbidity projections.

In addition, pricing actuaries will need to adjust durational morbidity for the impact of medical underwriting (long-form or short-form), the product's limitations and exclusions, applicant adverse selection, and the marketing distribution method. As discussed earlier, since most stand-alone CI products utilize a simplified underwriting screen, the potential for applicant adverse selection based on adverse family medical history is substantial. On the other hand, the use of simplified underwriting in conjunction with product design limitations and exclusions and possibly reinsurance, should enable the insurer to manage the stand-alone

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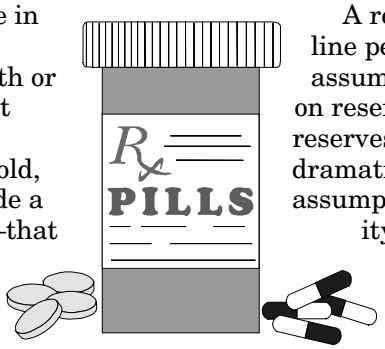
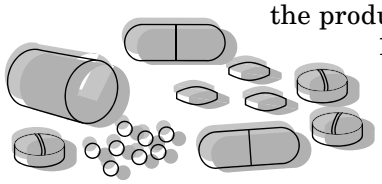
CI product risk to acceptable levels. Applicant adverse selection is more of a concern in some distribution channels than others, and the pricing actuary must consider this in pricing the CI product.

Claims experience on CI products sold through the small or large employer work-site should develop at least as favorably, if not more favorably, than claims experience on these products sold through direct response methods or career agent channels, since marketing efforts can be limited to actively-at-work, full time employees during standard benefit enrollment periods for new hires and existing employees. Selling a CI policy on the Internet, for example, using simplified underwriting is more risky than selling the same policy in the workplace since actively-at-work employees, by virtue of their working status, demonstrate a measure of good health that is not known for the online applicant at the time of application. The effect of insurance agent adverse selection must also be considered, including that of on-site sales representatives at small employers. The impact of applicant and distribution channel adverse selection is significantly mitigated on CI riders so CI riders are considered less risky than stand-alone CI products.

CI, like LTC insurance, is a product that builds large reserves for future claims, especially if attained age benefit reductions are not included in the policy. When sold in primarily variable cost distribution channels (such as career agent distribution channels where commissions are the primary marketing expense), low lapse and mortality rates in later durations can have an unfavorable impact on financial results. Most insurers currently assume that CI product lapse and mortality will emerge in a manner consistent with their other health or life insurance product offerings. When LTC insurance was first sold, many companies made a similar assumption—that LTC lapse rates would be similar to individual major medical or life insurance lapse rates—and were unpleasantly surprised to find that LTC lapse rates were much lower than they expected, which in turn led to concerns about the adequacy of their LTC insurance premium rates. If CI is to avoid the same pitfall, CI pricing actuaries need to carefully test the impact of both high and low lapse and mortality decrement rates on their ultimate premium rate levels. Specific margin for adverse experience is desirable.



An advantage of selling in fixed cost distribution channels, such as direct or employer group marketing, is that the concerns about the impact of low decrement rates on profitability are less applicable, or applicable only within certain threshold tolerances. This is because the present value of marketing costs as a percent of the present value of premium may decrease more than the lifetime loss ratio increases when decrement rates decrease. For example, for direct-marketed CI, if the early duration lapse rates decrease from the 30% to 40% range to the 20% to 30% range, overall returns will increase dramatically. Similarly, if the product experiences 5% or 10% level lapse rates, returns would also be much higher, but the level 5% lapse rate financials may not be as favorable as the level 10% lapse financials. This is because the increase in the lifetime loss ratio resulting when lapses decrease beyond a certain point (say from 10% to 5%) outweighs the benefit of the further reduction in marketing cost.



A related issue to product line persistency is the assumed excess earnings rate on reserves. The higher the reserves get, the more dramatic an effect this assumption has on profitability. One percentage point change in the overall earnings rate (i.e. from 6% to 7%) can change lifetime GAAP ROE or Statutory ROI by 1% to 5% depending on the persistency of the business and the morbidity margins built into the reserves. The pricing actuary may want to test the impact of various combinations of interest earnings rates and product persistency assumptions on profitability before settling on final assumptions for either.

Finally, pricing expense factors must be developed for the line. CI insurance is not a particularly labor intensive product to administer, so estimating policy maintenance expenses should be fairly straightforward for the pricing actuary. Claims adjudication expenses as a percent of claims should be low since the CI benefit is a large, single payment. Some minor adjustments may need to be made in the insurer's administrative system to handle CI, but these modifications will probably not be extensive. Perhaps the most significant additional expenses an insurer will incur to develop, market and administer CI will be in the area of compliance. As mentioned earlier, regulators viewed some of the early generation CI-type policies unfavorably due to the limited benefits and poor overall consumer value proposition they offered. Because of this past experience, insurers may need to put a bit more effort into the CI policy form and rate-filing approval process than they are used to for other products. Insurers should also expect to encounter state variations in terms of permissible coverage features (for example, some states do not allow cancer coverage) and