
Disability Income Insurance: The Private Market and the Impact of Genetic Testing

David J. Christianson

This article discusses the disability insurance industry in order to provide context regarding the potential impact of genetic testing on disability insurance. It describes disability income insurance, exploring both the protection it offers and its main contract provisions. It goes on to describe the private insurance market and the differences between group and individual insurance, and concludes with implications of genetic testing with respect to the private disability insurance market. The individual disability income insurance market is theoretically of great interest as a matter of public policy since there is potential for unfair discrimination through genetic testing although this remains very unlikely as a matter of practice, however.

It is more likely that a person will become disabled than die before age 65. The loss of income during a disability can be quite devastating. In contrast to the high risk and high impact of disability are the realities of the disability market. Group coverage, where the impact of genetic testing is slight since individual underwriting is not involved, dominates the disability insurance market, while individual insurance covers only a relatively small number of lives. For these reasons, practical insurance concerns are much reduced. Moreover, the number of companies selling individual insurance is shrinking, and their financial results have been weak, leaving them in a poor position to absorb increased risk should they be asked to ignore genetically evident health conditions.

Insurance and Insurable Events

Insurance provides financial protection against loss or harm. Companies provide such financial protection from losses due to fire, theft, illness, accident, and death. The Principles of Actuarial Science, adopted in

1991, set forth five conditions that must be met for an event to be insurable.

1. It is associated with a phenomenon that is expected to show statistical regularity;
2. it is contingent with respect to number of occurrences, timing and/or severity;
3. the fact of its occurrence is definitely determinable;
4. its occurrence results in undesirable economic consequences for one or more persons;
5. its future occurrence, timing, and severity are neither precisely known nor controllable by these persons.¹

What Is Disability Income Insurance?

Private disability income insurance protects against loss of income due to sickness or injury that prevents the insured from working. The term “disability” is defined in the insurance contract and carries a more narrow and specific meaning than the term does in common usage. The contractual definition usually contains wording such as “the inability, due to illness or injury, to perform the important tasks of your regular occupation.” Alternatively, the definition may require that the insured is unable to perform the important tasks of any occupation for which they are reasonably suited by education or training. Other more rarely used definitions may specify “any occupation.”

Within the contract, provisions define the conditions under which benefits are payable. In most, if not

David J. Christianson is Director, Inforce Product Management, at Thrivent Financial for Lutherans. He is also a member of the American Academy of Actuaries and the Society of Actuaries.

all contracts, payment is made to compensate for a complete inability to work. Many contracts also pay for partial or residual disability after a period of complete disability. Although definitions vary between contracts, partial disability payments are usually made when the insured can perform some but not all of the important job tasks or cannot work for a full day, while residual payments are related to the percentage loss of income suffered. These provisions add to the marketability of a contract while also motivating the insured to return to work, since payments are sometimes limited in amount and duration.

The elimination period is the period of time during which the disability must persist before benefits become payable. Typical elimination periods are 30, 60, 90, 180, and 365 days. This period may be thought of as a coinsurance provision. The longer the elimination period, the lower the risk and the administrative cost for the insurer, and thus the premium for coverage is reduced. Often, sickness benefits or short-term coverage at the place of employment as well as the insured's savings bridge the time until insurance benefits become payable. The financial hardship of supporting oneself during this time also helps ensure that the inability to work is real.

In some contracts, there is an offset for Workers' Compensation or Social Security Disability Insurance (SSDI). In others, the benefit amount issued is limited to adjust for such anticipated payments in the event of disability.

The Public Disability Insurance Market

Public insurance for disability consisting of Workers' Compensation and SSDI is not described in this paper, but does provide substantial disability benefits. In 2002, SSDI paid \$65.6 billion to 7.2 million disabled workers and dependents, with over 91 percent of the benefits going to disabled workers.² In 1999, approximately 124 million workers were covered by Workers' Compensation plans, and the \$43.4 billion of benefits, consisting of \$18 billion for medical and hospitalization expenses and \$25.3 billion for compensation payments, were paid.³

The Private Disability Insurance Market

The next largest form of disability insurance coverage, by number of lives, is group insurance. Most commonly, group insurance covers a company's employees or union members. Many associations such as professional, fraternal, or civic groups buy association or franchise coverage, which is similar to group insurance. Business partners often buy "quasi-group" coverage which includes aspects of group coverage but has some limited underwriting and the issuance of

individual contracts.⁴ Voluntary group business coverage is small but growing; it is not employer-paid, and employee participation is voluntary. Voluntary group coverage participation rates are lower; hence, some form of medical underwriting may be used. For example, a base amount of group coverage could be offered to all employees with an additional (voluntary) amount of coverage that individuals may purchase (also called buy-ups).

Group disability insurance comes in two forms: short-term disability (STD) and long term disability (LTD).⁵ Short-term disability plans provide benefits for 13, 26, or 52 weeks.⁶ Short elimination periods of 0, 7, 15, or 30 days are most common. Usually an "own occupation" clause is used. STD protects the insured against temporarily being unable to work and presumes that the insured will recover and return to work.

Not everyone can return to work within a short period of time. With long-term disabilities, the economic effect can be profound. LTD protects against that risk. The expectation in LTD is that sick leave, savings, and other means can get a person through a short-term disability. LTD benefits usually extend to age 65, or normal retirement age, although two- and five-year benefit periods are also written.⁷ Elimination periods for LTD are typically 30 days, but may go up to three months or even a year. Often an "own occupation" definition is used for the first two years of LTD policies and "any reasonable occupation" definition thereafter.⁸

Individual underwriting is not done with group disability income insurance. Prior claim experience of the group, a profile of the workforce demographics, and the general risk characteristics of the particular work performed enter into the risk analysis and premium setting. However, nowhere does the individual's health or genetic makeup become an underwriting consideration. To be covered, an individual must be employed and actively working. Hence, people currently disabled are, in effect, screened out when new coverage is underwritten. The bottom line is that in group disability insurance, there is little risk of discrimination by an insurer against an individual who has a disabling genetic predisposition but is not currently disabled. There are some limited exceptions where individual underwriting is done, occurring to varying degrees for buy-ups, late enrollment by individuals, and when very small groups (generally under ten people) are insured. These exceptions are not discussed further here; underwriting principles of individual disability insurance will apply to some degree.

Unlike in major medical insurance, when an individual leaves employment and their group disability

ity coverage ceases, there is no COBRA coverage for disability insurance. This means that unless an individual applies for and is issued individual coverage, or begins working for a new employer who offers group disability insurance, they will not have disability insurance. Even after obtaining new coverage, he or she may still be subject to a new pre-existing conditions clause. On the other hand, if that person is not employed, there is no financial loss to be insured against. Making some individual insurance available upon leaving a group may be worth some consideration.

Individual Disability Insurance

Individual Disability Insurance (IDI) comes in a variety of forms. The most common coverage is disability income insurance, a contract covering a single individual for the loss of income.

IDI premium guarantees come in two forms. The most common is non-cancelable coverage where the insurer can never raise premiums – at least not until a certain age, typically age 65.⁹ Less common is guaranteed renewable coverage. Here the premium level is not guaranteed, but the coverage still cannot be cancelled. Once a person is initially underwritten and placed in a premium class, coverage continues as long as premiums are paid in a timely manner, and no changes in premiums may be made based on an individual's changed health status or claims experience. Premium changes may be made for an entire premium class only.

The individual coverage market includes employees with no or limited group coverage, self-employed persons, professionals, and business partners. As a percentage of people covered by individual disability income insurance, highly paid professionals make up the largest group. This was not always the case.

The blue collar and middle-income markets represented a majority of the IDI market during the 1950's and 1960's. However, with the advent of government disability plans such as the U.S. Social Disability Program in 1965 and several state cash sickness plans, government was satisfying a significant portion of the need for disability insurance among the blue collar and middle income occupations.¹⁰

Comparisons between Group and Individual Disability Income Insurance

Contracts

A group insurance contract is between the insurer and the group contract holder, typically an employer. The covered individuals (typically employees) receive a

certificate of coverage. An individual insurance contract is between the insurer and the individual.

Payor

Group insurance requires either the employer, the employee, or both to pay. Generally, the employer pays all or a portion of the premium, thereby encouraging broad participation, a very important aspect of group insurance. For individual insurance, the individual is the sole payor, except in circumstances where the coverage is issued as part of an employer-provided plan or benefit.

Underwriting, Risk Classification, and Adverse Selection

"The process of determining what rates to charge people with different risk characteristics (or whether to deny coverage entirely to some people) is *underwriting*."¹¹ There are two steps to underwriting. The first is risk selection, where the insurer determines whether to offer or deny coverage to the applicant, and the second step is risk classification, where applicants are placed into groups of roughly equivalent levels of risk.

Risk classification is generally used to treat participants with similar risk characteristics in a consistent manner, to permit economic incentives to operate and thereby encourage widespread availability of coverage, and to protect the soundness of the system.¹²

In group insurance, where typically large percentages of substantial groups are insured, medical or financial underwriting is not done except where the number of lives covered in the group is very small, typically under ten.¹³

On the other hand, individual contracts are applied for at the discretion of the individual. In individual insurance, the applicant has discretion to choose the timing, amount (within some limits), and type of insurance, as well as contractual benefits for the insurance purchased. This flexibility allows the applicant to make decisions in one's own favor. Hence, in individual insurance, medical and financial underwriting is the rule, not the exception. Rather than decline coverage for a known medical risk or condition, insurers exercise a number of options. They may offer coverage with an exclusion for specific conditions, charge higher premiums for the coverage, issue the coverage with a longer elimination period or a shorter benefit period, or use some combination of the above.

None of these options applies to group coverage as it relates to specific individuals. However, the experience of the entire group is taken into account when group

contracts are issued or when rerates occur. It is not likely that a small number of at-risk individuals would have any significant effect on overall group premiums unless the group is very small.

Due to the individual discretion that occurs within individual insurance, adverse selection can occur. Adverse selection is “the financial advantage that applicants gain by making decisions based on risk characteristics known or suspected by them but unknown to the insurer.” Adverse selection is “not necessarily an intentional deception on the part of the consumer. It can also occur if the insurer fails to inquire about a health condition, is prohibited from doing so, or is limited in the degree to which that information can be reflected in the premium.”¹⁴

Claims

Accidents and sickness are the primary causes for disability claims. In addition, factors such as the overall status of the economy, including levels of unemployment and specific industry and individual job issues, also have an effect on claims. Since disability is based on the inability to work due to sickness or injury, the individual plays a role in the claims process. If jobs are unavailable or the insured is unwilling to work, this may affect the filing of a claim or the speed at which a claimant attempts to return to work.

Coordination of Benefits

Since group insurance is sold to employer groups and occupational risk coverage also is required and paid for by employers under state Workers’ Compensation plans, it is usually the case that there is an exclusion in insurance plans for occupationally related injuries; alternatively, coordination with Workers’ Compensation benefits may exist, which deduct Workers’ Compensation benefits from benefits otherwise payable under the group coverage.

In individual disability insurance, instead of direct coordination of benefits, public benefits are taken into account in reduced issue limits and sometimes by adding a social insurance rider to the contract that provides income if the individual does not qualify for social insurance benefits.

The same basic principles apply in both group and individual insurance. An appropriate amount of insurance should be provided, but receiving excess benefits should be avoided since this can lead to situations where the insured may earn a higher net pay when disabled than when working.

Benefits Payable

Under group insurance, benefits are most typically a percentage of employee earnings, and less com-

monly a flat dollar amount. Usually an upper limit on weekly benefits payable exists. Thus, group insurance is adjusted relative to each individual’s current earnings. The replacement ratio is the percentage of an employee’s gross earnings covered. Group plans seek to provide a gross income replacement ratio of 50 to 70 percent.¹⁵ For the employer-paid portion of disability insurance premiums, benefits are taxable, whereas when the insured pays the premium, as in individual insurance, the benefits are tax free.

Under individual contracts, the amount covered is set at issue, based on the current earnings of the applicant, and coverage is not adjusted downward if earnings decrease. If earnings increase, additional insurance may be purchased, but the applicant must be financially and medically underwritten at the time of the additional purchase. Often, contracts contain Future Purchase Option riders to guarantee medical insurability, but the applicant still must demonstrate that current earnings justify the increase. Since the 1980s, Cost of Living (COLA) riders have been available. These riders increase the benefit payments while an insured is on claim.

Termination of Coverage

In group insurance, an individual’s coverage is terminated when the employee is no longer employed by the company. The entire group contract may be discontinued by the employer, and the insurer may cancel the contract or adjust the premiums. In individual coverage, the contract stays in force as long as the contract holder continues to make timely payment of premiums.

Pre-Existing Conditions

Group insurance usually has a somewhat more restrictive pre-existing conditions clause than individual contracts. According to Charles Soule, “typical group disability contracts exclude or limit the payment of benefits for disabilities that occur during the first year of the contract if the insured had a definite history of impairment prior to the date of the policy.”¹⁶ This clause is sometimes eliminated when the new contract replaces existing coverage.

In contrast, individual insurance plans typically have a pre-existing conditions clause which “states that benefits are not payable for disabilities that manifest themselves prior to the issuance of the contract.”¹⁷ If the pre-existing condition is disclosed in the application or by the medical examination, the disability from that cause cannot be challenged.

Summary of Group vs. Individual Coverage

Except for buy-ups, late-enrollment by individuals and very small groups, group insurance plans do not

take individual medical history into account whereas individual contracts do. Individual coverage is assured to continue as long as premiums are paid, whereas under a group contract, an individual can lose his or her coverage through termination of employment or termination of the group contract.

Size of the Private Disability Market

In comparison to the size of the labor force, private disability insurance, particularly individual coverage, plays a minor role. Considering that some individuals may be covered by more than one group or individual plan, at most group contracts cover 30 percent of the labor force and individual contracts 3.3 percent of the labor force.

In contrast, SSDI and Workers' Compensation cover a much larger proportion of the labor force, though qualification for benefits may be more stringent and benefit payments more limited.¹⁸

Financial Health of the Individual Disability Market

Private disability insurance goes through cycles of profitability, often tied to the health of the general economy and employment rates. In addition, changes in new contract language spurred by competitive pressures and short term trends affect profitability. For example, Robert Beal writes,

From 1970 to 1975, industry financial losses emerged. These losses have been widely attributed to the recession of the mid-1970's and the acceleration of claims under U.S. Social Security Disability Program, which at that time was paying disability benefits at levels that produced significant over-insurance....¹⁹

This paper will not present an exhaustive analysis of the causes, but merely report on recent results and history.

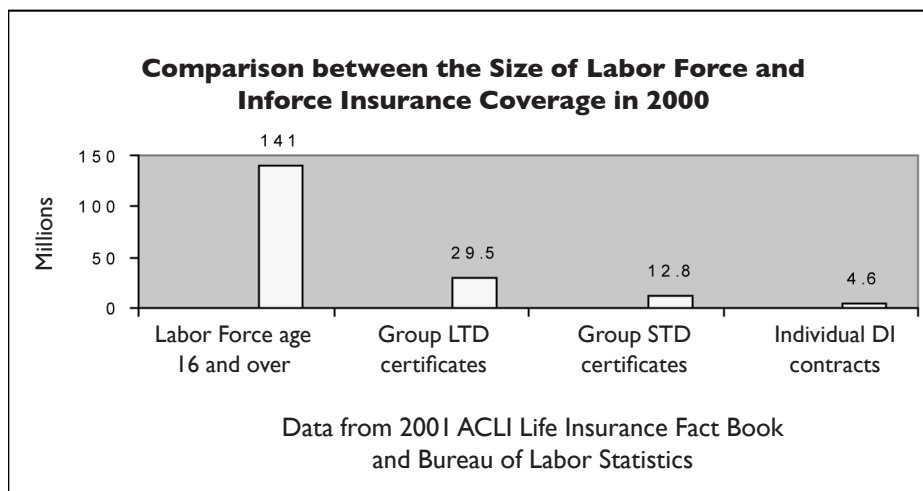
The number of individual disability companies continuing to manufacture their own products has steadily declined for many years. Sixteen companies, of which only nine still sell their own product, represent 94 percent of the inforce non-cancelable business. In a broader, more complete summary of 70 individual disability insurance companies writing new business in 1977, 45 left the market by 2001, and mergers further reduced the number of active companies. In addition, only two reinsurers actively assume new premium reinsurance business.²⁰

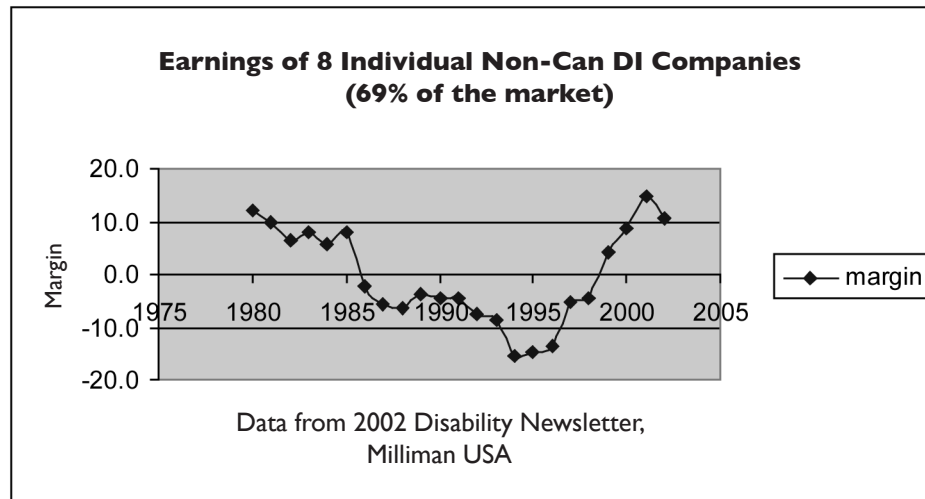
Regarding profitability, the eight largest companies have had volatile earnings margins before dividends and federal income tax from 1980 through 2002.

In summary, the industry has struggled with profitability and the number of companies still manufacturing and selling their own products has shrunk to a relative few.

General Conclusions Regarding Group Disability Insurance

Group disability insurance covers roughly ten times as many people as individual disability insurance. However, it still does not provide a broad floor of protection, since it covers only 30 percent of the labor force. There is no medical underwriting in group insurance except for very small groups, typically with under ten members, buy-ups, and late enrollment by individuals. A group's claims history is a factor as the group insurer determines the premiums to be charged. From an insurer's point of view, this entails trending forward past claims of the existing group. From an employer's point of view, this could theoretically entail consider-





ation of the effect certain employees or prospective employees could have on the future group experience and hence future claims. For an employee, having a group insurance certificate is no assurance that coverage will always be available. The contract is between the insurer and the employer, and either can terminate the coverage at any time. In addition, if the employee leaves the employer, coverage terminates.

General Conclusions Regarding Individual Disability Insurance

First and foremost, individual disability insurance does not provide protection for a significant proportion of the population. Less than four percent of the working population owns individual coverage. Moreover, ownership is skewed toward wealthier, professional workers, not the population first thought of as needing special protection.

Second, individual disability insurance is a contracting industry. Although industry leaders have seen a return to profitability from 1999-2003, the industry itself has gone through a long, difficult stretch. Underwriting restrictions, such as potential limits on the use of genetic test results, will likely lead to higher claims, and would have a deleterious effect on insurers. Premiums on new contracts would almost certainly rise to account for expected increased claims. This would likely, in turn, limit sales to those who have no apparent health concerns and would otherwise have sought coverage, but now would find it uneconomical. The net effect would be decreasing sales and profitability, as well as decreased access to disability insurance.

Third, for individual disability insurance, many factors go into underwriting, including medical, occupational, and financial factors. The whole process of underwriting allows the insurer to evaluate the risk and offer a long-term contract. Adverse selection is

reduced, and people are placed into risk classes so that an appropriate premium can be charged, and coverage restrictions can be made for already present conditions. This system is effective; the lowest possible premium can be charged and the insurer has the best chance for premiums to be adequate for the risks to be covered.

Fourth, individual contracts are long-term. As long as timely premium payments are made, the coverage cannot be terminated. Thus, the concern with individual disability insurance is availability of coverage, rather than the risk of having it cancelled, as with group plans.

Implications Regarding Genetic Testing in the Context of Disability Insurance

Genetic testing prompts potential concerns on a number of fronts. These include the following:

1. access to insurance
2. retaining insurance
3. medical underwriting
4. privacy of medical data
5. claims and affordability of insurance.

Access to Insurance

Only a small portion of the labor force currently owns and purchases IDI. These are mainly highly paid professionals. Thus, to infer that genetic testing may close a broad access point is to ignore the facts. Nevertheless, it is true that among current purchasers, the insurer's knowledge of genetic risks may restrict access for some. In group insurance, from an insurer's standpoint, access is not affected by knowledge of genetic test results, since medical underwriting is generally not a factor. Individual access may potentially be a factor with respect to an employer, but only in the hir-

ing process since an employer cannot choose who will and will not be offered coverage among its employee population.

Retaining Insurance

Individual insurance is not threatened by genetic testing after a policy has been issued since coverage cannot be terminated except for nonpayment of premiums. Loss of group insurance coverage is possible, but for reasons other than genetic testing. Exploring ways to guarantee access to new coverage when an employee changes jobs would be beneficial to employees who might otherwise not be able to obtain new insurance.

Medical Underwriting

Underwriting is used to determine the risk presented by each individual, and hence whether to offer coverage and at what price. Whether the risk is genetically based or otherwise, any additional risk may lead to additional claims. Ignoring genetic risk in these decisions while not ignoring other types of risk in others would raise questions of fairness. It would also create an incentive for some to buy at a reduced cost relative to others. This adverse selection in the long-run may reduce overall insurance access, as insurers respond to risk by raising premiums or leaving the market. As summarized above, medical underwriting only applies in individual insurance and very small insured groups, buy-ups, and late enrollment in group insurance.

Claims and Insurance Affordability

Genetic testing will not increase deaths or disabilities. However, it may provide increased knowledge of individuals' future disease or disabilities. Thus, if a person was already covered either in group or individual insurance (where the applicant did not know of the genetic condition prior to applying for coverage), then there will be no increase in claims. However, genetic information not shared by applicants creates the possibility of adverse selection, since coverage may be offered when it would have otherwise been denied, and applicants may seek a higher rate of coverage.

Withholding this information may lead to increased claims, increased rates for other insured individuals, and limited access to insurance for others.

Acknowledgement

This paper represents the author's own individual opinions. It does not represent the opinions of his company, the disability insurance community at large, the Society of Actuaries, the American Academy of Actuaries, the American Council of Life Insurers, America's Health Insurance Plans, or any other trade organization.

References

1. Society of Actuaries Committee on Actuarial Principles, "Principles of Actuarial Science," *Transactions of the Society of Actuaries* 44 (1992): at 574.
2. Social Security Annual Statistical Supplement to the Social Security Bulletin, *Beneficiary Statistics*, February 5, 2003, and Disability Insurance Benefit Payments, updated February 12, 2003, available at <http://www.ssa.gov/policy/data_alpha.html> (last visited April 19, 2007).
3. Social Security Administration, "Annual Statistical Supplement, 2001, to the Social Security Bulletin," at Table 9.B1, available at <<http://www.ssa.gov/policy/docs/stacomps/supplement/2001/supp01.pdf>> last visited April 19, 2007.
4. C. E. Soule, *Disability Income Insurance: The Unique Risk* (Bryn Mawr, PA: American College Publishing, 1994): at 216.
5. *Id.*, at 210.
6. *Id.*, at 213.
7. *Id.*, at 210.
8. *Id.*, at 214.
9. American Council of Life Insurers, *Life Insurers Fact Book 2001*, (Washington, D.C.: ACLI, 2001): at 137.
10. R. W. Beal, *Individual Disability Income Insurance in the United States* (Portland, ME: Milliman USA, 2002).
11. American Academy of Actuaries, *Issue Brief: Risk Classification in Voluntary Individual Disability Income and Long-Term Care Insurance*, Winter 2001, available at <http://www.actuary.org/pdf/health/issue_genetic_021601.pdf> (last visited February 15, 2007).
12. Actuarial Standard of Practice #12, adopted December 2005, available at <http://www.actuarialstandardsboard.org/pdf/asops/asop012_101.pdf> (last visited April 19, 2007).
13. See Soule, *supra* note 4, at 211.
14. See American Academy of Actuaries, *supra* note 11.
15. See Soule, *supra* note 4, at 215.
16. *Id.*, at 213.
17. *Id.*, at 57.
18. See *Life Insurance Fact Book 2001*, *supra* note 9, at 137; Bureau of Labor Statistics, data available at <<http://www.bls.gov/bls/newsrels.htm>> (last visited February 15, 2007).
19. See Beal, *supra* note 10, at 6.
20. *Id.*, at 25, 27.