

# Life, Health, and Disability Insurance: Understanding the Relationships

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This project focuses on the extent to which disability insurers should be allowed to use genetic information in underwriting and rate-setting, but this subject cannot be completely isolated from the related questions of whether life and health insurers should also have this discretion. Federal and state laws place significant restrictions on insurers' use of genetic information in health insurance, but regulation of such use in life and disability insurance is considerably more modest. This essay examines the reasons for this disparity and discusses the implications for future proposals to regulate disability insurers' use of genetic information in underwriting and rate-setting. The thesis is relatively simple: Communitarian values are stronger in health insurance than in life and disability insurance. Accordingly, the public is likely to acquiesce to insurers' insistence that they be allowed to make distinctions among insureds in disability insurance (and life insurance) that would not be tolerated in health insurance. The pattern of existing regulation with respect to genetic information bears this out, and the odds that this pattern will change in the future are low.

## I. The Risks Covered

Although many points of reference exist for comparing life, disability, and health insurance, the differences among the products with regard to risks covered is an obvious starting place. Life, health, and disability insurance are all examples of personal insurance and are to be distinguished from property insurance and liability insurance, the other major insurance cat-

egories. But life, disability, and health insurance each protect against different kinds of losses. Life insurance is designed to protect the insured's beneficiaries against the economic loss associated with the insured's premature death. At its core, life insurance covers the economic value of a human life, which is a function of the insured's earning capacity and the financial dependence of other persons on that capacity. Usually, we imagine the dependent interests to be immediate family or household members, such as the surviving spouse or partner or the insured's children. But business interests also have economic stakes in the continued existence of some lives, and protecting these interests is an extremely important purpose of many life insurance contracts.

One aspect of life insurance that distinguishes it from other products is that it can be structured as an investment vehicle. For example, life insurance can be used to create and fund a charitable gift.<sup>1</sup> This kind of use is very different from protecting against the risk that a dependent will suffer economic losses, and it is not something one can do with disability or health insurance. Similarly, one can use life insurance to make an end-of-life gift to a dependent that exceeds the dependent's reliance on the insured's earning capacity. In other words, it is possible to insure one's life for more than its economic value measured in terms of the insured's earning capacity, thereby facilitating the creation of an estate that is given to a child, partner, or spouse (or some other person) upon the insured's death. A person has an unlimited insurable interest in her own life, which means that she can lawfully insure her own life for an unlimited amount. As a general matter, insurers are unwilling to sell coverage grossly disproportionate to the insured's earning potential, as this creates an unacceptable amount of moral haz-

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ard (i.e., an unacceptable risk that the insured will self-destruct in order to make the large gift to a beneficiary) or signals the operation of adverse selection (i.e., the insured applies for large amounts of coverage because she knows premature death is probable and either hopes that the insurer will not discover a misrepresentation or undisclosed fact in the application process or that the insured will survive the policy's contestability period). But insurers tolerate mismatches between underwritten amounts and earning power, which allows for life insurance to be used for purposes other than indemnifying loss. In contrast, disability and health insurance indemnify loss and have no collateral investment function.

The purpose of health insurance is to cover the costs of hospitalization or medical care resulting from illness or accident. Unlike the economic value of a life or a person's earning capacity, hospital and medical expenses are finite and easily measurable. Health insurance, at least as it originated as a commercial insurance product (most modern health insurance functions very differently, as explained below), indemnifies the insured against these losses by reimbursing the insured's out-of-pocket expenses. In contrast, life insurance makes no effort to match proceeds paid with actual losses.

There is, however, a more fundamental difference between health insurance, on the one hand, and life and disability insurance, on the other. The root of this distinction springs from how health insurance originated in the United States. Until 1930, most health care was handled on a fee-for-service basis. One consequence of the Great Depression was that many middle-income citizens found themselves unable to pay for health care out of personal funds. When the public stopped using hospital and physician services (or stopped paying for the services they did use), many hospitals and physicians were threatened with insolvency. In direct response to these economic conditions, health care providers organized the first important health insurance plans. These were prepayment plans (the hospital plan, which was created first, became known as "Blue Cross," and the physician plan became known as "Blue Shield") where for a small premium the consumer became entitled to the receipt of services (up to a stated limit) in the event of sickness or injury. Whether the principal purpose of these contracts was to transfer and distribute risk (the function of an insurance contract) or to pre-purchase services on a contingency (the function of a fixed-price requirements contract) was not obvious, and the argument that these arrangements did not constitute insurance prevailed in some early cases.<sup>2</sup> With the rapid growth of managed care since the 1970s, most modern health

insurance arrangements now resemble these early prepayment plans more than the traditional indemnity arrangements that would emerge later. As a result, what is commonly called "health insurance" – and is more accurately labeled a "health care plan" – involves paying a fixed price<sup>3</sup> in advance for all the services one requires during a defined time frame. This is not the "business of insurance" under the standard definitions, even if some elements of risk transference and distribution are embedded in the contract.<sup>4</sup> Life and disability insurance have no element of prepayment for the delivery of services; thus, these products are fundamentally different from what is commonly called "health insurance."

Another fundamental feature of insurance is that it pays for unforeseen, accidental, and usually large fortuitous losses that individuals cannot absorb with their own resources. Health plans are now expected to pay for routine, small expenses that are foreseeable and for which the non-poor can easily pay out of existing assets. These include, for example, physical examinations (which are not fortuitous losses), physician visits for minor ailments, routine prescriptions, and so on. This underscores the observation that 21st century health insurance is largely prepayment of expected medical services, as opposed to the insuring of unexpected, fortuitous losses. In contrast, both life insurance and disability insurance are designed to compensate for large, unexpected (at least in the sense that the timing of death, which itself will occur, is uncertain) fortuitous losses.

Disability insurance is similar to health insurance in that the same perils – illness or accident – are covered, but the two products cover different manifestations of those perils. Whereas health insurance compensates for the out-of-pocket expenses associated with hospital or medical services, disability insurance compensates for the insured's loss of income due to illness or accident. Life insurance is related to disability insurance in the sense that death is the most severe of all disabilities, but in life insurance, unlike disability insurance, the principle of indemnity is weak. In disability insurance, insurers contract to pay less than a person's lost income, which helps ensure that the principle of indemnity is not violated (i.e., the proceeds paid by the insurer may not exceed the insured's loss). Many other provisions in disability insurance contracts can be explained as insurers' efforts to ensure that they do not pay proceeds for undeserving claims.

## II. Private Industry versus Government as Provider of Last Resort

There are, of course, private markets in which life, disability, and health insurance products are sold. In one

part of the market, the coverage is sold by insurers to consumers on an individual basis; in the other, it is sold to group representatives, usually employers, for the benefit of members of the group, usually employees. The extent of private ownership is one measure of insurers' success in marketing its product and the strength of consumer demand for it. It sheds light on how valuable the product is to the public, but it can also illuminate barriers that insurers face in bringing the product to the market.

With respect to each of these products, a public version of the coverage also exists in which the government plays a role as either the "facilitator" of the product (meaning that the government compels employers to provide coverage or pay the employee's cost of participating in a program) or as the provider of the product, essentially underwriting the coverage and serving as the insurer of last resort. The extent of the public version of the coverage is important for two reasons. It provides some measure of the extent to which the public is unwilling to tolerate gaps in access or availability left by the operation of supply and demand in private markets. Also, to the extent the government deploys its resources to fill these gaps, a statement is made about how the public perceives the social welfare importance of the insurance coverage and the extent to which the public will insist upon government intervention to ensure that appropriate minimum coverage is provided. As the following discussion shows, the strength of the public commitment to minimum coverage varies in health, life, and disability insurance.

#### *A. Health Insurance*

In the United States, it is assumed that everyone obtains health insurance coverage – which is for most people the ticket to health care services of any kind or quality – through one of four options: employer-provided insurance (group insurance or employer-provided self-insurance); Medicare for the aged and some persons under age 65 (including some disabled persons); Medicaid for the indigent; and individual insurance for everyone else. This approach to health care access is, however, imperfect. In 2004, 68 percent of the U.S. population had private insurance (88 percent of which was provided on a group basis).<sup>5</sup> Almost 100 percent of the 39.7 million persons over age 65 or disabled (or both) received coverage through the Medicare program.<sup>6</sup> In 2004, approximately 37.5 million indigent persons, including many aged, blind, and disabled persons as well as poor mothers and children, received some coverage through the Medicaid program.<sup>7</sup> When private and government insurance programs are combined, approximately 84.3 percent of the U.S. population in 2004 had some form of private

or government health insurance. This leaves, however, approximately 45.8 million persons – or 15.7 percent of the entire population – without any health insurance coverage.<sup>8</sup> As large as these numbers are, they disguise the fact that nearly one-third of the U.S. population under age 65 lacks health insurance at some point during any given year.<sup>9</sup>

Even with these major gaps, the government presence in the health care system as a provider of insurance or direct payer of health care services is massive. In 2003, federal and state government health expenditures for health care exceeded \$766 billion, which is 45.7 percent of total public and private expenditures.<sup>10</sup> This figure represented seven percent of gross domestic product in 2000.<sup>11</sup> Medicare alone financed 17.5 percent of all health care spending in 2003,<sup>12</sup> whereby most of the funding for this program comes from federal tax revenues.<sup>13</sup> The Medicaid program, which along with some other public assistance programs financed 16.7 percent of all health care spending in 2003,<sup>14</sup> is funded almost exclusively through federal and state tax revenues.

Where the federal or state government does not invest resources directly, Congress and state legislatures channel the spending of private resources toward these public objectives. Federal laws such as COBRA,<sup>15</sup> HIPAA,<sup>16</sup> the Pregnancy Discrimination Act,<sup>17</sup> the Newborns and Mothers Health Protection Act,<sup>18</sup> the Mental Health Parity Act,<sup>19</sup> and the Women's Health and Cancer Rights Act,<sup>20</sup> not to mention hundreds of mandated benefits law at the state level, have a net collective impact of expanding the coverage that would otherwise be provided in an unregulated private market. When these regulations are combined with the various programs that provide access to categories of persons (including the elderly, the poor, and children), it is fair to assert that the U.S. health care system is now in the midst of a slow, incremental march toward universal access.<sup>21</sup>

In life insurance and disability insurance, there is nothing remotely comparable to the regulatory management and the public financial investment that exists in health insurance. Indeed, dating back to the Truman administration, presidents have periodically put the health care access issue on center stage in the national political discussion. There has never been a similar national discussion or similar expressions of national concern over access to either life or disability insurance. In essence, health insurance is more important. This is not surprising, given that the public's health – and thus the insurance that provides access to the health care that sustains it – is fundamental in that each individual's ability to function as a member of society, including the ability to earn income and

Table 1

**Survivors' Annual Benefit Payments in 2006 for Survivor of Worker with Death at Age 40, in current dollars, using SSA default assumptions as to deceased's prior earnings history\***

Salary on death date	20,000	40,000	60,000	80,000	100,000	200,000
Child	7,464	11,376	15,300	17,160	18,960	19,824
Spouse caring for child	7,464	11,376	15,300	17,160	18,960	19,824
Spouse only	9,948	15,168	20,400	22,854	25,284	26,424
Family maximum	14,953	28,398	35,711	40,062	44,264	46,272

\*Note: These amounts assume the dependent's eligibility. For example, the spouse is not eligible to receive these benefits until he or she reaches age 60 unless the spouse is disabled or is caring for a dependent child; also, the amounts in the table will be reduced if the spouse elects to begin the payments before reaching his or her full retirement age. These figures are derived from calculators available on the Social Security Administration Web site, <http://www.ssa.gov>.

meet other needs, depends on it. The loss of life or the advent of disability can have extremely harsh consequences, but health and access to health care services rest on an even higher plane.

### *B. Life Insurance*

Private ownership of life insurance in the United States is substantial. Over two-thirds of all families in the U. S. own some kind of life insurance.<sup>22</sup> In 2005, individual life insurance accounted for 54 percent of all life insurance in force in the United States, and the average new policy had a face value of \$158,000.<sup>23</sup> Group insurance accounted for the remaining 45 percent (with credit life insurance constituting the final one percent).<sup>24</sup> In 2000, the average amount of life insurance coverage per insured household was \$196,200, a figure equal to approximately 35 months of disposable personal income for the average household.<sup>25</sup> In 2005, waiver of premium provisions, a limited form of disability insurance that removes the insured's obligation to pay premiums in the event of disability, existed in 25 percent of individual life insurance and 23.8 percent of group policies in force.<sup>26</sup> At the end of 2005, total life insurance in force in the United States reached \$18.4 trillion.<sup>27</sup>

There is a program of public life insurance embedded in the Social Security system. Because Social Security is synonymous with retirement benefits in the national vocabulary, the life insurance component of the Social Security program is commonly overlooked. The survivors' benefits program under the Social Security system provides an annuity for survivors of a person who participated in the Social Security system. The private analogue for this coverage is a life insurance policy

that pays the face value of the proceeds at death but gives the beneficiary the option of accepting a settlement in the form of some kind of annuity.<sup>28</sup>

For a person to be eligible for a survivor's benefit in the Social Security system, the person must be either a surviving spouse of the deceased worker, an unmarried child of the deceased worker under age 18 (or up to age 19 if he or she is attending high school full-time), a child of any age of the worker who was disabled before age 22 and remains disabled, or a dependent parent of the deceased worker age 62 or older.<sup>29</sup> Moreover, the deceased worker must have been qualified for Social Security benefits. Ten years (or "40 quarters") of work qualifies a person's dependents for survivor's benefits, but in some cases fewer years (or "quarters") can make dependents eligible. For example, the requirement is reduced for workers who die at a young age; if the surviving spouse is the caregiver for dependent children, that person can obtain benefits if the worker has six credits (or 1.5 years) of work. The benefits paid to survivors depend on the survivors' status, the age of the worker upon death, and the worker's earnings history. Table 1 lists the annual payments made to the surviving dependents of a worker who died at age 40 while earning various annual salaries at death ranging from \$20,000 to \$200,000.<sup>30</sup>

As Table 1 shows, for a surviving spouse or any other dependent, the annual payment is modest. These payments are in the vicinity of current poverty line definitions.<sup>31</sup> Although the dollar amounts rise as the worker's salary at death increases, payments as a percentage of the deceased worker's final salary decline steeply. The family maximum caps total payments to one family, causing the per-child payment when a surviving par-

ent has a second child to decline by about half, with no payment increase being made for the third child and every child thereafter. Payments also decline in every dependent category as the age of the deceased worker increases. Table 2 illustrates this using a dependent child as an example.

Although the survivors' benefits payable under Social Security are not inconsequential, the amounts fall well short of the sums needed to provide a subsistence existence. Yet when discounted, the present values of the annuities are not insubstantial; indeed, they exceed the face value of the average individual life insurance policy purchased in the United States. For example, if a worker dies at age 60, has a surviving spouse also age 60, had \$40,000 in earnings in the year of death, and had a prior earnings history equal to the default assumptions used by the SSA, the surviving spouse's monthly benefit under the current program would be \$1,121. If, however, the survivor elects to take the benefit before reaching full retirement age, the benefit would need to be reduced accordingly. In this instance, if the survivor elects to take the benefit at age 60, the reduction is 28.5 percent, producing a monthly benefit of \$802. Persons who reach age 60 are currently predicted to have average remaining life spans of 22.0 years. The present value of the annuity for a person having a remaining life span of 22.0 years, assuming a discount rate of five percent, is \$128,802.<sup>32</sup> This figure is a rough approximation of the annuity purchased in the private market that would be needed to produce the same earnings stream<sup>33</sup> and should bear some relationship to the face value of a life insurance policy that would be fully paid up at age 60 with an annuity settlement option.<sup>34</sup>

This figure, however, does not represent the "public" contribution to the survivor's payments, given that the worker contributed a percentage of his or her earnings to the Social Security trust fund annually and the employer matched this contribution. When the future value of these contributions is calculated for a worker who dies at age 60 with the same default earnings assumptions and assuming a rate of return on contributions of five percent, the future value is \$158,454,<sup>35</sup> a sum well in excess of the present value of the annuity to be paid beginning at age 60. Moreover, the excess rises as earnings of the deceased worker increase. For example, if the earnings at death of this 60-year-old worker were \$100,000, the monthly payment for the surviving spouse, using the same assumptions (including the discount rate of five percent), would be \$1,288 per month, which equates to a present value of \$204,758. But the future value of the deceased worker's contributions, using the same assumptions, is \$378,612, implying that the cross-subsidy provided by this employee to the benefits of other workers and their spouses exceeds \$170,000.

Of course, the foregoing examples oversimplify the premises on which the Social Security survivors' program is based.<sup>36</sup> But the examples do illustrate a basic point. The life insurance coverage program in the Social Security program receives no public subsidy, but is instead fully funded, at least presently, by employee and matching employer contributions. Thus, instead of reflecting a consensus that the coverage is so important that public resources should be invested in it, the life insurance component of Social Security simply reflects a consensus that a mandatory life insurance (and retirement benefit) program should be imposed on all workers in the nation, with the costs of the cov-

Table 2

**Surviving Child's Annual Benefit Payments in 2006 at Various Salaries and Death Ages for Deceased Worker-Parent, in current dollars (assuming child is otherwise eligible for benefits and using SSA default assumptions as to deceased's prior earnings history)\***

Salary on death date	20,000	40,000	60,000	80,000	100,000	200,000
Worker dies at age 30	7,848	12,144	15,864	17,880	19,740	20,172
Worker dies at age 40	7,464	11,376	15,300	17,160	18,960	19,824
Worker dies at age 50	7,116	10,692	14,268	16,524	18,180	19,608
Worker dies at age 60	6,804	10,092	13,356	15,948	17,412	18,960

\*These figures are derived from calculators available on the Social Security Administration Web site, [www.ssa.gov](http://www.ssa.gov).

erage to be borne entirely by all workers. Accounts are not individually owned; thus, wealth redistribution among workers is a feature of the program. Higher-income workers subsidize lower-income workers, and workers without dependents subsidize workers with dependents. Viewed as a whole, the Social Security survivors' benefit is not an insignificant mandate, but it is less aggressive than the public response to health insurance, where hundreds of billions of dollars of general revenues are spent annually on health care access.

There are other limitations on the survivors' benefit under Social Security that counter the suggestion that the program reflects a strong public commitment to making life insurance widely available and accessible. No benefits are paid for spouses who are under age 60 (unless the spouse is disabled, in which case the benefits can begin at age 50), unless the spouse is caring for a dependent child under age 16. If the surviving spouse elects to take the benefits for her full retirement age, the monthly payments are reduced. If the surviving spouse is eligible for retirement benefits because of her own earnings history, the survivor's benefit is reduced. If the surviving spouse remarries before age 60, the benefits are unavailable; and if the surviving spouse works, the benefits may be reduced. These kinds of limitations on a beneficiary's recovery are utterly foreign to life insurance purchased in the private market, which severely undercuts the suggestion that the survivors' benefit reflects a strong public commitment to widespread availability of life insurance.

Social Security is not the only source of life insurance benefits in the public market. If the death is workplace related, some limited benefits will be provided under the auspices of the state Workers' Compensation system, which essentially mandates a range of insurance protections for workers. If the death occurs in an automobile accident, in 10 to 12 states the mandatory first-party coverage of an automobile insurance policy will provide some minimum benefits to the deceased's family. Like the survivors' benefit in Social Security, these are essentially government-mandated life insurance protections that are privately financed. The benefits are limited,<sup>37</sup> and thus cannot be offered as evidence of a strong public commitment to widespread access to and availability of life insurance.

In short, unlike health insurance, for which strong public sentiment, and arguably a consensus, exists that health insurance should be universally available or nearly so, there is no similar sentiment with respect to life insurance. Notwithstanding the presence of life insurance coverage in the Social Security system and a few other areas, life insurance is, and is likely

to remain for the foreseeable future, a discretionary purchase viewed as desirable, but not so necessary that its purchase should be compulsory or its availability underwritten through the expenditure of public resources.

### *C. Disability Insurance*

When compared to health and life insurance, the penetration of disability insurance in the private market is even less significant. In 2006, only 39 percent of the work force had private short-term disability insurance, and only 30 percent had private long-term disability insurance.<sup>38</sup> The gap between employers offering health insurance and offering disability insurance is dramatic; studies in the late 1990s found that 76 percent offer health insurance as a fringe benefit, but only 43 percent offer long-term disability insurance.<sup>39</sup> Among small firms, 64 percent provide health insurance, but only 22 percent provide long-term disability insurance.<sup>40</sup>

Why is the private disability insurance market so limited? The lower-income disability market essentially disappeared when disability protection was extended to Social Security participants in the late 1950s.<sup>41</sup> Disability insurance has become a highly specialized market where only a few insurers sell the product, and fewer still do so on an individual basis; profitability is elusive.<sup>42</sup> Also, the concept of "disability" is more abstract than damage to property or a loss of life. More room for debate exists with regard to whether a claimant is actually disabled on a given set of facts, which increases claims processing costs and drives up the cost of coverage. To the extent this encourages some insureds to claim benefits in doubtful situations, the average cost of the coverage increases, reducing demand. In addition, potential policyholders seem to underestimate the risk of becoming disabled, which tends to suppress demand for the product. All of these factors combined constrain consumers' purchase of the coverage. This has led some commentators to observe that Americans are less insured for disability than for any other risk. As one observer put it, "[m]ost American workers (particularly professionals) are better prepared to die than they are to become disabled for an extended period of time. This is disturbing because there is a greater likelihood that an individual will become disabled for a substantial period of time (more than 90 days) during his working years (particularly the younger years) than there is that he will die during those years."<sup>43</sup>

There are also barriers to expansion of the existing market for disability insurance. First, the threat of adverse selection constrains insurers' interest in expanding their disability insurance offerings. Most applicants are seeking the coverage for the first time,

and a disproportionate number consider themselves to have some risk factor that increases their need for the coverage. This raises insurers' average costs and, inevitably, the premiums charged for policyholders. Higher prices, of course, reduce demand, except among those who consider themselves to have a special need for the coverage. Those who are not deterred from acquiring the coverage will purchase less because of the higher prices.<sup>44</sup> Adverse selection concerns are less acute with group insurance, but the problem does not vanish, particularly with respect to smaller groups, which have less capacity to spread risks.

Moral hazard also limits the supply of disability coverage. As Abraham and Liebman observe, moral hazard is present both *ex ante* (a disability insured is more likely to become disabled than an uninsured person) and *ex poste* (the disability insured will recover from a disability more slowly and is more likely to never recover).<sup>45</sup> Insurers try to respond to moral hazard through incentives to remain healthy and recover quickly (such as writing the coverage for no more than 60 percent of after-tax income and reducing benefits by the amounts recovered from Social Security disability and Workers' Compensation programs), but the response cannot be perfect, which leaves a significant measure of moral hazard as a barrier to expansion of the market.<sup>46</sup>

There is a public version of disability insurance provided through the Social Security system that is designed to provide benefits for workers who become disabled before they reach retirement age. The benefit is important, but it is not robust. Total disability insurance benefits paid under the program in 2004 were \$5.94 billion.<sup>47</sup> Before receiving benefits, a worker must satisfy the eligibility limitations. Although not particularly difficult to meet, the typical worker must be employed for ten years before becoming eligible for the benefits. A worker earns up to four credits per year and needs 40 for eligibility; also, 20 of the credits must

have been earned in the 10 years prior to the disability's onset, although younger workers may qualify with fewer credits.<sup>48</sup> The disability must be one that is severe enough to prevent the worker from being employed for at least a year, and the definition of disability is strict: If the worker can adjust to other work while having the medical condition, then the worker is not considered disabled. The benefits paid depend on one's prior earning history and the age at which the worker became disabled, as Table 3 illustrates.

Qualified children may also receive a monthly payment of up to one-half of the worker's disability amount, and there are also benefits for spouses and divorced spouses. Family maximums also exist, and these are in the range of 150 to 180 percent of the worker's benefit. As Table 3 shows, disability benefits under the Social Security program are thin. Without other savings, insurance, or investments, a worker and his or her family would have severe difficulty subsisting on these payments. In addition, as the discussion with respect to survivors' benefits above indicates, there is no public contribution to this program out of general revenues; the program is fully funded by employee and matching employer contributions.

One program that, among other things, provides disability coverage is the Social Security Income Program (SSI), which is administered by the Social Security Administration but is funded with general tax revenues. This program provides assistance for elderly, blind, and disabled persons, providing cash to meet basic needs for food, clothing, and shelter.<sup>49</sup> But SSI is very limited due to strict eligibility requirements, and even if one is eligible, the payments are minimal; the basic SSI payment in 2006 was \$603 per month for one person and \$904 per month per couple. Some states add funds to enhance this basic rate, but the amount can be reduced if someone else helps pay for food and shelter. Workers' compensation is also a

Table 3

**Disabled Worker's Annual Benefit Payments in 2006 at Various Salaries and Ages at which Disability Began, in dollars\***

Salary on date of disability	20,000	40,000	60,000	80,000	100,000	200,000
Worker disabled at age 30	10,236	15,768	20,844	23,436	25,908	26,304
Worker disabled at age 40	9,816	14,928	20,016	22,584	24,912	26,256
Worker disabled at age 50	9,456	14,184	18,912	21,960	24,132	26,076
Worker disabled at age 60	9,048	13,368	17,688	21,192	23,196	25,080

\*These figures are derived from calculators available on the Social Security Administration Web site, [www.ssa.gov](http://www.ssa.gov).

source of disability compensation, and some coverage is available in some states with auto no-fault laws, but these sources of coverage are limited.<sup>50</sup>

To summarize, disability insurance in the United States is very differently situated than health insurance. Like life insurance, disability insurance is currently regarded as a discretionary expenditure, and this is unlikely to change in the foreseeable future. Unlike health insurance where there is strong public sentiment that the coverage should be universally available or nearly so, no similar imperative exists with respect to disability insurance. Disability insurance will continue to be viewed as desirable but, like life insurance, not so necessary that its purchase should be compulsory or its availability underwritten through the expenditure of public resources.

### III. Implications

The conclusion to be drawn from the foregoing discussion is relatively straightforward. To the extent a consensus is reached in the political process that an insurance product or particular coverage should be universally provided (or at least universally available) or extended to particular segments of the population at public expense, barriers to the availability of that product – such as insurers' use of genetic information in underwriting – are less likely to be tolerated, as such restrictions undercut the public's effort to increase access to the product. But where there is little commitment to using public resources to support extension of a particular coverage, underwriting and rate-setting practices that limit the availability of coverage are more likely to be tolerated.

When this calculus is applied to disability insurance, the challenges facing those who would urge limitations on disability insurers' use of genetic information in underwriting and rate calculations are daunting. By any measure, communitarian values are stronger in health insurance than in either life or disability insurance. The discussion in the prior section makes this point, as the public commitment to extending health insurance coverage is vastly greater than that which exists with respect to either life or disability insurance. In addition, most health insurance is sold on a group basis, where the underwriting factors used by insurers are less refined; the percentage of disability and life insurance sold in group markets is much less. Thus, community rating is more prevalent in health insurance, and the effects of adverse selection are weaker than with either disability or life insurance. Health insurance is sold on an annual basis, which means renewal is not possible, giving insurers less reason to fear the impact of adverse selection or moral hazard. In contrast, life insurance is typically automatically

renewable, which makes adverse selection and moral hazard more worrisome. Noncancellable disability insurance is less available than in the past, but this reflects increasing tightness in the disability line and does not show evidence of private insurers' embracing community rating principles.

With respect to health insurance, it is fair to describe the American experience as one of slow, incremental movement toward greater availability of coverage and universal access. (The difficulties facing the economy and federal and state budgets in recent years are likely to produce a hiatus in this movement, but it is unlikely that the trend of recent decades will be reversed.) If insurers are allowed to make distinctions in underwriting and risk classification based on genetic information, access to coverage will be limited to those who do not fare as well on whatever standards insurers use for evaluating the relevance of genetic information. In health insurance, this would create, rather than ameliorate, barriers to health care. It is not surprising, then, that 46 states have some kind of regulation of the use of genetic information in health insurance, including limitations on insurer requirements for testing, insurer requests for information about past tests, or insurer use of testing information in making eligibility or renewal decisions, setting rates, or underwriting. But, consistent with the calculus described above, only a small number of these statutes have any relevance to life insurance, and still fewer have any connection to disability insurance.

At the federal level, the Health Insurance Portability and Accountability Act of 1996 (HIPAA)<sup>51</sup> regulates insurers' use of genetic information in group health insurance plans (defined as plans in which two or more employees are enrolled).<sup>52</sup> HIPAA, in limiting the effectiveness of pre-existing condition exclusions in health insurance, provides that genetic information cannot, in and of itself, constitute a pre-existing condition, which means that a covered employee cannot face a denial of coverage based on genetic information alone. In addition, the anti-discrimination provisions of HIPAA prohibit group health plans and health insurance issuers from using genetic information to discriminate against individual participants and beneficiaries. Thus, with respect to group health plans covering two or more employees (note that individual plans are not regulated), HIPAA limits how genetic information can be used to adversely affect an individual. But HIPAA, by its express terms, does not apply to disability insurance.<sup>53</sup>

The arguments commonly made against insurers' use of genetic information in underwriting and rate-setting generally have the same moral force in any line of insurance. For example, the arguments that such



use irrationally discriminates, unfairly determines price and availability of coverage based on circumstances beyond the insured's control, unfairly burdens a small number of people, emphasizes factors that tend to concentrate in racial or ethnic groups, imposes a stigma on innocent persons, and promotes a practice of subordinating persons (often termed "geneticism")<sup>54</sup> are as relevant to life and disability insurance as they are to health insurance. But these arguments have not resulted in significant statutory limitations on insurers' use of genetic information in any line other than health insurance. In fact, nothing similar to the regulation of genetic information that exists in health insurance applies to either life or disability insurance. As noted above, given the lack of commitment to universal coverage in life and disability insurance, this result is not surprising.

Last but certainly not least, it is difficult to imagine the question of access to life and disability insurance receiving serious attention in the political process until the formidable problem of gaps in health care access is solved. In the absence of a commitment to universal access and availability in life and disability insurance, barriers to coverage are more likely to be tolerated. If a consensus were reached in the political process that every American should enjoy some minimum package of disability insurance benefits as either a matter of entitlement or right, the case for eliminating a wider range of underwriting factors from insurers' arsenal – including genetic information – would become much stronger. It is unlikely, however, that these issues will be confronted anytime soon.

If the foregoing analysis accurately describes the current landscape, it suggests that efforts to impose broad restrictions on disability insurers' use of genetic information in underwriting and rate-setting are unlikely to garner the public support needed to overcome insurers' resistance to such restrictions. But narrowly tailored regulation of insurers' use of genetic information in disability insurance may be feasible. For example, in portions of the disability insurance market where little underwriting occurs and where adverse selection and moral hazard pressures have little force, such as in the large group market, proposals to eliminate the use of genetic information in underwriting are less likely to be controversial. This may also be true in some portions of the small group market. In other words, in portions of the market where community rating principles have some grip, insurers may not actively resist being asked to surrender the use of genetic information in underwriting. Thus, one avenue for reform might involve extending the regulatory framework of HIPAA to disability insurance. This framework would use the distinction between group

and individual insurance as the basis for drawing the line between segments of the disability insurance market where insurers can use genetic information and segments where they cannot.

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### References

1. This is typically accomplished by an insured purchasing insurance on his own life, naming a charity as the beneficiary, and then assigning the ownership interests in the policy to the charity. For further discussion of assignment in life insurance, see R. H. Jerry, *Understanding Insurance Law* 3rd ed. (Newark, NJ: LexisNexis, 2002).
2. See, e.g., *Jordon v. Group Health Assn.*, 107 F.2d 239 (D.C. Cir. 1939); *California Physician's Service v. Garrison*, 172 P.2d 4 (Cal. 1946).
3. The price is flexible to the extent the member of the plan has deductibles or co-payments that phase out after certain expenditure thresholds are reached, which is typically the case.
4. For more discussion, see Jerry, *supra* note 1, at 25-32.
5. U.S. Census Bureau, *Statistical Abstract of the United States: 2006*, 125th ed. (Washington, D.C., 2005): Table 144, available at <www.census.gov/prod/2006pubs/07statab/health.pdf >.
6. *Id.*
7. *Id.*, at Table 137.
8. *Id.*, at Table 142.
9. See Families U.S.A., *Going Without Health Insurance: Nearly One in Three Non-Elderly Americans*, report prepared for and released by Robert Wood Johnson Foundation, March, 2003 (reporting that 74.7 million persons under the age of 65, or 30.1 percent of the nation's population, were uninsured during a part of 2001 and 2002; two-thirds were uninsured for six months or more). This suggests that the U.S. Census Bureau figures for uninsureds, which require a person be uninsured for the entire year, understate the scope of the problem.
10. See Statistical Abstract, *supra* note 5, at Table 118.
11. *Id.*, at Table 650.
12. *Id.*, at Table 119.
13. Medicare Part A is financed by payroll taxes, and Medicare Part B is financed mostly by general federal revenues. For more discussion, see M. McClellan and J. Skinner, "Medicare Reform: Who Pays and Who Benefits," *Health Affairs* 18 (1999): 48-62.
14. See Statistical Abstract, *supra* note 5, at Table 119.
15. Pub. L. No. 99-272, 99th Cong., 2d Sess., 100 Stat. 82 (1986).
16. Pub. L. No. 104-191, 110 Stat. 1936 (1996) (codified in scattered sections of 29 & 42 U.S.C.).
17. 92 Stat. 2076, 42 U.S.C. § 2000e(k) (1994).
18. 29 U.S.C. § 1185, 42 U.S.C. §§ 300gg-4, -51 (Supp. II 1996).
19. 29 U.S.C. § 1185a, 42 U.S.C. §§ 300gg-5 (Supp. III 1996).
20. 29 U.S.C.A. § 1185b, 42 U.S.C.A. §§ 300gg-6, -52 (West 1999).
21. The post-2000 crisis in state budgets, which afflicts most states and is typically described as the most severe since World War II, and the sudden reappearance of federal budget deficits are likely to result in some retrenchment. The ultimate impact of these budget pressures cannot be known with certainty, but they will probably produce a short-term detour in the march, rather than a long-run change in the destination.
22. See American Council of Life Insurers, *Life Insurers Fact Book 2002*, at 89 (reporting that in 1998, 69 percent of all families had some form of life insurance).
23. *Id.*
24. *Id.*, at 64 (Table 7.1).

25. American Council of Life Insurers, *Life Insurers Fact Book 2001*, at 104.
26. American Council of Life Insurers, *Life Insurers Fact Book 2006*, at 67 (Table 7.5).
27. *Id.*, at 69 (Table 7.8).
28. Social Security is not unique in this respect. The survivor's benefit in private pension plans function as a form of life insurance as well. In fact, one could describe an individual whole life insurance policy as the functional equivalent of a private pension, except that in the whole life policy the pension benefit is reduced in exchange for a larger payment of proceeds in the event of the insured's premature death.
29. Social Security Administration, *Number of Credits Needed for Survivors Benefits*, available at <www.ssa.gov/retire2/credits4.htm> (last visited March 19, 2007).
30. The SSA default calculator which generates these numbers assumes an earnings history with annual percentage increases (i.e., a "relative growth factor") of two percent faster than the national average prior to the year of death. See <www.ssa.gov/OACT/quickcalc/faqs.html> (last visited March 19, 2007).
31. U.S. Census Bureau, *Poverty Thresholds 2004*, available at <www.census.gov/hhes/poverty/threshold/thresh04.html> (last visited December 21, 2006).
32. This assumes that the first annuity payment is made on one's 60th birthday and remaining payments are received at the beginning of the month one month late. The amount declines to \$128,268 if the payments are made on the last day of the month. This is based on a calculator written by Steven J. Willis. To review the calculator, see S. J. Willis, *Financial Calculations for Lawyers*, available at <http://cle.law.ufl.edu> (last visited March 19, 2007). What constitutes an appropriate discount rate when interest rates are at historic lows is difficult to know. A four percent rate would produce a present value (assuming payments on the first of the month) of \$134,989, a six percent rate would produce a present value of \$113,159, and a seven percent rate would produce a present value of \$104,175. This provides some sense of the range of possible present values.
33. The present value of a \$1121/month annual income for 22.0 years, which is the life expectancy of a 60-year-old, is \$179,287 (with payments made at the end of the month), using a discount rate of five percent. In a conversation with Maya Womack, a representative with AnswerFinancial (available at <www.answerfinancial.com> [last visited March 19, 2007]), on June 5, 2003, the author was quoted a price of \$164,344.51 for an annuity for a 60-year-old male, with monthly payments of \$1086 beginning at age 61, payable for life with a ten-year guarantee. The relationship is not a perfect one because amounts receivable under a privately purchased life insurance policy are not equivalent to amounts payable under a survivor's benefit annuity provided under the auspices of the federal government through the Social Security system. This is due to the risk of nonpayment of the private annuity associated with the possible insolvency of the private annuity provider. The annuity from the federal government, on the other hand, would be considered riskless (or nearly so). To illustrate, consider a survivor who receives a lump sum payment in the amount of \$128,802. That survivor might have the option of investing in a "risk-free" annuity at five percent or an annuity written by a private firm with a modest level of insolvency yielding six percent. The survivor's choice would be between a risk-free annuity of \$805 per month for 22.0 years (with payments at the end of the month) or \$880 per month for 22.0 years from the more risky insurer.
34. Again, the relationship is not perfect for the same reasons articulated in the prior note.
35. This calculation used the SSA's 2003 default earnings history for a hypothetical 60-year-old. For the current SSA calculator, see (www.ssa.gov/retire2/AnyApplet.html) (last visited April 27, 2007). The formula was applied to the sum of the employee's and employer's contributions for each year of earnings; the sum of this result for each year produces the \$158,424 future value figure. In other words, "future value" here means the hypothetical value, available at age 60, had the employee invested on his own the Social Security contributions made previously by him or his employer. Institutional investors should be able to earn higher returns, so a higher rate of return may be appropriate. Using six percent, the future value would be \$182,826, and using seven percent, the future value would be \$212,659, well above the present value of the income stream.
36. For example, Social Security also protects the worker from the consequences of disability, so a portion of contributions needs to be allocated to the security purchased against this risk. Survivors and retirement benefits are paid out of the same trust fund; although a premise of the program is that a pension is paid to the worker or, if he or she does not survive the spouse, the worker who lives to retire collects more than his or her survivor.
37. See other articles in this issue for further discussion of this point.
38. U.S. Department of Labor, Bureau of Labor Statistics, *National Compensation Survey: Employee Benefits in Private Industry in the United States 2000* (August, 2006).
39. U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Medium and Large Private Establishments 1997*, Table 1.
40. U.S. Department of Labor, Bureau of Labor Statistics, *Employee Benefits in Small Private Establishments 1996*, at Table 1.
41. See C. E. Soule, *Disability Income Insurance: The Unique Risk* 4th ed. (Bryn Mawr, PA: American College, 1998): at 11-12; K. S. Abraham and L. Liebman, "Private Insurance, Social Insurance, and Tort Reform: Toward a New Vision of Compensation for Illness and Injury," *Columbia Law Review* 93 (1993): 75-118, at 101 ("the extension of SSD to virtually all Social Security participants after 1956, the growth of some state disability protection programs, and the indexing of SSD benefits in 1972 essentially have made the lower-income market an unlikely source of private disability insurance policyholders").
42. J. H. Dodge, discussions in the Working Group on Genetic Testing and Disability Insurance. Abraham and Liebman made the same point in their excellent analysis of private and social insurance. See *id.* (Abraham and Liebman), at 101-102.
43. F. J. Rief, "Disability Insurance: Its Uses and Tax Implications," in ALI-ABA, *Uses of Insurance in Estate and Tax Planning*, SE14 (1999): at 667, 669.
44. See Abraham and Liebman, *supra* note 41, at 102-103.
45. *Id.*, at 103.
46. *Id.*, at 103-104.
47. Social Security Administration, *2005 Annual Report of the Board of Trustees of the Federal Old-Age and Survivors Insurance and Disability Income Trust Fund*, at Table VI.G1.
48. Social Security Administration, *How Much Work Do You Need?* available at <www.ssa.gov/dibplan/dqualify2.htm> (last visited March 19, 2007).
49. Social Security Administration, *Supplemental Security Income Home Page*, available at <www.ssa.gov/notices/supplemental-security-income/> (last visited March 19, 2007).
50. See discussion of Workers' Compensation programs in the project report.
51. Pub. L. No. 104-191, 110 Stat. 1936 (1996) (codified in scattered sections of 29 & 42 U.S.C.).
52. For detailed discussion of HIPAA's regulatory framework with respect to genetic information, see R. H. Jerry, "Health Insurers' Use of Genetic Information: A Missouri Perspective on a Changing Regulatory Landscape," *Missouri Law Review* 64 (1999): 759-788, at 773-779.
53. See 29 U.S.C. § 1191b(c)(1)(A).
54. See D. Hellman, "What Makes Genetic Discrimination Exceptional," *American Journal of Law & Medicine* 29 (2003): 77-116, at 83-92.