January 1992

Genetic Screening and Insurance: Too Valuable an Underwriting Tool to Be Banned from the System

Naomi Obinata

Follow this and additional works at: http://digitalcommons.law.scu.edu/chtlj

Part of the Law Commons

Recommended Citation
Available at: http://digitalcommons.law.scu.edu/chtlj/vol8/iss1/5
GENETIC SCREENING AND INSURANCE: TOO VALUABLE AN UNDERWRITING TOOL TO BE BANNED FROM THE SYSTEM

Naomi Obinata†

I. INTRODUCTION

Thirty-eight years ago, James Watson and Francis Crick discovered the structure of DNA.¹ Since then, scientists have been probing our genetic code in the attempt to shed light on the biological mysteries of life, death, and disease.² Today, it is not uncommon to read a news headline reporting the identification of a specific gene and its association with a particular disease.³ In March and April, 1990 the news press reported the discoveries of genes associated with colon cancer and alcoholism.⁴

One area of major development resulting from these advances in biotechnology has been genetic screening. Genetic screening is a procedure whereby the DNA in blood cells is analyzed for information about a person’s genetic history.⁵ The screening procedure provides invaluable information about a person’s health, including whether or not that person, or their offspring, is predisposed to certain diseases.⁶ This determination can provide a warning about an individual’s future state of health.⁷ It can also provide relief from

¹ The human genome is a compilation of genes in the chromosomes carried in each cell that makes up a human being. “Chromosome” refers to DNA strands which contain genes. Humans have 23 pairs of chromosomes for a total of 46. A “gene” is a strand of DNA containing instructions for the production of specific required proteins for the proper function of a cell activity. “DNA” is the molecule that contains the basic architecture of the proteins and other chemicals required for life. John Carey et.al., The Genetic Age, BUSINESS WEEK, May 28, 1990, at 68.
² Id.
³ Id.
⁴ See Carey et al., supra note 1.
⁶ See Carey et al., supra note 1.
worry if the individual believes he or she may have inherited a possibly debilitating disease. Since the procedure can give information about genetically-based illness, it can also be used for risk assessment of a person's future health risk. Since private insurance rates are based on risk assessments, health insurers would have a genuine interest in using genetic screening information.

Two potential problems could arise if insurers are allowed to utilize genetic screening. The first is a societal issue: society may disapprove of its use because of the inherent "genetic discrimination" that would result. The second potential problem is a rise in the number of "uninsurables" - i.e., those who pose such high health risks that they would most likely be denied insurance.

The discrimination concern reflects society's general distaste for drawing lines between groups of people on the basis of factors they cannot control. This is evident in the problems that have arisen from statistical risk groupings based on race and sex. In keeping with the policy of eradicating discrimination based on these variables, legislatures have passed laws disallowing the use of race, and in some jurisdictions, sex, in insurance underwriting.

Classifications of persons by risk are, however, a necessary part of insurance. When restrictions are placed on underwriting, an inherent unfairness results in the setting of premium rates. When persons do not have to pay premiums according to their risk potential, then those in the higher risk group can pay lower rates than their risk would require, but at the expense of the lower risk groups.

8. See Carey et al., supra note 1, which gives a story about a 63-year-old man whose father and brother died of Huntington's disease. Huntington's disease is a lethal disease that is manifested by the degeneration of the mind and body. He leaped at the opportunity to learn his own fate by a simple blood test which indicated whether he carried the flawed gene. The results of the test were negative: he did not carry the flawed gene.


10. See Miller, supra note 7.

11. Critics of genetic screening fear that such information would naturally give rise to a greater number of persons who cannot afford to purchase insurance. See Prediction and Prejudice, supra note 9. However, such a result is a mere prediction, and the result in actuality may be the opposite. For example, an individual shown to be at risk of contracting Huntington's disease based on the individual's family history may be automatically denied insurance, even though there is a 50-50 chance the person would never contract the disease. Through genetic screening the individual can determine if he or she has inherited the defective gene. If the individual has not inherited the gene, there is no risk of contracting Huntington's disease, and the insurance risk is thus removed. See Judy Berfield, Genetic Testing: Healthcare Trap, LOS ANGELES TIMES, April 30, 1990, at B 2.


13. See infra notes 52 and 102.

who must subsidize them. Restricting insurance underwriting may actually result in more harm to society than benefit.

The fact that the use of genetic screening information may be pursued by insurers gives rise to controversy. One commentator proposes that genetic screening be banned from use by insurers altogether. Such a proposal would probably be received favorably by society in general; no one wants to be discriminated against based on their genetic makeup. However, the benefits that could be gained by allowing insurers to use genetic screening would likely make such a measure too drastic. If used responsibly, genetic screening could improve insurance. With increased accuracy in assessing a person's risk, premium rates could be set more fairly, thus benefitting both insurers and insureds. This comment contends that insurers should be allowed to use genetic information as part of the underwriting process. Genetic screening is too important a technology to be banned.

This comment examines the moral reasons forwarded by the critics opposing the procedure. By working within the rationales of moral unfairness and efficiency, the comment will show that genetic screening not only is a valuable tool for insurers because of the improvements to business it could provide, but in addition, can be used to solve the problem of discrimination based upon the traditional "suspect" classifications.

In private insurance, where competition and economics necessitate setting premiums according to risk, it is an unavoidable reality that some individuals who are in high risk groups will not be able to pay for private insurance. In response to the problem of insuring these "uninsurables," some states have enacted risk-pooling legislation. California is not one of these states. This comment suggests that as part of the implementation of genetic

15. See infra notes 38-40 and accompanying text.
17. See Miller, supra note 7, 93 DICKINSON L. REV. at 745.
18. It is in individual insurance that underwriting involves an evaluation of personal characteristics that could impact a given insured's risk. Group insurance, on the other hand, involves evaluation of relevant characteristics of a group of insureds rather than individuals. See Karen A. Clifford and Russel P. Iuculano, AIDS and Insurance: The Rationale for AIDS Related Testing, 100 HARV. L. REV. 1806, 1808-1809 (1987). Because discrimination based on individual characteristics is at issue here, this comment will be discussing insurance in the context of individual insurance only.
19. See infra notes 100-116 and accompanying text.
20. Clifford and Iuculano, supra note 18, at 1822.
21. See infra note 140.
screening by insurers, California also enact risk pooling legislation into the Insurance Code.22

II. GENETIC SCREENING, INSURANCE AND DISCRIMINATION

A. What is genetic screening and what is the fear?

Genetic screening is used to obtain information23 as to whether a person has a propensity for developing an ailment brought on by defective genes.24 Genetic screening is accomplished by probing the DNA present in blood cells to determine the presence of certain genetic markers associated with various genetic diseases.25

The procedure is not a new concept; it has been in existence for nearly 30 years.26 The first tests made were for phenylketonuria27, sickle-cell anemia, and Tay-Sachs disease.28 More recently, genes associated with Huntington’s chorea, cystic fibrosis, colon cancer and the link to emphysema have been uncovered.29 As the techniques for gene mapping have advanced, the rate at which specific genes associated with genetic ailments have been discovered has increased dramatically.30

The fear in allowing insurers to use genetic screening arises from the belief that a new “genetic discrimination” will result.31 However, the notion of differentiating individuals according to their risk categories is an important and basic part of running an insurance business.32 Discrimination is necessary to maintain fairness in premium rates.33 If insurers are not allowed to classify according to risk, then there would be a single uniform premium. To account for the mixing of risks, the premium would have to become higher than

25. See Miller, supra note 7, at 731. See also Robert Wachbroit, Making the Grade: Testing for Human Genetic Disorders, 16 HOFSTRA L. REV. 583 (1988).
27. Id. Phenylketonuria is a condition found in some newborns which could lead to mental retardation.
28. Capron, supra note 5, at 686.
29. See Carey et.al, supra note 1.
31. See Prediction and Prejudice, supra note 9.
32. See Gerber, supra note 14, at 1207-1208.
33. Id.
it otherwise would be if the lower risk groups paid according to their risk. 34 The result would be a lack of equity among the insureds. 35 Premium rates could eventually become so expensive that people no longer purchase insurance. Insurers could face insolvency. 36 In light of the importance of insurance to society, 37 such a result would be highly unfortunate.

B. A brief overview of risk classification in insurance.

The selection and classification of risks is a basic and fundamental concept in insurance.

An insurance company has the responsibility to treat all its policyholders fairly by establishing premiums at a level consistent with the risk represented by each individual policyholder. As one observer has noted, "[b]asic to the concept of providing insurance to persons of different ages, sexes, . . . occupations and health histories . . . [is] the right of the insurer to create classifications to recognize the many differences which exist among individuals. 38"

Equity among insureds is maintained when each insured can contribute to the common insurance fund according to the quality of the insured’s risk. Equity cannot exist if one person pays less than his or her share, causing rates to increase for other persons in the group to keep the common fund solvent and able to pay claims. 39 Thus, "[p]remium rates must be high enough to assure permanent financial security for the company and, at the same time, low enough to enable the company to be competitive."

Obviously, insurers compete for customers. But fundamentally, insurers compete against the insureds themselves. 41 If insurance is too expensive, people will not purchase it. Instead, people will invest in savings or other arrangements as a means for insuring against the risk of future loss. 42

The courts and Congressional intent manifest the basic view that competition in insurance “best serves our economic and social

34. Id. at 1209-1210.
35. Clifford and Iuculano, supra note 18, at 1817.
36. See ABRAHAM, supra note 12.
38. Clifford and Iuculano, supra note 18, at 1808 (footnote omitted).
40. Id. at 1212.
41. ABRAHAM, supra note 12, at 67.
42. Id.
aims.” “It is the opinion of Congress that competitive rates on a sound financial basis are in the public interest.’”

Unbridled governmental intrusion into insurance business affairs would be harmful to the industry because of its hand-tying effect. The tension between the desire to protect the public from unfair treatment and the dangers that restrictions place on the stability of the industry was elucidated in *German Alliance Ins. Co. v. Kansas.* There the United States Supreme Court recognized the need for some regulation: “[T]he business of insurance so far affects the public welfare as to invoke and require governmental regulation.” Regarding the regulation of actuarial practices, however, the court said:

The contracts of insurance may be said to be interdependent. They cannot be regarded singly, or isolatedly, and the effect of their relation is to create a fund of assurance and credit, the companies becoming the depositaries of the money of the insured, possessing great power thereby and charged with great responsibility. How necessary their solvency is, is manifest.

The policy regarding insurance can thus be reduced to the following: although the government should regulate the industry due to its importance to society, at the same time, insurers must be able to run the business in such a way as to maintain solvency.

C. *The quandary: rate discrimination is socially disagreeable, but insurers must discriminate to maintain solvency.*

To efficiently classify risks, it makes business sense to use statistical risk predictor variables such as race or sex. These classifications, however, tend to raise social, moral and legal concerns because of their “suspect” nature. Race discrimination has traditionally been considered intolerable. In the interest of eradicating race discrimination on all fronts, many states have passed laws ban-

45. 233 U.S. 389 (1914).
46. *Id.* at 412.
47. *Id.* at 414.
48. ABRAHAM, *supra* note 12, at 76.
49. *Id.* at 93.
ning the use of race as an insurance underwriting variable. California is among these states.

Prohibitions on sex classifications have been less uniformly applied. This nonuniformity probably stems from the fact that sex has not traditionally been deemed "suspect" or "invidious" as has been the case for race discrimination. For example, sex classification cannot be used by employers but can be used by the military.

The United States Supreme Court had an opportunity to comment on sex classification used by employers in comparison with insurers in Los Angeles Department of Water & Power v. Manhart and Arizona Governing Committee v. Norris. These cases arose from the employers' usage of statistics, directly or through insurers, to determine the amount of retirement pay for its employees. In both cases, the Court held that the employers' practices of differentiating between male and female employee retirement pay rates violated Title VII of the Civil Rights Act. With regard to such practices by insurers, the Manhart Court recognized their validity: "We do not suggest that the statute [Civil Rights Act] was intended to revolutionize the insurance and pension industries." The Court refrained from stating in Norris that insurers ought to be similarly restricted from using sex-based mortality tables even though the insurance companies had "done the dirty deed" of using sex-based calculations to administer the fund. Rather, the Court acquiesced in the insurers' practice.

---

52. Id.
57. 463 U.S. 1073 (1982).
58. In Manhart, the female employees complained about the employer's use of sex-based mortality tables to calculate the amount to be deducted from male and female employees' salaries. Since statistics showed women live longer than men, women would be drawing retirement benefits for a longer period of time. As a result, the female employees suffered a greater deduction from their paychecks than their male counterparts. 435 U.S. at 704-05.
59. Manhart, 435 U.S. at 717, and Norris, 463 U.S. at 1074-75.
60. 435 U.S. at 717.
61. "[O]ur judgment will in no way preclude any insurance company from offering annuity benefits that are calculated on the basis of sex-segregated actuarial tables. All that is at issue in this case is an employment practice . . ." 463 U.S. 1073, 1087-88 n.17 (emphasis in original).
In response to the Manhart and Norris decisions, some states passed sex-based underwriting restrictions. California, however, did not make an all-out prohibition against using sex-based differentials. The California legislature instead added a paragraph stating that sex-based differentials are not required for insurance contracts provided through employers in compliance with Title VII of the Civil Rights Act.

Other recent court decisions have recognized insurers' right to classify. In Life Insurance Association of Massachusetts v. Commissioner of Insurance, the court refused to allow the insurance commissioner to restrict underwriting practices for individuals who tested positive for the AIDS-HIV antibody. The court's refusal is made even more remarkable in light of the fact that such a refusal meant impossibly high premiums for those infected.

The basic principle underlying statutes governing underwriting practices is that insurers have the right to classify risks and to elect not to insure risks if the discrimination is fair. The intended result of the process is that persons of substantially the same risk will be grouped together, paying the same premiums, and will not be subsidizing insureds who present a significantly greater hazard.

In another case, Physicians Mutual Insurance Co. v. Denenberg, the insurer attempted to make premium rates "equitable" by charging the same premium across the board, for all of its coverages and therefore, risks. The court struck down this practice as unfair discrimination.

The term "discrimination" used in Life Insurance Association and Denenberg connoted differing meanings. In Life Insurance Association, it was discrimination where HIV carriers were risk-classified differently from non-HIV carriers, yet in Denenberg, it was discrimination when the same premium was charged irrespective of

---

62. Wortham, supra note 52.
63. CAL. INS. CODE § 790.03(f) (West Supp. 1991).
64. The legislative history states in part: "In order for life insurers to continue to offer insured benefits on an individual basis for persons affected by this decision in California, it is necessary that this act take effect immediately."
66. "AIDS-HIV antibody" refers to the antibodies that are formed when a person has been exposed to the Human Immuno-Deficiency Virus. A blood test, known as ELISA, is used to screen for the antibody's presence. Its accuracy is nearly 100%. See Clifford and Iuculano, supra note 18, at 1812.
67. Life Ins. Ass'n. of Mass., 530 N.E.2d at 171.
68. 327 A.2d 415 (Pa. Commw. Ct. 1974). The complaint in this case was that equal rather than unequal rates were unfair.
risk. However, if one looks past this potentially confusing point, both cases make it clear that classification by insurers promotes fairness.

Although courts have shown some tendency to favor the insurers in underwriting challenges, discrimination issues thrive in both commentary and legislatures. In a review of current legislative bills and perspectives on the handling of the discrimination problem, one author suggests that insurers refrain from classifying risk groups according to variables that cannot be controlled.

In the context of “genetic discrimination”, one proposal is that genetic screening use by insurers is morally wrong and should be banned. It is said that four potential problems warrant the banning of genetic screening, these being: employment discrimination if employers use genetic screening data, the concern that genetic screening information would lead to additional coverage exclusions as pre-existing conditions, the psychological effects upon a person whose test results show a propensity for contracting a fatal or debilitating disease and the breach of confidentiality over a person’s genetic test results. In other words, notwithstanding the value of genetic screening to insurers and insureds, the technology should not be used because of its potential moral consequences.

Moral arguments can be powerful because they appeal to human compassion. But, as will be shown, moral arguments, viewed on a pragmatic level, can be weak. The weakness of these moral arguments balanced against the substantial benefits that will be derived from genetic screening, compels the conclusion that genetic screening is too valuable an underwriting tool to be banned.

D. The weakness of moral arguments for banning genetic screening by insurers.

1. The employment discrimination concern.

The thought of employment discrimination based on genetics is troubling. Many commentaries have discussed this very issue.

---

69. See Wortham, supra note 52.
70. Id.
71. See Miller, supra note 7, at 751-752.
72. Id. at 744.
73. Id. at 744.
74. Id. at 742.
75. Id.
76. See Mary Bassett Stanford, Note, Genetic Testing in Employment: Employee Protection or Threat?, 15 SUFFOLK U. L. REV. 1187 (1981); Edith F. Cantner, Employment Discrimination Implications of Genetic Screening in the Workplace Under Title VII and the
Though the legal issue of how to handle genetic discrimination in the workplace is beyond the scope of this comment, some suggestions are given below.

The Civil Rights Act\textsuperscript{77} seems to provide limited if any protection from genetic discrimination.\textsuperscript{78} Should the need arise, however, genetic discrimination could be added to the Act. Employment discrimination based on one's genes can be as objectionable as discrimination based on sex. As Justice Stevens once described sex discrimination, "It is objectionable because it is based on an accident of birth."\textsuperscript{79}

What employers can or cannot do with genetic data, however, should not affect the question of whether insurers should be able to use it in risk assessment. The desire to maintain a separation between insurers and employers' actuarial practices was clear from the dicta of \textit{Manhart}\textsuperscript{80} and \textit{Norris}.\textsuperscript{81} Such a separation is important because unlike other businesses, classification of persons based on their risk is an integral and necessary part of the insurance business. Thus, even if employers' use of actuarial tables is prohibited, the insurers should be left alone.

2. Pre-existing conditions.

Health insurance policies typically exclude from coverage pre-existing health conditions.\textsuperscript{82} It has been argued that genetic tests would allow insurers to more liberally exclude coverages as pre-existing conditions.\textsuperscript{83} This argument is nonsensical. Genetic screening provides knowledge of a risk. Even if the occurrence of illness is 90\% probable,\textsuperscript{84} it is only a risk. Furthermore, even if a person is shown to be at risk, the future course of events cannot be fully known. The individual may be able to avoid the risk by altering his or her lifestyle,\textsuperscript{85} or may simply see relatively mild affects of the

\begin{thebibliography}{99}
\item See supra note 54.
\item See Cantner, supra note 77, at 336.
\item Craig v. Boren, 429 U.S. 190, 212 (1976).
\item 435 U.S. 702.
\item 463 U.S. 1073.
\item ROBERT IRWIN MEHR et al., \textit{PRINCIPLES OF INSURANCE} 443 (8th ed. 1985).
\item Miller, supra note 7, at 744.
\item See Carey et al., supra note 1, in reference to the gene for Huntington's disease.
\item Provided that the risk is of a type that can be controlled to an extent, such as a heart attack. \textit{See} authorities cited \textit{infra} notes 125-27 and accompanying text.
\end{thebibliography}
A risk, therefore, cannot be equated with a presently existing condition-in-fact. Accordingly, a health risk evidenced by genetic screening should not be deemed a "pre-existing condition."

3. The ethical hazard concern.

The ethical hazard concern refers to the potential psychological harm that would result for the person who decides to undergo genetic screening and is found to possess a life-threatening genetic trait. Some people may incur a negative psychological impact; others may not. One woman who was found to have a 90% chance of contracting Huntington's Chorea had a seemingly healthy attitude. She said that she decided to take the test because: "Ignorance is really stupid. The more you know, the better off you are." Some people who learn of their disorder will need psychological support. But there are ways to help. One comment suggests mandatory counseling, by placing those who test positive for an incurable disorder into a support group.

The ethical hazard concern is emotionally appealing, but it is an independent issue. The technology is available and people will take advantage of it, regardless of whether insurers use it. Those who receive positive test results for a terrible disease may suffer severe emotional distress. The ethical hazard exists by virtue of the technology itself. Banning its use by insurers will not solve the ethical hazard problem. Such a ban would only suffice to create a new hazard: other insureds would have to bear the financial costs of subsidizing those at higher risk merely because of their potential for self-inflicted psychological harm.


The issue of genetic screening and confidentiality has been
raised previously in other articles. Insurers are sensitive to the issue. They are aware that care must be taken in obtaining screening information so as not to deter individuals from obtaining genetic screens, or, more fundamentally, to donate blood.

In the event that confidentiality is breached, there are standards in place, or at the least have been recommended, to remedy resulting harm. For example, in any medical treatment there must be confidentiality between patient and physician. If this confidentiality is breached, remedies in contract, defamation and invasion of privacy are available, as well as statutory remedies. These standards can be applied, after there has been an allegation of a breach, and after genetic screening has taken place. The existence of potential legal remedies in the event of a confidentiality breach fizzes the proposition that confidentiality problems require the banning of the use of genetic screening.

III. THE HIDDEN BENEFIT OF GENETIC SCREENING

A. Fairness and other problems in using certain statistical variables.

The general fairness of classification of risks beyond the insured's control has been questioned. It has been proposed that classification on the basis of race, color, religion, sex, and national origin be banned from the underwriting process for all lines of insurance. Some states have banned sex classification in automobile insurance underwriting and coverage, and one state extends the ban to all lines of personal insurance.

The use of such uncontrollable variables by insurers have

95. On the subject of AIDS, the American Council of Life Insurance has stated: "Our position is to not try to obtain from blood banks, plasma centers, or alternative testing sites the results of blood tests given by them, since to do so might discourage people from donating blood." Benjamin Schatz, The AIDS Insurance Crisis: Underwriting or Overreaching? 100 HARV. L. REV. 1782, 1803 (1987).
96. See Becker, supra note 91, at 295.
97. Id.
98. Id.
99. See id. at 295-98, for a discussion of legal issues arising from genetic screening for Huntington's disease.
100. See ABRAHAM, supra note 12, at 89.
101. Wortham, supra note 52.
102. Id. at 366. The states passing legislation as to automobile insurance are: Hawaii,
raised not only moral but legal tensions. To remain attractive to insurance purchasers while maintaining financial security, insurers strive to provide coverage to insureds according to the expected risks and therefore, costs.\textsuperscript{103} In doing so, insurers classify risks.\textsuperscript{104} These classifications are based on certain statistically correlated risk factors because the costs of gathering the data required for further risk refinement may exceed the financial benefit that would be derived from the greater accuracy.\textsuperscript{105} As a result, such suspect classifications as race or sex are used.\textsuperscript{106}

There is another problem with the use of such classifications, in that they can be inaccurate and thereby force subsidization.\textsuperscript{107} For example, sex may correlate with driver accident rates and thus be used as a risk factor for automobile liability insurance.\textsuperscript{108} The reason this factor is used is that the cost of gathering sex data may be substantially lower than determining an individual’s habits or character.\textsuperscript{109} Risk assessment based in statistical correlations leads to a degree of coincidental grouping. Some, perhaps many individuals who are in the higher risk group because of their sex, have excellent driving habits which in reality would make them a very low risk.\textsuperscript{110} But since they are placed in the higher risk category due to their sex, they pay a higher premium than their actual risk would require. Essentially, these individuals subsidize those in the same group who are a higher risk.\textsuperscript{111}

For health and life insurance, genetic screening serves as the most reliable way to assess an individual’s health risk.\textsuperscript{112} The inaccuracy of this method lies only in the probability that is assessed.\textsuperscript{113} With better underwriting reliability, the degree of subsidization within a health risk group can be minimized.\textsuperscript{114} Instead of indirect statistical correlations that can lead to coincidental risk grouping, direct information about the health of an individual would be used.

\begin{footnotes}
\item[103.] See ABRAHAM, supra note 12, at 77.
\item[104.] See Gerber, supra note 14, at 1207.
\item[105.] See ABRAHAM supra note 12, at 69.
\item[106.] Id. at 92-95.
\item[107.] Id. at 83.
\item[108.] Id. at 69.
\item[109.] Id. at 85.
\item[110.] Id. at 71, 74-75.
\item[111.] Id. at 83.
\item[112.] See Carey et al., supra note 1.
\item[113.] Id.
\item[114.] See ABRAHAM, supra note 12, at 79-80, 83.
\end{footnotes}
There would be a cost in gathering the genetic screening data, and it may still be less expensive to use the present classification scheme. However, "[t]he more reliable the variables on which classes are based, the more worthwhile the level of refinement, since it will represent classification on the basis of actual expected loss . . . ." In the long run, the benefits derived from genetic screening may lead insurers to replace statistical correlations altogether for underwriting health and life insurance policies. Replacement of current statistical variables would allow suspect variables to be erased from the underwriting process. No longer would insureds be grouped artificially based on sex or race; instead, real predictive factors would be used to assess risk. This is the hidden benefit of genetic screening.

B. Present legislation for ensuring fairness and equity in the use of genetic screening.

The insurance industry has long been subject to legislation requiring fairness for its insureds. California has already accounted for potential difficulties in the use of genetic screening, but the restriction is narrowly drawn. The California insurance Code prohibits the insurer from refusing to issue, sell, or renew any life or health insurance because the person has been shown to carry a gene which may be transferred to the person’s offspring, but otherwise would cause no adverse effects to the carrier. The code

115. A cost summary is tabulated in Market for DNA Probe Tests for Genetic Diseases, GENETIC TECHNOLOGY NEWS, Nov. 1986, at 6. The approximate price for DNA probe tests based on single genes is $30 per test. This amount is subject to change depending on the disease probe.

116. See ABRAHAM, supra note 12, at 79.

117. See Clifford and Iuculano, supra note 18, at 1809.


119. Id. The provision states:

(a) No insurance company licensed in this state shall refuse to issue or sell or renew any policy of life or disability insurance after appropriate application solely by reason of the fact that the person to be insured carries a gene which may, under some circumstances, be associated with disability in that person's offspring, but which causes no adverse affects on the carrier. Such genes shall include, but not be limited to, Tay-Sachs trait, sickle cell trait, thalassemia trait, and X-linked hemophilia A. No such policy issued and delivered in this state to any association, corporation, firm, fund, individual, group, order, organization, society, or trust subject to the supervision of the commissioner shall demand or require a higher premium rate or charge by reason of the fact that the person to be insured carries such traits than is at that time required of any other association, corporation, firm, fund, individual, group, order, organization, society, or trust in an otherwise identical classification, nor shall any asso-
does not state that insurers cannot take into account genetic information of the individual in its underwriting. Further, the code does not restrict underwriting for the person who is shown to have a propensity for contracting a disease.

IV. THE PROBLEM OF UNINSURABLES

A. Uninsurables as a casualty of private insurance.

A consequence of a goal to distribute insurance premiums fairly is the denial of insurance to some individuals. Insurers, acting alone, simply cannot afford the financial burden of covering a person at very high risk. It is estimated that the health care cost for the “174,000 AIDS patients projected to be alive during the year 1991 will be between $8 billion and $16 billion.”

The type of burden that the insurer would face because of a ban on screening for the AIDS-HIV antibody can be illustrated as follows: 100 AIDS-infected individuals purchase life insurance coverage of $100,000 for an annual premium of $200, on the basis of an assumption that these people pose average risk for lack of other information. At the end of 7 years, 20 of these insureds die, after having paid $1,400 in premiums. The insurer must pay out $2 million at this time. The return on the premium investment is 1,329% in this case. It is difficult to see how this can be afforded. If insurers were forced to accommodate purchasers who are a very high risk, some companies would surely go out of business. To avoid insolvency, insurers could charge a uniformly high premium. This

---

120. Clifford and Iuculano, supra note 18, at 1821.
123. Clifford and Iuculano, supra note 18, at 1822.
route would be immediately unfavorable to the many insureds who must become subsidizers of a few at extremely high risk. People would lose their incentive to purchase insurance because of the cost.  

B. The ability to prevent disease and save on insurance.

Knowledge of one's future health provides an opportunity to take preventive measures to avoid the onset of a given health condition. If the insured takes these preventive measures, an insurance discount can be given.

A present example of this is in automobile insurance. Since it has been found, statistically, that non-smokers and non-drinkers create fewer risks, rates for such insureds are reduced accordingly. In addition, awards are given for those who take preventive measures to reduce their risk. Thus, an insured can receive a 30% discount on the medical coverage portion of auto insurance if he or she drives a car with an air bag. Such classifications comparatively burden those designated as higher risk (no air bag, smokers, drinkers). The rates, however, are fair because each insured pays proportionately to the degree of risk. Moreover, those at higher risk have an opportunity to alter their lifestyles to place themselves in the lower risk category.

These principles can be applied to risks found from genetic screening. If, for example, a person was screened for susceptibility to contracting heart disease, the insured could take measures in diet and exercises to extend his or her life and thereby reduce the risk category, or receive a discount from the higher risk premium. For those who cannot take measures to control their risk, and as a result cannot obtain insurance, there are alternative coverages that should be made available by risk-pooling, as will be discussed below.

The future brings greater possibilities for preventing the onset of genetic-based disease. At the same time that genes for various diseases are discovered, new treatments for genetic ailments are being developed. For example, in the case of an early-life emphysema, scientists have found a genetic defect that is at the root of

124. See Abraham, supra note 12, at 67.
125. Gerber, supra note 14, at 1212.
126. Id. at 1208.
127. See Carey et al., supra note 1.
128. See statutes cited infra notes 139 to 149 and accompanying text.
129. See Carey et al., supra note 1. Emphysema is a breathing disorder which is caused by a thinning and breaking down of lung lining. Smoking is known to be one cause for this disorder.
GENETIC SCREENING

of the condition in 95% of the victims. The researchers developed a therapeutic technique for delivering a normal gene into the body of the victim, so that the gene could cause the cells to function properly, and halt the furtherance of damage to the lungs. Gene therapy opens tremendous possibilities for the actual curing of serious genetic disorders. If these cures are successful, insurance rates could be lowered (because the insurance risk of the cured individual goes down), which could result in a decrease in the number of "uninsurables."

Treatments for some genetic disorders are on the horizon. Yet, some individuals whose risks are too high will still face the status of being "uninsurable." To enable insurance coverage for these "uninsurable" risks, several states have enacted risk pooling legislation. In California, various parts of the insurance code prohibit insurers from refusing to sell insurance to individuals of a particular risk. Nothing in the legislature, however, addresses the particular problem of insuring the "uninsurables."

V. A SUGGESTION FOR RISK POOLING LEGISLATION IN CALIFORNIA

In suggesting that California adopt risk pooling legislation, this comment does not purport to hold that state risk pooling legislation is the best or only solution to the problem. The fact that risk pooling legislation has been adopted in 13 states, however, indi-
icates that such legislation can be considered in California at least as a temporary means for protecting those highest risk individuals.

The current risk pooling legislations are similar in form and requirements from state to state. The uniformity of the laws makes it apparent that risk pooling legislation is well-defined. California could adopt the provisions of the other states. The following will be a brief but general description of current risk pooling legislation. The discussion will reflect the uniformity of the law from state to state, rather than serve as a comparative analysis. Presented in the Appendix is an example, in outline form, of risk pooling legislation that could be adopted in California, based on an incorporation of the main provisions contained in current legislation.

The purpose of risk pooling is to provide health insurance for those state residents who otherwise cannot receive insurance. The risk pool is established as a nonprofit corporate entity which issues health insurance to persons who are eligible. The eligibility requirement is satisfied if a person is a state resident and has proof of rejection by at least one insurer for health reasons. The nonprofit entity is comprised of a board of directors. The number of directors varies, but most states require nine. The composition of the board is to represent a variety of groups pertinent to assuring a fair and reasonable implementation of the legislative intent. An example of the required composition is taken from the Utah legislation: health insurance industry, health maintenance organization, physician, hospital, person who is qualified for coverage under the pool, the person’s spouse or parent, the general public, and employers. The insurance commissioner and the director or the department of health are also to sit on the board. The board is appointed by the governor or insurance commissioner.

The board is given general powers granted to insurance companies of the respective states. These powers include entering contracts, setting rates, issuing policies of insurance, the ability to sue or be sued, and electing an administering insurer.

The health care expenses covered under the pool are the cus-

---

140. See id.
141. Id.
142. Id.
145. Id.
tomary and reasonable charges for medically necessary health care services which exceed the amount of deductible. These would include major medical expense coverage, prescription drugs, professional services for the diagnosis or treatment of injuries or disease, radiation therapy, anesthetics, X rays and laboratory tests, and services for diagnosis and treatment of mental and nervous disorders.\footnote{146}{Id.}

The insurance pool premium rates are ultimately determined by the board and may not be unreasonable. The premiums of the five highest volume insurers offering a comparable coverage as the pool are used as a standard from which the applicant will be charged a certain percentage above this rate.\footnote{147}{Id.} Usually, the rates are 135\% to 200\% of the standard. One state provides a discount schedule for those uninsurables who also cannot afford to pay the premiums set by the risk pool.\footnote{148}{Wis. Stat. Ann. §§ 519.165 (West 1990).}

This comment has incorporated the risk pooling legislations of the other states into an outline.\footnote{149}{See Appendix.} The reason for doing this is two-fold. First, it enables visualization of the general provisions of current risk pooling legislation. Second, it provides a framework for risk pooling legislation in California.

VI. CONCLUSION

Genetic screening is a valuable tool for underwriting health insurance. The technique allows for a more accurate assessment of insurance risks and as a result, makes setting of rates more precise, and therefore, fair.

Opposition to insurers’ use of genetic screening is based on the moral consequences. Such a view is flawed, however, because such moral consequences stem from the existence of the technology itself, and not from its use in insurance. Measures can be taken to diminish the moral problems arising from the technology. Insurers, however, must be left alone.

Genetic screening could replace highly objectionable variables such as sex in the underwriting scheme. Thus, at the same time that rates could be set more fairly, the concern over allowing insurers to continue to discriminate based on factors that are unlawful for other businesses to use would be alleviated.

Whether or not insurers embrace genetic screening, the unfor-
The unfortunate situation of certain persons being deemed "uninsurable" is an unavoidable aspect of private insurance. The law needs to accommodate for the misfortunes of these few "uninsurables." Some states have enacted risk-pooling legislation in answer to this problem.

California currently is in the process of deciding the question of the use of genetic screening by insurers, and is questioning how to deal with the inevitability of "uninsurables." In light of the value of genetic screening in insurance underwriting and the social desirability in maintaining equity in insurance rates, California should not prohibit the use of genetic screening. To guarantee insurance for those in the highest risk groups, California should consider enacting risk pooling legislation.

APPENDIX

CALIFORNIA INSURANCE CODE

COMPREHENSIVE HEALTH INSURANCE RISK POOL ACT

I. Legislative Intent

The purpose and intent of the general assembly is to provide access to health insurance coverage to all residents of the State of California who are considered uninsurable or underinsured.

II. Creation of Pool

A. There is hereby established a nonprofit entity known as the California Comprehensive Health Insurance Risk Pool. All insurers authorized to issue health insurance in this state and providing health plan benefits in this state shall be members of the pool as of the date this section is enacted.

B. There shall be established a board of directors consisting of nine (9) members, to be selected collectively by the governor and insurance commissioner. The members of the board will represent the following groups:
   1. Domestic insurance industry
   2. Nonprofit health care service
   3. Health maintenance organization
   4. Physician
   5. Medical research faculty
   6. Hospital administrator
   7. An “uninsurable” insurance applicant
   8. General public
   9. MediCal

C. The board shall operate as a board of directors of any nonprofit entity, and have a fiduciary obligation toward the entity.

D. The board shall have the power to
   1. Enter into contracts as are necessary to carry out requirements and policies of this section.
   2. Review applications of prospective insureds.
   3. Sue or be sued.
   4. Establish rates and coverages.
5. Appoint technical personnel for actuarial and underwriting processing.
6. Pool risks among members.
7. Determine all risk-sharing policies not contained in this section.
8. Enter into any other transaction or do any other business allowed of insurers.

III. Eligibility

A. Who is eligible
   1. A person is eligible for a risk pool policy upon a showing that the person has been rejected by two (2) carriers of health insurance for health reasons, including results from a genetic test.
   2. No person who is currently eligible for a federally-funded or state-funded health insurance plan will be eligible to participate in the Risk Pool Act.
   3. Any insured who is no longer in the category of "uninsurable" is no longer eligible for assistance under this plan.

B. Risk assessment
   1. Insured's health risk will be assessed.
      a. biennially, if insured is below the age of 50.
      b. annually, if insured is age 50 or older.
      c. annually, if insured is among the following enumerated groups (list those ailments, found by genetic screening or otherwise, which pose serious health risks but can be controlled, such as heart disease, or genetic ailment which can be treated by gene therapy).

IV. Health Coverage under Plan

A. Expenses Covered
   1. Covered expenses are the usual and customary charges for medically necessary health care services that exceed the deductible amounts, including gene therapy.
   2. Eligible medically necessary health care services will be defined by the board.
   3. These expenses shall include, but are not limited to:
a. Medical emergency expenses
b. Hospital stay and treatment
c. Prescription drugs
d. Professional services for the diagnosis or treatment of injuries or disease.
e. Radiation therapy
f. Oxygen
g. Surgery
h. Gene therapy

V. Health Insurance Pool Premium

A. Rates for coverages issued may not be unreasonable.

B. Premium rates must take into consideration the extra morbidity and administration expenses, if any, for risks insured in the association.

C. A standard pool rate shall be determined based on the average rate of the five (5) largest carriers of benefits comparable to the coverage offered by the pool.

D. The rates for a given classification may not be more than 175% of the standard pool rate.

E. If the rate approved by the board exceeds the applicant's ability to pay, the board shall grant a discount at a rate to be set by the board.