

**Underwriting Health and Security: Insurance as
Health-Enabler in the Molecular Age
–a scoping study**

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EXECUTIVE SUMMARY

Insurance is both a health-enabler and a (social) security provider. The two services are intimately linked. Insurance products may directly help people provide for their health care. Those in good physical health, however, tend also to be those in good financial health. Insurance provides a means of restoring people to a measure of financial health in the event of accident, injury or death. It helps put them back into social circulation. In these ways insurance – health, accident and life assurance - provides a supplementary measure of social security. Molecularisation has profoundly impacted on medicine. Molecularisation is profoundly impacting also on insurance; specifically health insurance and life assurance. That impact is affecting the role of insurance as health-enabler and security provider.

This project will conduct a pilot study of insurance as a health-enabler and security provider in the molecular age with a view to providing a continuing basis of expertise for keeping the changing relation of medicine, insurance and security under review. Specifically the pilot project will provide an initial assessment of

- 1 Key developments in the molecularisation of medicine
- 2 Impact of key developments in the molecularisation of medicine on medical insurance
- 3 Impact of key developments in the molecularisation of medicine on Life Assurance.

The findings in 1-3 above will be specifically directed towards informing the operation of the current moratorium on the use of predictive genetic testing for life assurance. It is envisaged that this may also help inform debate about the impact of molecular medicine on health insurance as well. The project will also foster an interdisciplinary academic capacity within Lancaster University to keep this developing problem area under review.

The target audience are the stakeholders within the moratorium. These include in particular: HM Government, the House of Commons Select Committee on Science and Technology, the Human Genetics Commission, The Genetics and Insurance Committee, The Association of British Insurers, the Institute and Faculty of Actuaries, the Wellcome Trust, and Patient Groups.

DETAILS OF THE SCOPING STUDY

A. Aims

Insurance is a health enabler in three respects; two direct and one indirect. While insurance is an indirect health enabler in as much as it provides an important contribution to social security, itself critically related to standards of health, this research is focused on insurance as a direct health enabler. Insurance is a direct health enabler in the form of health, accident and life insurance. Insurance is however also a direct health enabler through the ways in which it requires certain behavioural standards. These specify eligibility for insurance and the honouring of insurance contracts; the obligation to declare previous claims provides a simple illustration of the point. Certain approved behavioural standards may also however

allow insurance to be purchased at reduced premiums. Actuarially, this is specified in the category of 'preferred lives' .¹

Both health and insurance have been impacted by the molecular revolution. This interdisciplinary research proposal is a pilot proposal designed to address the impact of the molecular evolution on the direct and the indirect role of insurance as a health enabler. It also proposes, however, to lay the groundwork for a sustained interrogation of the impact of the molecular revolution on the intersection of health and insurance. It does so by asking in the first instance: 'What happens to the health-enabling role of insurance when the health to be insured and the life to be assured become subject to molecularisation?'

To that end this pilot project has three aims:

1. **Establish an Expert Community:** Lancaster University possesses world-class expertise in the fields of genomics (CESAGen, the ESRC Centre for Economic and Social Aspects of Genomics), health research (Institute for Health Research and Biomedical Sciences Unit), and biopolitical configurations of security and social security (Department of Politics and International Relations). The first objective of this pilot project is to constitute an expert community out of this pool of talent by bringing its research skills to bear on the intersection of health, insurance and genomics.
2. **Map Key Features of a Newly Emergent Problem Space:** The second aim of the project is to contribute more widely to the current mapping of the key policy issues raised by the intersection of genomics, health and security.
3. **Specify the Operationalisation of 'Preferred Lives' under Molecular Conditions:** Reviewing the history and status of the current moratorium on predictive genetic testing in the insurance industry, the project's third objective is to use that expertise to advance knowledge in understanding the changing technical and behavioural specification of the category 'Preferred Lives', in general, and that of the newly emerging category of 'the person genetically at risk' (Novas and Rose, 2000) in particular under the molecular conditions now increasingly employed in both medicine and insurance to specify life itself.

B. Preliminary Research

1. A New Problem Space: Health, Genomics, Security

The grant proposer is internationally recognised for documenting what happens to security practices when 'life' is taken as the referent object of security: 'biopolitics of security' (Dillon and Reid, 2001, Dillon, 2001, Dillon, 2005c, Dillon, 1995, Dillon, 2005a, Dillon, 2005b, Dillon, 2004, Dillon, 2005). He is also recognised for interrogating the impact of the digital and molecular revolutions on security practices concerned with the biopolitical governing of life processes (Dillon, 2003, Dillon, 2002). These not only extend our capacity to intervene in life processes. They profoundly change our understanding of what it is to be a living thing.

¹ Preferred lives is an actuarial term of art that refers to 'lives chosen according to criteria in addition to sex and tobacco use, and are expected to experience lower mortality as a group than the remaining non-related lives of the same age, known as residual lives'
Munich Re (1999) *The Concept of Preferred Lives*, Munich, Munich Re Group.

Changing accounts of the vital signs of life thus impact on the intervention strategies employed in its promotion and protection.

Biopolitics of security² therefore constitute a point of intersection between how life is governed and how life is promoted that extends beyond traditional accounts of life, health and security. It constitutes a new interdisciplinary problem space for health research, in particular, in which traditional policy issues and traditional domains of expertise are intimately related to newly emerging genetic and behavioural technologies. Medicine too thus profits from such an interpretation. When the science that informs the concept of life becomes molecularised so do concepts of normality and illness and their related health-enabling technologies. (c.f. Collins, 1999) Connecting health and insurance by construing insurance as a health enabler is then a natural outcome of biopolitical security analysis. One supported in detail also by their co-evolution historically.

From a biopolitical perspective it is therefore natural, indeed imperative, to interrogate interconnections between expert communities in the protection and promotion of life. That imperative is all the greater when what it is to be a living thing undergoes profound transformation and change. Here, in particular, the molecularisation of medicine and the specification of life genetically are impacting directly on medicine and biopolitical security in the form of insurance in ways that have extensive implications for the ways in which - providing health insurance and life assurance as well as changing moral economies of behaviour - insurance operates as a significant health enabler.

2. Insurance as Health-Enabling Technology

While the generic problem space is that triangulated by the changing relation between health genomics and security the grant proposer and named researcher have already been engaged in work on specifying how insurance operates as an effective technology of governance concerned with the promotion and protection of life (Rose, 2000, Dillon, 2004, Baker and Simon, 2002, Ericson and Doyle, 2004, Ericson et al., 2003). In this and current work sponsored by Lancaster University Institute for Advanced Studies, Dillon and Lobo-Guerrero explore how insurance enables individuals and collectivities to function effectively as social and economic agents. Insurance is the means by which individuals, for example, secure their health, their property, their income and their old age. No insurance, no car, no mobility; no mortgage, no property ownership; no critical illness cover, no protection against heart disease, a stroke, cancer, etc.; no insurance, in the form for example of annuities and investments, no secure old age. The security provided is not a prophylactic security; it is a reparational one. Insurance does not directly prevent people from falling ill, having their property stolen, walking under a bus or losing their jobs. Insurance provides a reparational security that compensates people for losses they may suffer so that they may continue to function economically and socially. In addition, it furnishes them with a means of directly accessing health care provision and, through the moral economies instituted by insurance, of changing their behaviour in ways that directly impact upon their health as well.

² Biopolitics of security is a term of art in politics and international relations. Differentiated from state security, human security and 'biosecurity', it is concerned with the problems and practices associated with taking 'life' as the referent object of security.

Behavioural change is also directly encouraged through insurance because approved behaviour is a condition of becoming insurable. A moral economy of information transparency and exchange is instituted, for example, because failure to disclose relevant information will invalidate an insurance policy. Failure to follow a healthy lifestyle –smoking, practicing risky sports, for instance– affect insurance provision as well. As Behavioural Health Enabler the moral economies instituted by insurance (Baker, 2000, Rose, 2003, Rose, 1999, Ericson and Doyle, 2003, Glenn, 2003) directly relate to behavioural medical concerns as well. It is here, not only in relation to the specification of life but in particular of ‘preferred lives’ that insurance directly intersects with the latest developments in medical technology, notably those to do with the development of preventive medicine, molecular medicine and the advent of genetic testing, and behavioural medicine.

3. Genetics and Health Research: Preferred Lives

Changing conceptions of life premised upon interpretations of genetic information have led to different conceptualisations of health (Lemke, 2005, Novas and Rose, 2000, Rabinow, 1994). Categories of health and illness follow conceptualisations of life and patterns of normality determining states of welfare. When the science that informs the concept of life becomes molecularised so do the conceptions of health upon which such life is promoted. If concepts of normality and illness change, so do the technologies through which health is promoted. So also do those of ‘preferred lives’. The category of ‘preferred lives’ is of equal relevance to insurance and medicine. It is likely to become more so: viz. “The potential impact of behavioural interventions in prevention and treatment raises the question as to why they do not feature more strongly in research, policy and practice” (Marteau et al., 2006). Preferred Lives thus provides a very concrete basis for interrogating the link between health and insurance in the molecular age as each of these enterprises responds to the ways in which the molecular revolution impacts on the other. Insurance is not unaffected by medical advances because the very life to be assured, for example, is coming to be defined and specified in new ways. Health care is similarly not unaffected by transformation in the provision of insurance. Indeed insurance is now a live issue once more in debates about the strategic level of the provision of health care. Our concern is however much more empirically focused on the changing operationalisation of the category of ‘preferred lives’ at the intersection of medicine and insurance as each is impacted in detail by the progress of the molecular revolution.

Pursuing this research question while providing the means of keeping it under continuing elaboration and review requires the mobilisation in addition, however, of an inter-disciplinary research group. Lancaster University is uniquely well equipped to do that through the support of the Centre for Economic and Social Aspects of Genomics (CESAGen) and the Institute for Health Research (IHR), for this project. Professor Brian Wynne (CESAGen) and Professor David Clark (IHR) have agreed to be Project Collaborators to develop collaboration already instituted between them through Lancaster Institute for Advanced Studies ‘Preferred Lives’ Workshops and CESAGEN workshops on Bio-economy.

C. Relevance of the project to policy and practice

A concordat and moratorium is currently in place in the UK preventing insurance companies from using genetic testing for the purposes of underwriting insurance policies (HM Government, 2005). The current moratorium extends one first introduced when the issue of genetic testing and life assurance arose in the late 1990s (Actuaries, 2001, Commons, 2001, HGC, 2001, HGC, 2001). A complex public-private regulatory network has however arisen in the process of the negotiation, institution, and extension of this moratorium since the late 1990s. It involves the insurers in the form of The Association of British Insurers, as well as HM Government, but it has also engendered intermediate agencies like The Human Genetics Commission and The Genetics and Insurance Committee.

Much evidence is emerging and important developments are also taking place under the terms of this concordat and moratorium. This research is specifically concerned to relate that evidence and allied material from molecular medicine to the specification and health significance of the category of Preferred Lives. That category is itself already if only obliquely acknowledged as a significant policy issue for both insurance and health. The relevance of this project will be to raise its status as a policy problematic and to elaborate its ethical as well as its material implications.

Users of the findings of this research comprise: The Human Genetics Commission, The Genetics and Insurance Committee, The House of Commons Select Committee on Science and Technology, HM Government, The Wellcome Trust, The Institute and Faculty of Actuaries, the general public including patient groups, and the insurance industry represented by the Association of British Insurers. Analysis of how the molecularisation of life affects the provision of security through insurance will inform decisions that the above-mentioned institutions will have to make during and at the end of the current moratorium.

In synthesis, the policy and practical relevance of this project will:

- Foster an expert interdisciplinary academic community encompassing genomics, biomedicine, and insurance focused on the intersection of health and the securing of life;
- Advance the current knowledge available to HM Government over the role of insurance as a security provider;
- Highlight the interaction of economic, social, political, medical, biological, ethical, and cultural factors when deciding on the insurability of life and the production of security, not merely as a technological issue but a behavioural and ethical one as well;
- Highlight the category of Preferred Lives and detail its specification in medicine and insurance.
- Enrich the discourse surrounding social debate concerning predictive genetic testing for underwriting purposes.