

# **Genetics 2003**

**Alan Doble**

**IAAust BIENNIAL CONVENTION 2003**



# Genetics Background Papers

- *Genetics in Society, 2001* (IAAust)
- Joint alrc / AHEC Inquiry  
*Protection of Human Genetic Information*
- IP26 – 440 pp – October 2001
  - IAAust response AAJ 8-2
- DP66 – 920 pp – August 2002
  - IAAust Response AAJ 8 - 4
- Final Report – 2 volumes? – May 2003?



# Community Engagement

- **Media, seminars, consultation, education**
- **Alrc / AHEC**
- **IFSA**
- **ASFA / PHIAC**
- **ACCI / BCA / CEDA**
- **Consumers & Stakeholders**
- **Geneticists, Doctors & Lawyers**
- **Government Ministers**



# **Fields of Actuarial Practice**

**Most are affected by genetics**

- **Life Insurance**
- **General Insurance**
- **Health Insurance & Financing**
- **Employment & Superannuation**
- **Academic Research**
- **Wider field areas of Interest**



# Actuaries and Social Policy

- **Should actuaries remain neutral?**
  - present all sides, advocate none
  - This has been the UK approach
- **Should actuaries form a view?**
  - lead opinion, guide directions
  - This has been the IAAust approach



# What is IAAust Role?

- **Preservation of Status Quo?**
  - Protecting mainstream interests
- **Or, thinking outside the square?**
  - May undermine an area of interest,  
... but progresses thought
  - May be of more benefit to society
  - (CLIP example, refer later slides)



# **Airc /AHEC did NOT Cover**

- **Genetically modified foods**
  - (*Gene Technology Act 2000* & OGTR)
- **Human Cloning**
- **Genetic Engineering**



# **Covered by alrc / AHEC :1**

- **Human Genetic Research**
- **Human Genetic Databases**
- **Health Services**
- **Law Enforcement & Evidence**
- **Other Contexts**
  - **Proof of parentage, kinship or ethnicity**





# Non Traditional Areas

- **Should IAAust always comment?**
- **In areas of limited actuarial expertise**
  - **Ask the taskforce to research & respond?**
  - **Or, ... Keep silent?**



# **Covered by alrc / AHEC: 2**

- **Introduction: general background**
- **Genetic Testing**
- **Regulatory Framework**
- **Insurance (primarily life insurance)**
- **Employment**



# IAAust Supported Principles

- **Establishment of HGCA**
  - Human Genetics Commission of Australia
- **Consistency of regulation**
- **Protect at the highest available level**
  - Protection of Information
  - Protection of tissue samples
  - Ethics in research & accreditation
- **Equality of treatment for genetic data**



# **(Life) Insurance Underwriting**

- **Genetic or Non-Genetic => equal weight**
- **Life / General / Health / Super**
- **Inquiry mostly supports current practices**
- **IFSA Code provides sensible protections**
- **Is family history genetic information?**
- **+ve discrimination / moratorium / bans?**
- **Other Alternatives**



# Innovative Thinking

- **Alternative Sources of (Life) Insurance**
  - Credit Insurance
  - Superannuation
  - Non Underwritten Direct Business
- **When to apply for insurance?**
  - Before genetic testing?
- **Special insurance pools**
  - Only for the genetically disadvantaged?



# Public Welfare Alternative

## AAJ 8-4 App 2: Community Life Insurance Pool

- Insurance as a Public Good
- Social Security type benefit
- What types of cover?
- What rules? (age, citizenship, residence)
- How much cover? (what cost?)
- Any Cross Subsidisation?
- Administration?



# Employment Contexts

- **Having a disability ...  
v ... suffering disablement**
- **Illegal to discriminate in employment ...  
v ... must pay claim in superannuation**
- **Answer: depends on degree, and timing**



# Employment Case Studies

- **Imminent disablement (< 1 year)**
  - Eg terminal bowel cancer
- **Short term disablement (1 to 5 years)**
  - Eg motor neurone disease
- **Medium term disablement (5 to 15 years)**
  - Eg Huntington, HIV+, Insulin diabetes
- **Long Term higher disablement risk (>15)**
  - Eg Smoking, BRCA1 +





# Where to from Here?

- **IAAust to stay interested in genetics?**
- **Should we:**
  - **Maintain a special taskforce, or**
  - **Rely on permanent Practice Committees?**
- **Be active or passive?**
- **Innovative or reactive?**



# Prospects for Actuarial Work

- **Actuarial Statistics & Research**
  - Numerical Rating System
  - Multi-state Markov Models
- **Joint work with other researchers?**
- **Funding available through HGCA?**
- **Outline in AAJ 8-4 Appendix 1.**



# Future Direction

- Any other suggestions?
- Should IAAust be changing direction?
  - In what way?
  - How fast?

