



International Actuarial Association Health Section  
2007 Colloquium

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# Actuarial Developments in SA Health Care

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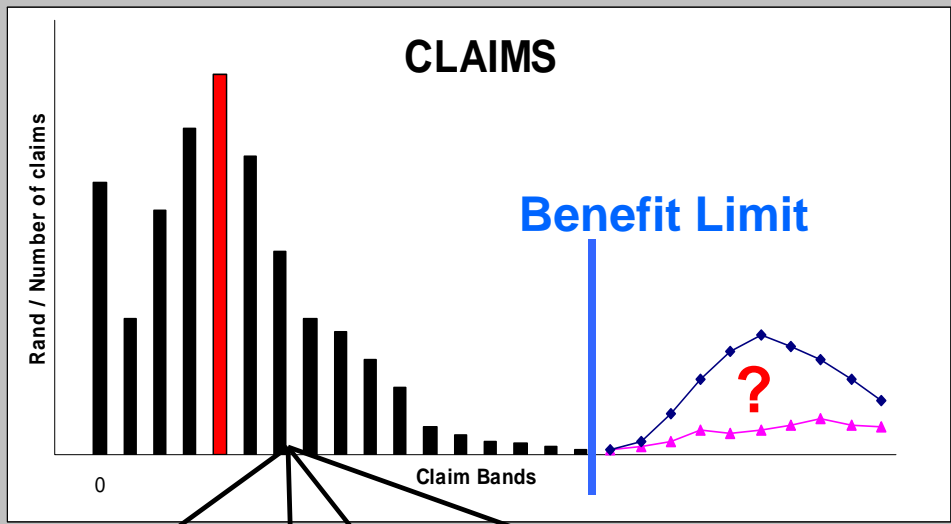
15 May 2007

# Developments

- Actuaries in South Africa started getting more involved in providing health care advice in the early 1990's
- One of the first areas of advice was on post-retirement medical assistance liability valuations – Helen
- With the de-regulation of the medical scheme market in South Africa in 1993, and as more large insurance companies got involved in health care, the involvement of actuaries also increased
- The promulgation of the new Medical Schemes Act in 1998, increased the demand for actuarial services over time, in respect of non-profit medical schemes
- SA Actuaries also continued to be involved in health insurance, such as disability and CI insurance

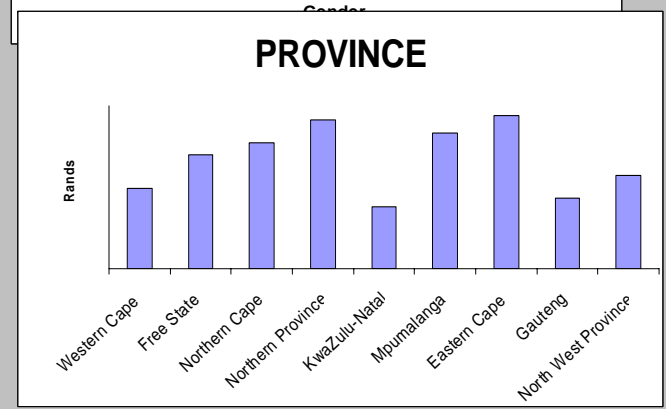
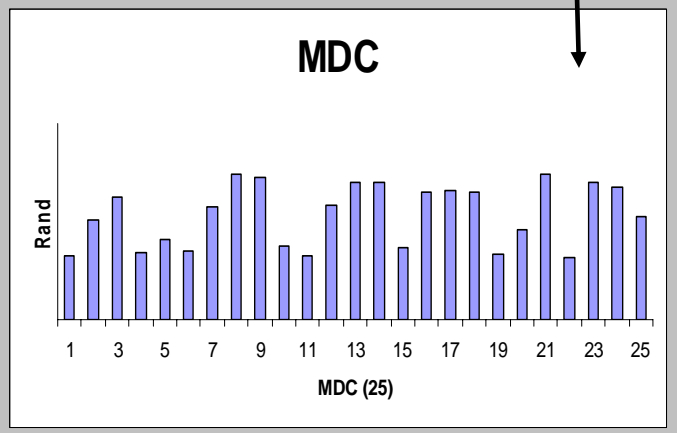
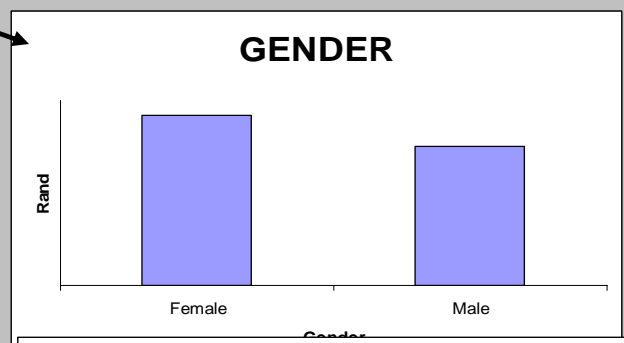
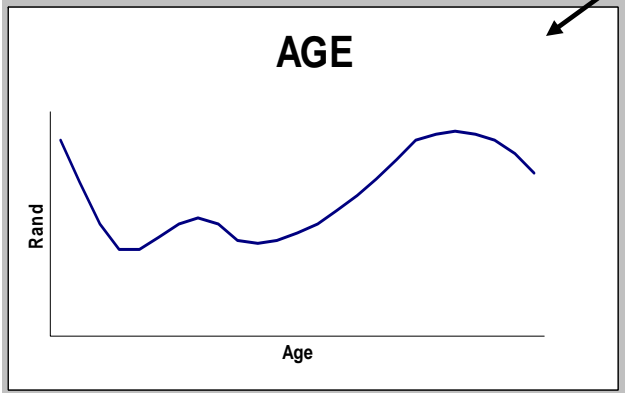
# Development

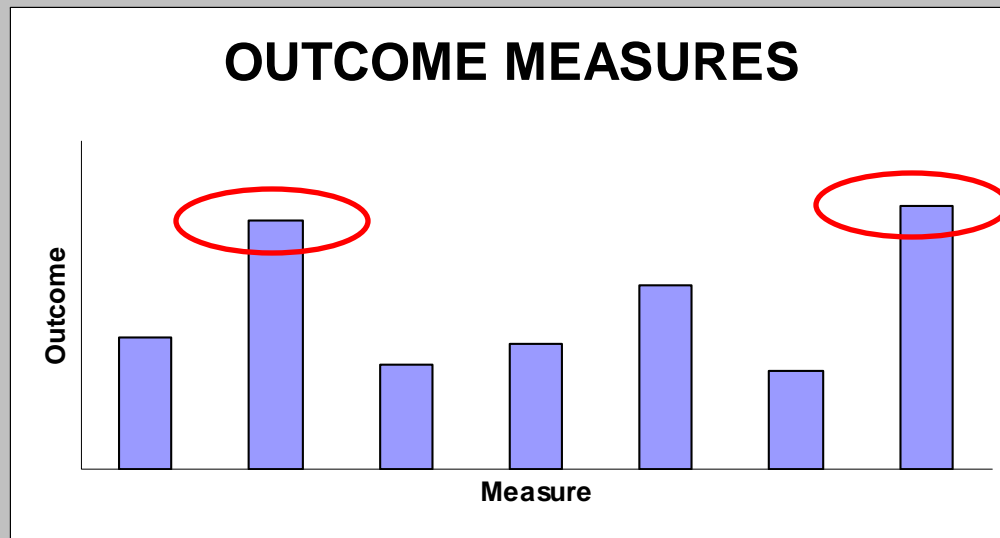
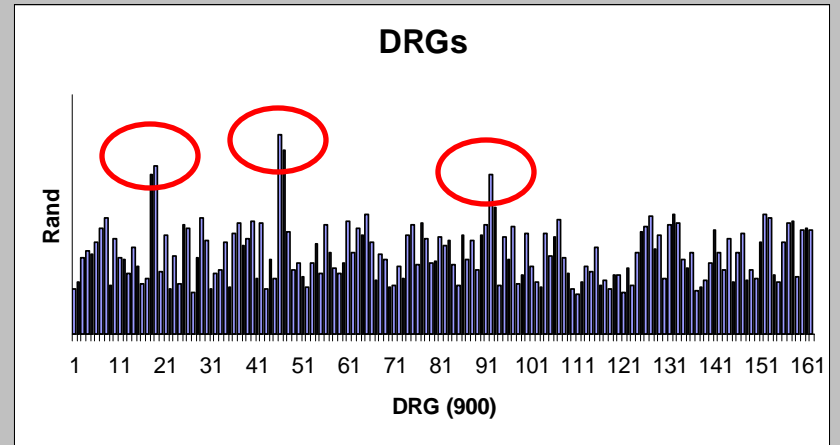
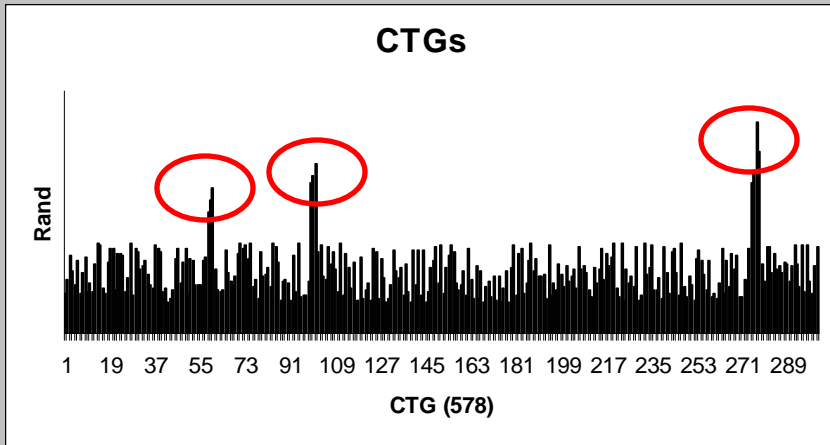
- Major areas of involvement with medical schemes:
  - Pricing
  - Benefit design
  - Managed care, including risk sharing arrangements
- Latest technical developments:
  - With availability of more reliable ICD-10 codes, and CPT4, scientific and detailed risk adjustment is becoming more and more advanced
  - GLMs used in conjunction with DRGs and CTGs
- Involvement in regulatory development
  - Risk Equalisation Fund
  - Advanced formulae for equalisation of many in-hospital and chronic conditions



By option

GLM





eHR

# Development

- Further, since 1990 ASSA has also been developing and refining the HIV / AIDS demographic model, for South Africa and 10 other African countries
- This model is used in a wide variety of contexts, including insurance and in government policy and planning
- It is an advanced multi-state model, including sophisticated elements such as the impact of the general introduction of anti-retroviral therapy and migration, and is calibrated every year to a wide variety of data, particularly antenatal statistics produced by the DoH
  - See [www.assa.org.za](http://www.assa.org.za)

# Development

- The demand for South African health care actuaries has increased steadily from the early 1990s to now
- And this will continue
- We are uniquely placed to evaluate the impact of various policy changes (e.g. REF), develop innovative ideas (such as CDH), and use advanced modelling (e.g. risk adjustment with diagnostic groupers and clinical staging)
- We now also have our own health care Fellowship exam  
- Adrian