

ST. JOHN'S COLLOQUIUM

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THE PERSONALIZED MEDICINE REVOLUTION

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Pieter Cullis

Jacques Boudreau

Emile Stipp



IAA Health Committee Briefing Note

- Preview of *The Impact of Personalized Medicine and Genomics on the Insurance Industry*
- Aim: high level overview & introduction to the topic
- To be released before the end of this year

Genome Sequencing

- Cost decreasing rapidly: from \$2.7bn in 2003 to \$200 now
- Applications:
 - Clinical diagnostics
 - Drug discovery
 - Biomarkers for identifying disease
 - Pharmacogenomics
- Whether you like it or not: your policyholders' genomes will be sequenced soon!

Challenges of Personalized Medicine

- Genomic Literacy (of doctors and their patients)
- Ethics (do you want to know?)
- Discrimination (who should know?)
- Privacy and security (who can be trusted to know? Forever?)
- Which organisations have the Big Data capacity to handle this?

Impact of Personalized Medicine on Insurance

- Anti-selection
- ...vs discrimination against policyholders
- The consequences of increased longevity
- Earlier identification of disease
- Higher / lower cost of treatment?

Recommendations

- Learn from past experience
- Be informed about developments
- Think hard about ethics and privacy