



.... so you want to sell International PMI ?

# Dr. Charlie Easmon

Founder Number One Health Group

a doctor's random reflections on health

& data from recent reading and observations



- My son
- Google
- The Spirit Level
- Malcolm Gladwell: Outliers
- Nassim Taleb: Fooled by Randomness and The Black Swan





my son





## According to Wikipedia:

An **actuary** is a business professional who deals with the financial impact of risk and uncertainty. Actuaries provide expert assessments of financial security systems, with a focus on their complexity, their mathematics, and their mechanisms

(Trowbridge 1989, p.7).



## But I bet this will **surprise** you:

In 2010, a study published by job search website CareerCast ranked actuary as the #1 job in the United States (Needleman 2010). The study used five key criteria to rank jobs: environment, income, employment outlook, physical demands and stress.

*A similar study by U.S. News & World Report in 2006 concluded that actuaries were among the 25 Best Professions that it expects will be in great demand in the future (Nemko 2006).*



What are Google doing ?



‘We will bring a unique combination of mathematical ability, business awareness, practical application and communication skills.’

Who does that **sound** like?



# THE WORLD NEEDS ACTUARIES

Address given by the President of the  
Faculty of Actuaries, Ronnie Bowie

Delivered to the Faculty of Actuaries, 6 October 2008



His mother Eugenia, a former NASA mathematician, was diagnosed in 1999 and a genetic test put Mr. Brin's own chances of developing the disease at 80 per cent.

The Google billionaire has described the pace of research into Parkinson's as "glacial" compared to developments on the internet, and hopes his methods will dramatically accelerate the search for a cure.



Mr. Brin, 36, the billionaire co-founder of Google is creating a database of information from thousands of sufferers and will use hi-tech computers to find links between them.

Mr. Brin, who is worth an estimated \$17.5 billion (£11.5 billion), entered the medical research field after discovering several years ago that he has a high chance of developing Parkinson's himself.



He has invited 10,000 Parkinson's sufferers to take part in the project, asking them to pay a nominal fee to make sure they are committed. Around 4,000 have already signed up.

Those involved are sent a test kit, which they spit into and return for analysis. They are also asked to answer detailed questionnaires about their lifestyle, as environmental factors can affect chances of developing the disease.

Algorithms will be used to find meaningful patterns in the flood of data.

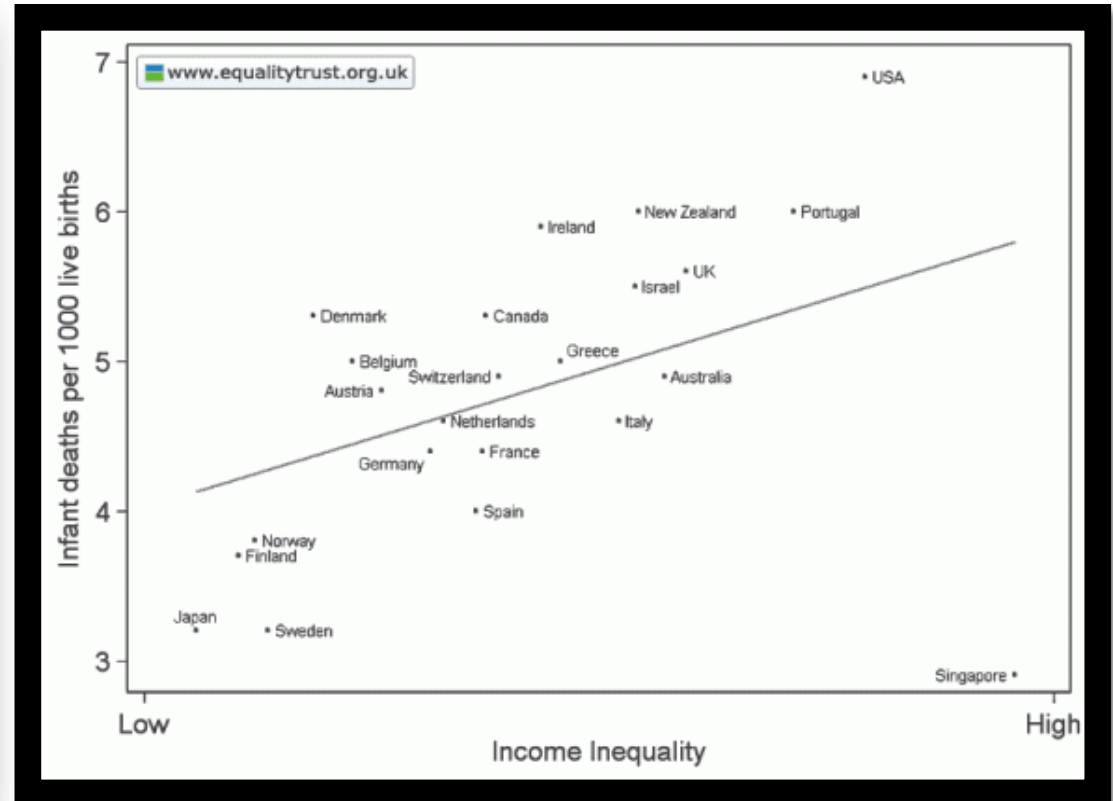
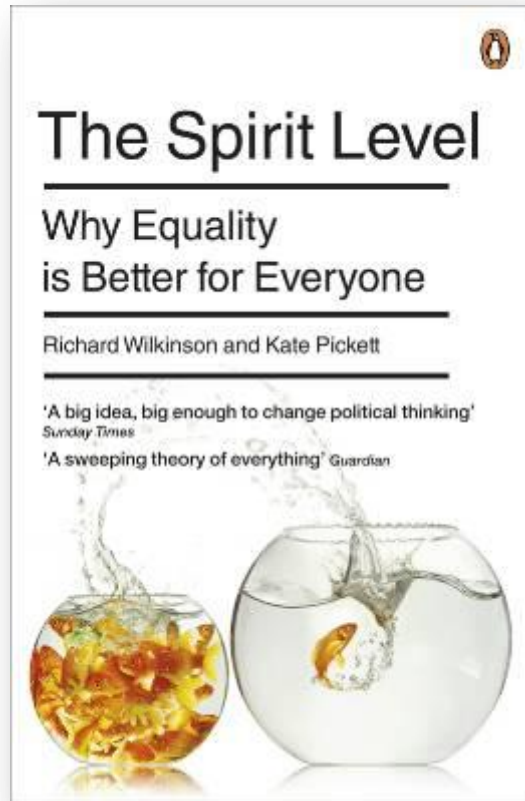


Most previous research into Parkinson's has followed the traditional process of scientists coming up with a hypothesis and carrying out focused studies on smaller groups of patients.

Mr. Brin wants to reverse the process, collecting vast swathes of information first and then using computers to look for trends.

**Google has entered the health field before**, quickly detecting outbreaks of flu and swine flu by tracking search queries entered by internet users around the world.



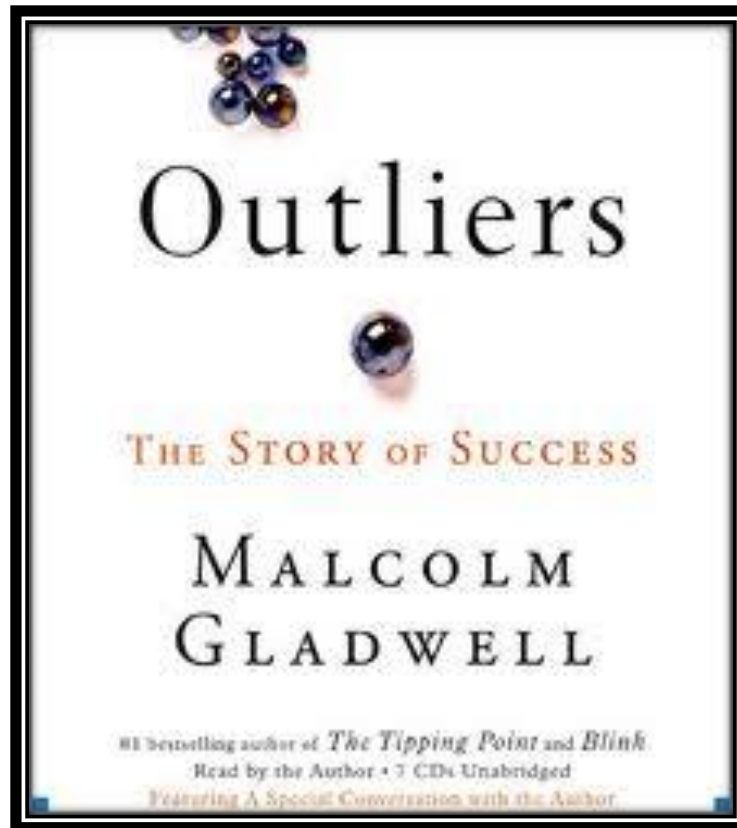


Great inequality is the scourge of modern societies. We provide the evidence on each of eleven different health and social problems: physical health, mental health, drug abuse, education, imprisonment, obesity, social mobility, trust and community life, violence, teenage births, and child well-being. For all eleven of these health and social problems, outcomes are very substantially worse in more unequal societies.

We have checked the relationships wherever possible in two independent test beds: internationally among the rich countries, and then again among the 50 states of the USA. In almost every case we find the same tendency for outcomes to be much worse in more unequal societies in both settings.







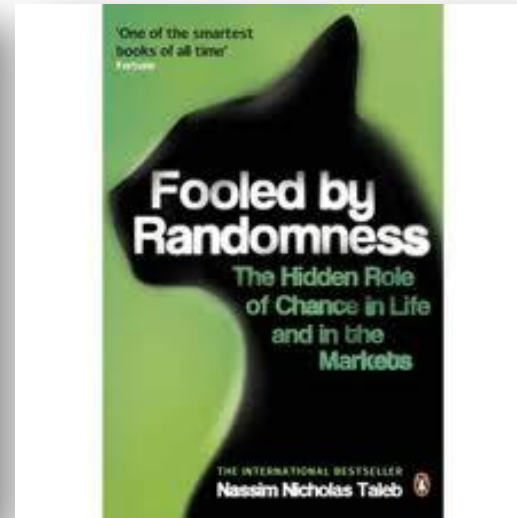
The big finding: A sense of COMMUNITY is GREAT for health

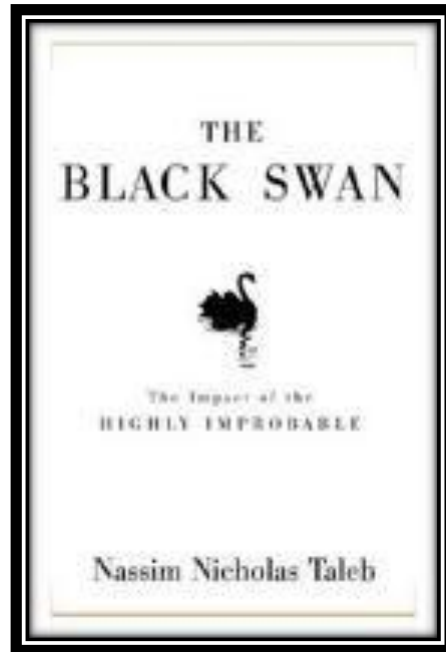
10,000 hours of PRACTICE = EXPERTISE

School holidays are TOO LONG

Look up KIPP Schools: Knowledge is Power programme







the **impact** of the  
highly improbable



*"My major hobby is teasing people who take themselves & the quality of their knowledge too seriously & those who don't have the courage to sometimes say: **I don't know....**"*

*You may not be able to change the world but can at least get some entertainment & make a living out of the epistemic arrogance of the human race.*











## Rarity, extreme impact, and retrospective (though not prospective) predictability.

A small number of Black Swans explains almost everything in our world, from the success of ideas and religions, to the dynamics of historical events, to elements of our own personal lives.



**Taleb** .....recommends employing both physical and functional redundancy in the design of systems.



# Can we link these themes in Health insurance?

Our data may not only be misleading but our ignorance greater than we can possibly realise.

BUT there are new tools and new competitors

We should strive for more equality and communal links to improve health.

*Ironically some of the richest people in the world may help us achieve that and the final words go to...*



**You're worse off** relying on misleading information than on not having any information at all. If you give a pilot an altimeter that is sometimes defective he will crash the plane. Give him nothing and he will look out the window.  
**Technology is only safe if it is flawless.**

*Nassim Taleb*





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