



**MEDILINK INNOVATION DAY**  
& HEALTHCARE BUSINESS AWARDS 2010



**Medilink**  
Yorkshire & Humber

# Mike Gordon

## CEO

### Healthcare at Home Ltd





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# **Innovation in Healthcare**

**Michael Gordon**

**CEO, Healthcare at Home**

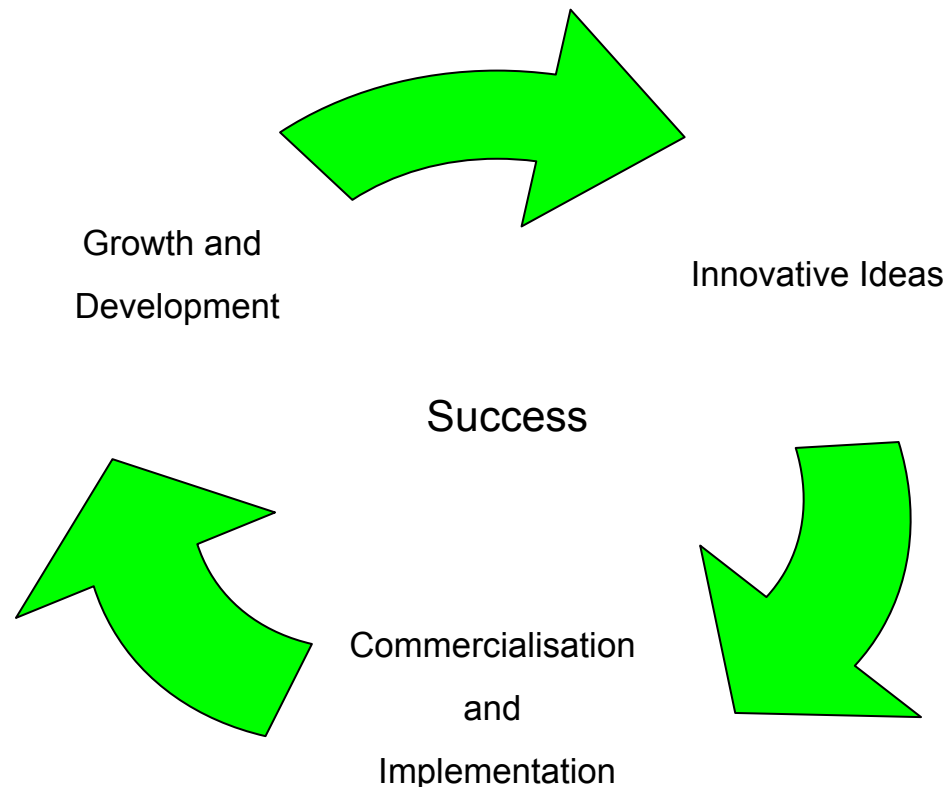


# What is Innovation?

- ▶ In time series analysis (or forecasting) — as conducted in statistics, signal processing, and many other fields — the innovation is the difference between the observed value of a variable at time  $t$  and the optimal forecast of that value based on information available prior to time  $t$ .
- ▶ Innovation is a subscription-based magazine, compiling recent developments in the area of research in Singapore and globally. The format and style is designed to be accessible to an "educated layperson", and also includes relevant fields such as patenting
- ▶ Innovation is a new way of doing something or a creation (a new device or process) resulting from study and experimentation. It may refer to incremental and emergent or radical and revolutionary changes in thinking, products, processes, or organizations

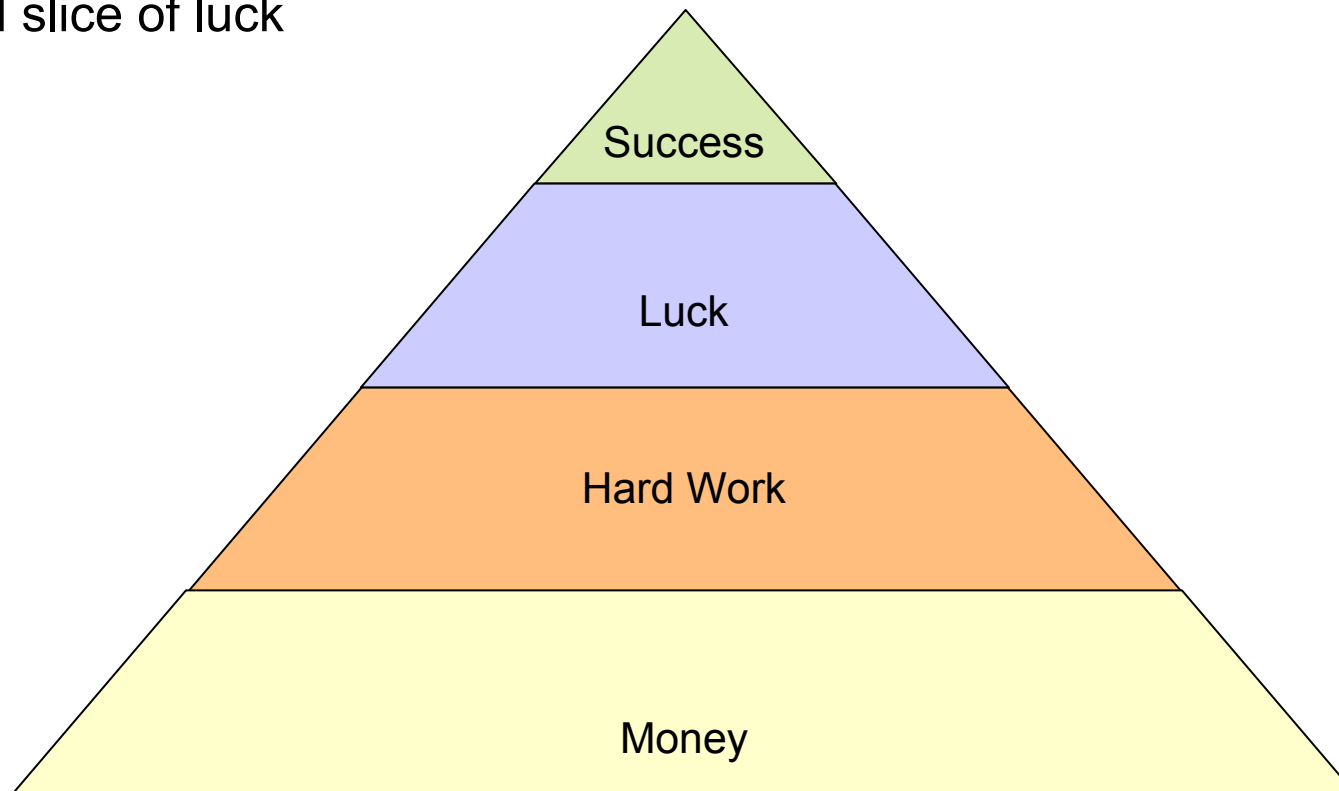
# The three stages of Innovation

- ▶ the origination of an idea to its transformation into something useful
- ▶ its commercialisation and implementation
- ▶ and the process of ensuring it grows and develops



# What is needed to be successful?

- ▶ A good business plan that will convince the Investors, or marry a very, very rich partner
- ▶ A lot of very hard work and long hours from a good team of people
- ▶ A good slice of luck



# The People – the Thinkers and Grafters

People define your company determining its look, feel, culture and values.

You need to have the right mix of people:

- ▶ the “Plant” - highly creative and good at solving problems in unconventional ways.
- ▶ the “Monitor Evaluator” is needed to provide a logical eye,
- ▶ and others such as “Coordinators”, “Resource Investigators”, “Implementers” “Completer Finishers”, “Shapers” and “Specialists”

Knowing who you need at each stage and the balance of the team are key

Money, pressure and capability to grow with the business will all ensure that you will not finish up with the same team you started with!

# The Idea

- ▶ The healthcare system has become a disease care system.
- ▶ 17m people in the UK have single or multiple long term chronic diseases
- ▶ Let's treat those patients where they would like to be treated

## Did it Work?

- ▶ NO
- ▶ The idea was sound. We needed to turn it into something the potential customers wanted to buy. It also needed a lot of hard work and commitment in time and energy. This was the point in time where the people in the team needed to stand up and be counted

# Transforming the Idea

- ▶ We needed to find some 'champions' amongst our potential customer base
- ▶ We needed 'a slice of luck'
- ▶ We got both at a point in time where we had the resources and determination to develop the opportunities presented
  - ▶ The competitor
  - ▶ The pharmacist
  - ▶ The consultant
  - ▶ The pharmaceutical company
  - ▶ The policy change

# What does success look like for us?

- ▶ We remain an independent British company
- ▶ Today we are the leading UK provider of high-tech home healthcare and specialty pharmacy services
- ▶ Over 100,000 patients receive a service from us
- ▶ We prepare, dispense and deliver around 500,000 prescriptions annually to our patients
- ▶ Services are provided across many therapy areas on behalf of the NHS, private medical insurers, pharmaceutical companies, charities and self-funding patients



# We have developed relationships based on trust

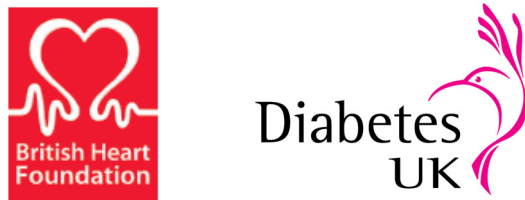
## National Health Service



## Private Medical Insurers



## Charities



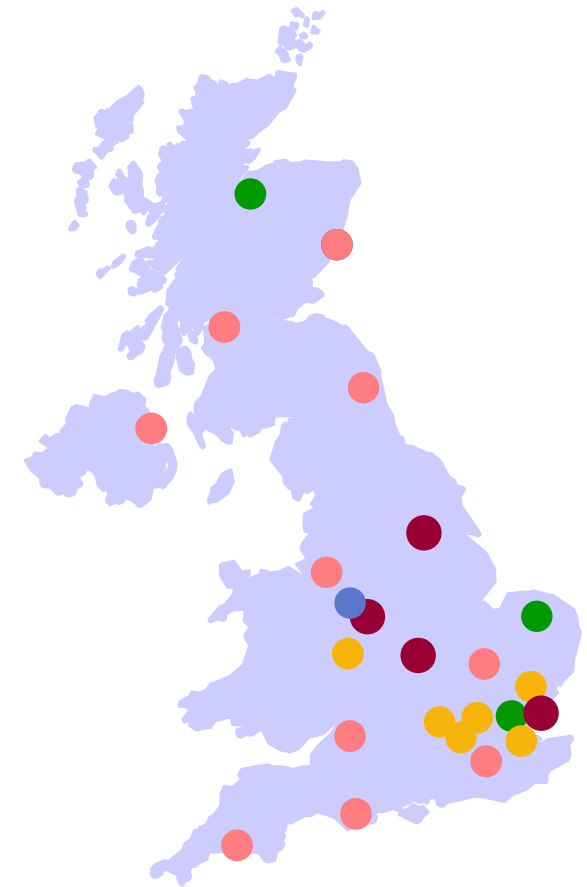
## Self – funding patients

## Pharmaceutical Companies



# We have built an infrastructure to support the customer

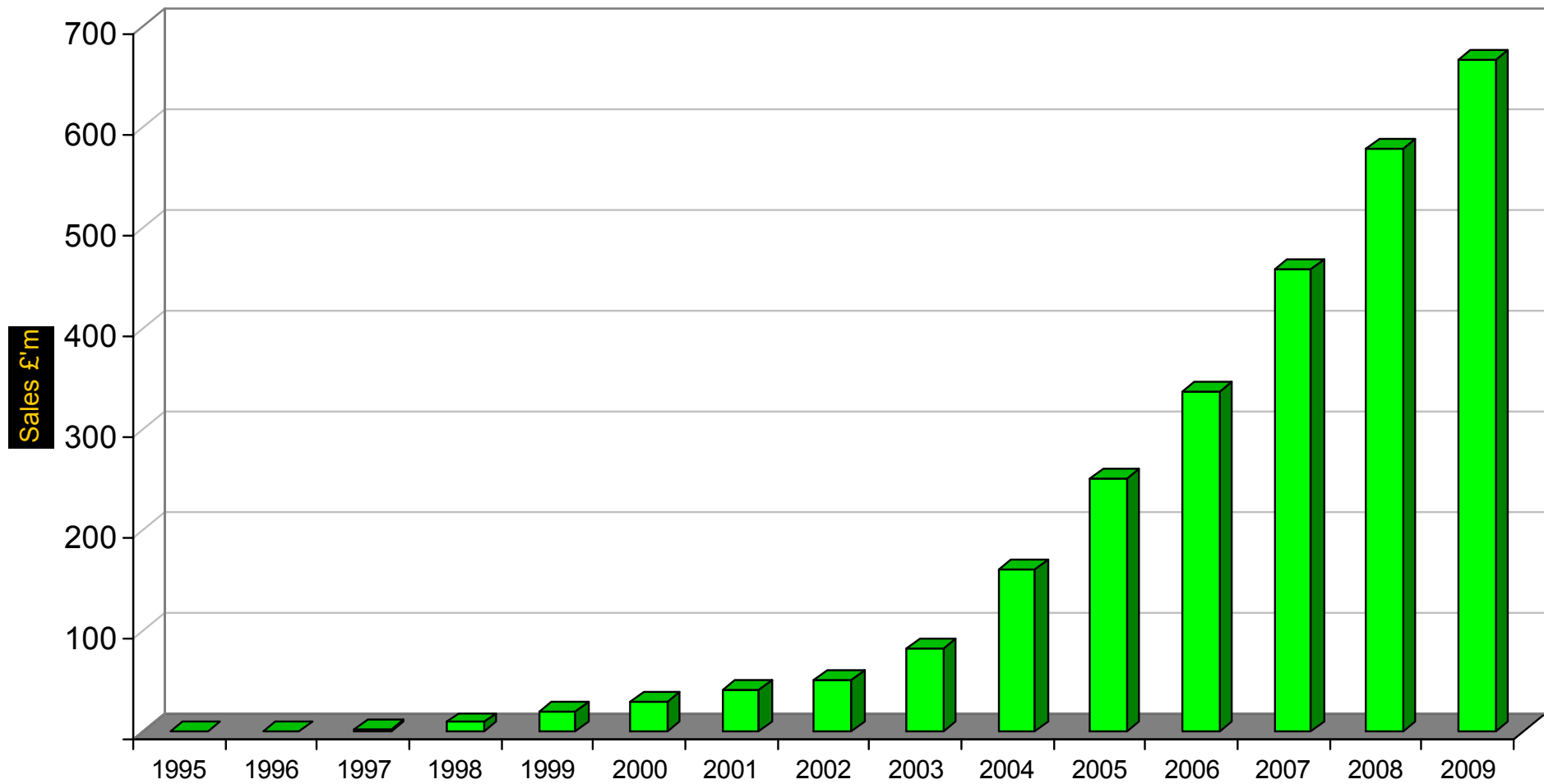
- ▶ National company with a local presence
- ▶ Over 800 employees
- ▶ Over 400 highly skilled clinical staff
- ▶ 24 offices nationally
- ▶ Local 24/7 patient support
- ▶ Audited cold-chain logistics capability



- Head office/distribution centres
- Nursing centres
- Nursing and distribution
- Distribution depots
- Pharmacy



# What can be achieved



# The Future for Innovation?

- ▶ Martin Rees, President of the Royal Society, Astronomer Royal and Master of Trinity College, Cambridge delivered the BBC's 2010 Reith Lectures exploring the challenges facing science in the 21st century
- ▶ Nanobots inside the body repairing damaged organs
- ▶ Repairing damaged genes before the onset of disease
- ▶ Genetically modified children capable of living on another planet
- ▶ The last act of man – to create a machine with human intelligence

# The Practical Future!

- ▶ The move to disease prevention

“In the beginning the malady it is easy to cure but difficult to detect, but in the course of time it becomes easy to detect and difficult to cure” Niccolo Machiavelli 1467 – 1527

- ▶ Comprehensive integrated multidisciplinary programmes delivered in the community

- ▶ Have to remove low value interventions and replace them with high impact interventions

- ▶ The use of telecare and telemedicine to provide vital data, to facilitate and educate

- ▶ The transition to long term self management

- ▶ The continued move towards the home as the key place of treatment for many

- ▶ Focus on outcomes and value for money

# What changes are we seeing?

- ▶ Multi modality – advances in medical imaging that will revolutionise multi-disciplinary clinical meetings
- ▶ Functional MRI, not just to measure the body, but also blood flows
- ▶ Using light to look at how oxygenated neo-natal brains are, borrowing techniques from astrophysics, and light-activated treatment
- ▶ Big revolution in specialist molecular analysis and tests at the point-of-care for LTCs
- ▶ A rise in home tests allowing the continued shift to patient self-management
- ▶ I-phone apps – the informed patient is becoming scary. How do you manage all of the data and knowledge in the right way
- ▶ Miniaturisation means that things that used to be done in labs can now be done by hand-held devices close to the patient
- ▶ Devices that measures vital signs which means the potential for earlier discharge or admission prevention
- ▶ Local measurement of the patient with diagnostic hub for the interpretation and management of the clinical intervention

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# To enable this to happen the medical landscape has to change

This will provide opportunities for innovative people and organisations

- ▶ The culture will have to change
- ▶ The type of staff required will change
- ▶ The availability of medical staff with the right clinical expertise to operate in the community will need to change
- ▶ We will need the mass adoption of telehealth systems integrated into care pathways
- ▶ We will need systems that accurately measure clinical outcomes and service benefits
- ▶ We will need greater collaboration and cooperation between public, private and charitable organisations