

The impact of the genetic revolution on [health services](#) .

The genetic revolution will completely redefine the meaning of health, transform disease management and totally wipe out many diseases. It will also create huge resource problems and urgent ethical dilemmas. The same tools to destroy cancer and cure diabetes could also permanently alter the human race. (Lecture outline by Dr Patrick Dixon - physician and futurist).

[youtube:http://www.youtube.com/watch?v=loXJAeQKZI0]

Comment by Dr Patrick Dixon on science of ageing, health care, life expectancy, medical advances, pensions, retirement, lifestyles and government policy.

- Selection of "intelligent" or "athletic" IVF embryos

- New hair follicles for the bald

- Replacement brain cells to enhance memory

- Enabling pensioners to give birth.

- Reversal or arrest of aging process

- Adding new genes to sperm or eggs

- Cloning of the living - and the dead

Demand will be driven by wealthy well-informed consumers, making their own arrangements online for the bio-enhancements they think they need. Health service providers, insurers and [governments](#) will struggle to adapt last-century care models.

Tomorrow's headlines will include:

- Hundreds of genes linked to diseases and personal profiles
- Preventative medicine becomes a precise risk-management science
- Health messages targeted exactly at those at risk
- Accurate predictions about individual response to medication
- Claims that marker genes help predict personality and intelligence
- Gene therapy for cystic fibrosis, muscular dystrophy and other disorders
- Stem cell repairs for damaged heart, liver, brain, muscle, bone and spine
- Nanotechnology to test or deliver - microbots - injectable bio-machines
- New vaccines for malaria, HIV, cervical cancer

- Birth of "replacement" clones of dead children
- Campaigns against commercial exploitation of human genes / patents
- Concern about a genetic underclass unable to get life or health insurance
- More laws against genetic discrimination in the workplace
- Shifts from treatment to prevention, and from prevention to life-enhancement
- Growing reaction against performance-related genetic refits at a time when 2/3rds of the world lack

But human needs will remain unchanged: to be loved, to be needed, to be cared for, to be comforted. Compassionate, sensitive, professional, expert help will always command the highest respect. Trusted professionals will be in even greater demand in a rapidly changing and confusing world. We need to combine all the best care values of the past with the tools of the future, helping people live active and fulfilling lives.

Dr Patrick Dixon lecture to biotech venture capital investors about future medicine and health care, gene therapy, biotechnology, and the [pharmaceutical industry](#). Dr Dixon is a physician and trends analyst.

Dr Patrick Dixon is a global authority on the future,, a trained physician, a lecturer at business schools and author of ten books including Futurewise.