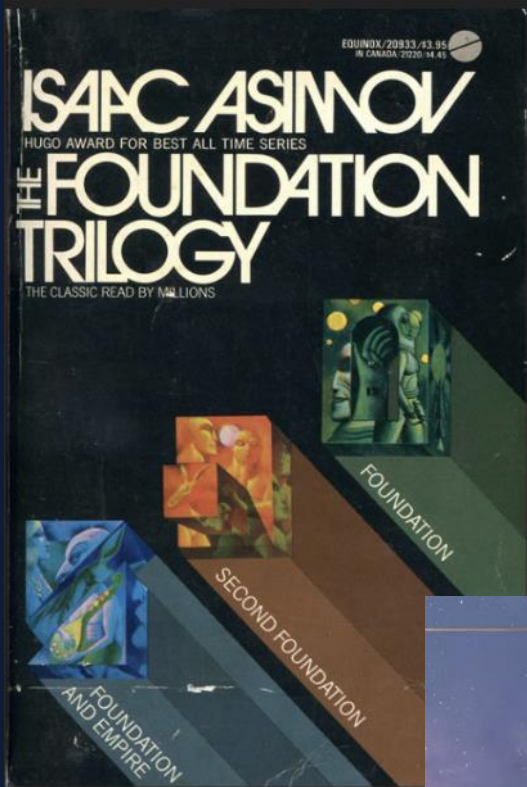




Integrated Care The last 40 years and the next 2

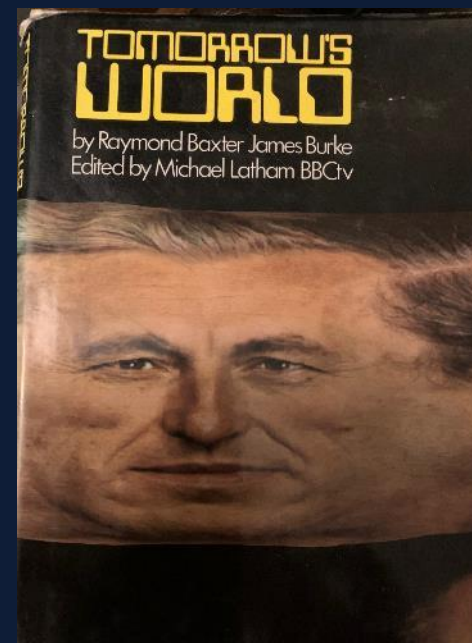
A personal view of the progress of
Digital Health since 1980

1970s - Predictions



Mathematician Hari Sheldon spends his life developing a theory of psychohistory, a new & effective mathematical sociology.

Using statistical laws of mass action, it can predict the future of large populations.



Old
Burkster's
Almanac

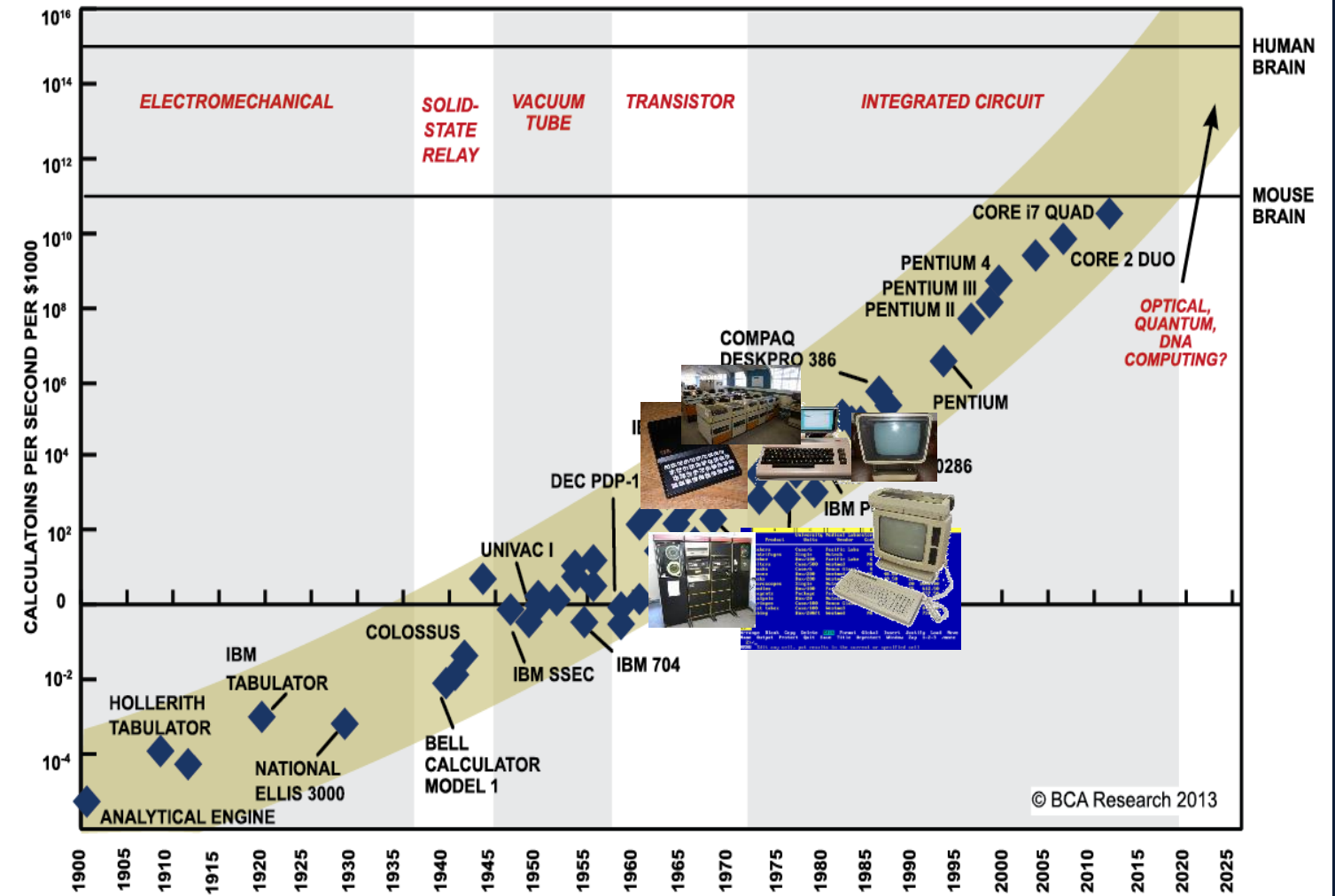
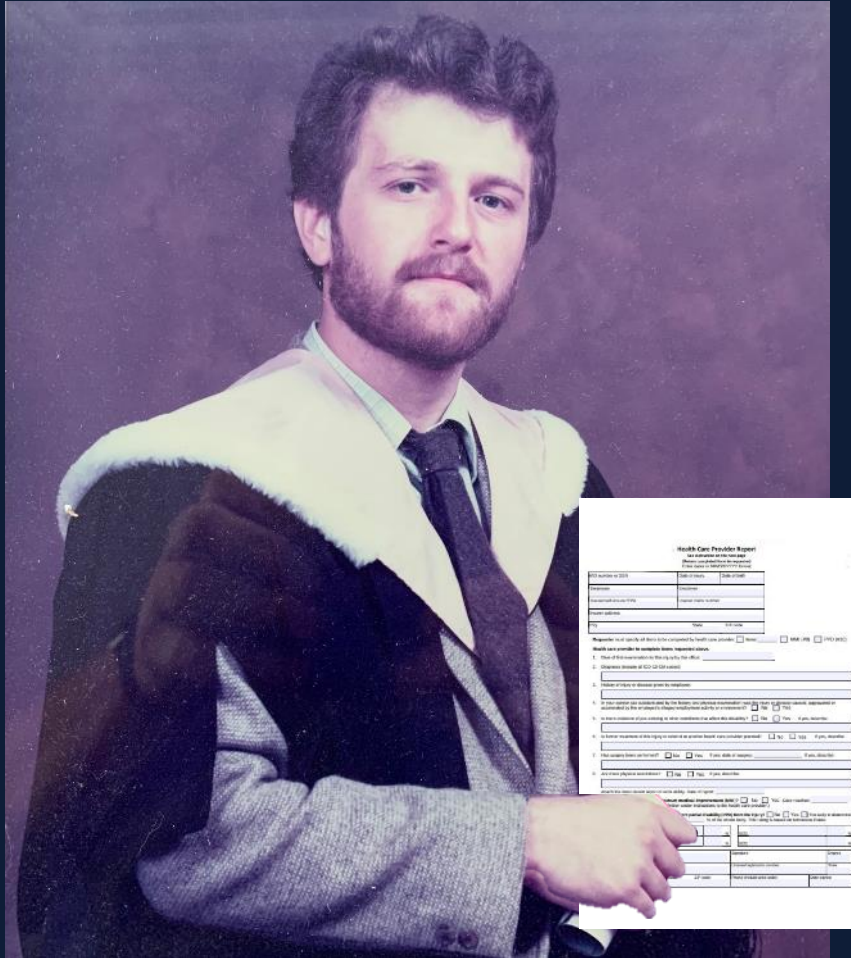
1987 Control of arteriosclerosis and heart disease.
Soviet manned landing on Mars.

1990 Use of drugs to increase intelligence widespread.
3-D colour laser TV on sale.
Cure for cancer discovered.
Last national morning newspaper closes down.

1991 Helicopters for urban transport.
1994 Establishment of world computer-information bank.

1999 Creation of intelligent artificial life achieved.
2000 Semi-voluntary euthanasia at the age of 60
encouraged by Department of Health.

1980s – Moore's Law – Processors



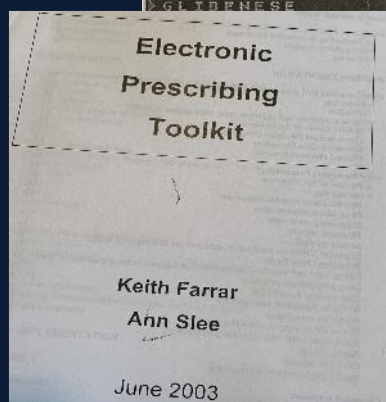
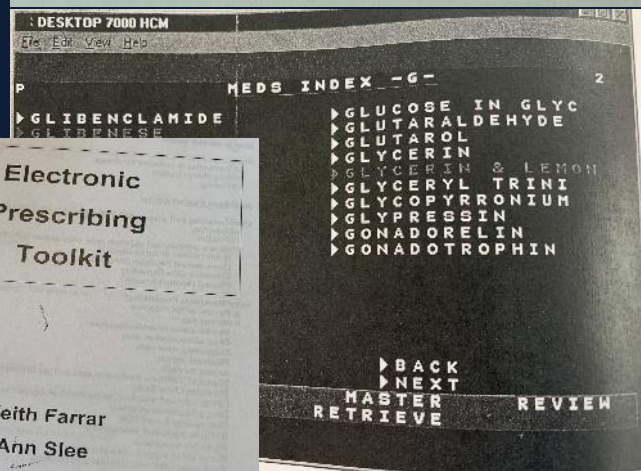
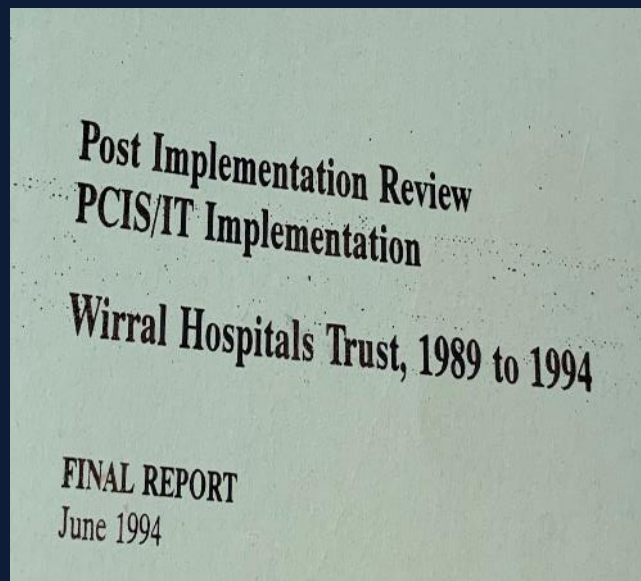
SOURCE: RAY KURZWEIL, "THE SINGULARITY IS NEAR: WHEN HUMANS TRANSCEND BIOLOGY", P.67, THE VIKING PRESS, 2006. DATAPPOINTS BETWEEN 2000 AND 2012 REPRESENT BCA ESTIMATES.

1990s - Applications

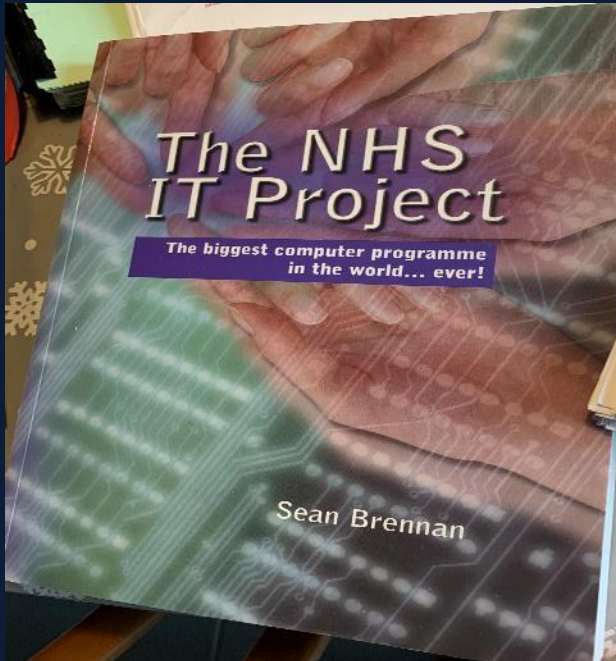
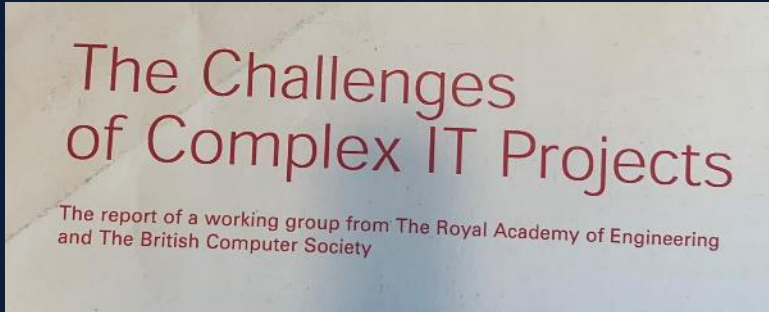
Information for Health -Principles

- HISS project
- Resource Management Project
- TDS
- Clinically led not technical or management
- Link of change to benefits

	<u>For clinical professionals</u>
O1	Provision of reliable and rapid access to patient information
O2	On-line access to local and national evidence on treatment
O3	Access to effectiveness information
	<u>For patients</u>
O4	Access to accredited independent information
O5	Provision of on-line access to services and specialists
	<u>For the public</u>
O6	Fast convenient access to accredited information
O7	Involvement in health service policy
	<u>For managers and planners</u>
O8	Availability of accurate information for planning purposes



2000s – Large Scale Programmes



Cheshire and Merseyside SHA
CFH/NPfit
NorthWest SHA

2010s – Other Ways of Looking At IT?



Qatar and Hamad Medical Corporation

(2010-15 - working on a national scale)

Qatar in top 10?



Morecambe Bay

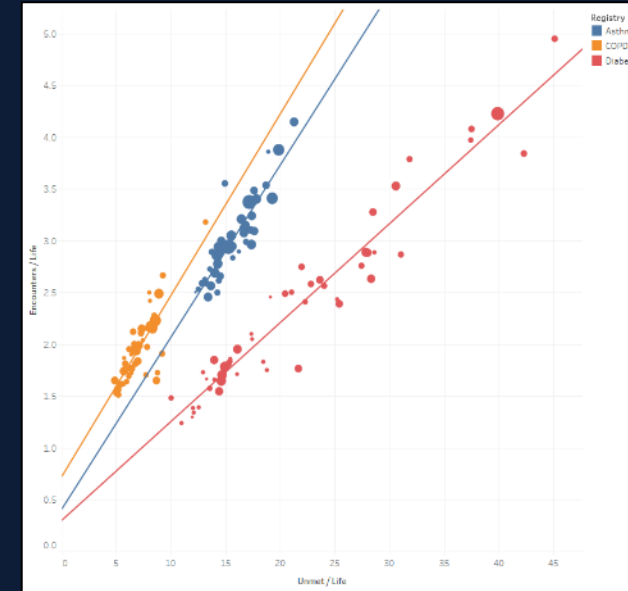
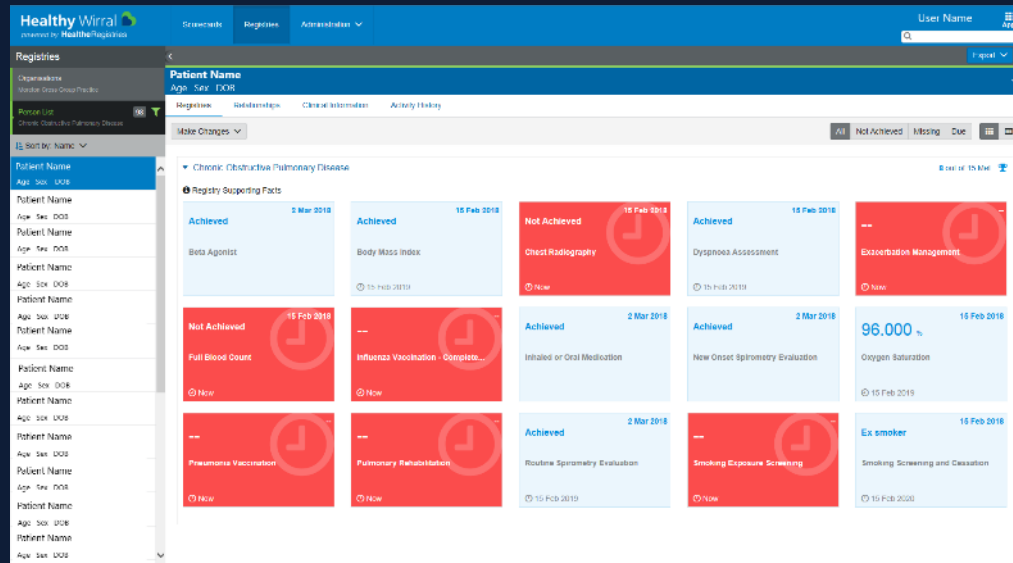
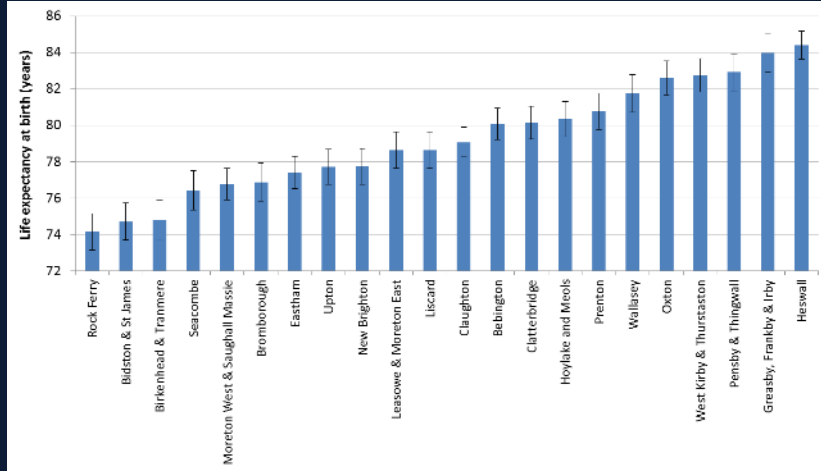
(2015- Lorenzo)

Integrated Care Partners

NHS vanguards



2020s Where are we now ? We have the data



Artificial Intelligence and Population Health



Five key priorities for successful use of AI technologies by public health organizations are identified in this commentary:

- 1) Contemporary data governance;
- 2) Investment in modernized data and analytic infrastructure and procedures;
- 3) Addressing the skills gap
- 4) Development of strategic collaborative partnerships, and;
- 5) Use of AI best practices including explicit consideration of equity

The next 2 years ...

- We've gone from Processors, to Applications, Programmes to Data and (maybe) insight
- Are we going to tackle the clinical and business problems?
- Get the operational systems in place (do they need to be the same?)
- Get the data together and sort out the IG
- Collaborate – working for the system not just the organisation
- Involve the patient – I'll need it

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