Sustainability Healthcheck

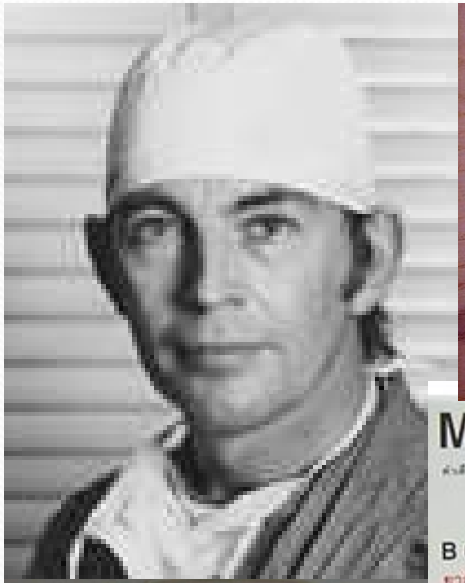
Applying the triple bottom line to mainstream medicine

Delny Britton PhD

ISD consultancy

Mainstream Medicine

- Systematic approach
- Reductionist
- Treats symptoms
- Tools: drugs, surgery, radiation, technology



VIAGRA
25 mg film-coated tablets
Sildenafil (as citrate)
4 film-coated tablets

BRITAIN'S BIGGEST EVENING SALE
Evening News
LATE SPECIAL
CITY PRICES
Meet Louise, the world's first test-tube arrival
SUPERBABE

AMOCIN
Amoxicillin Capsules

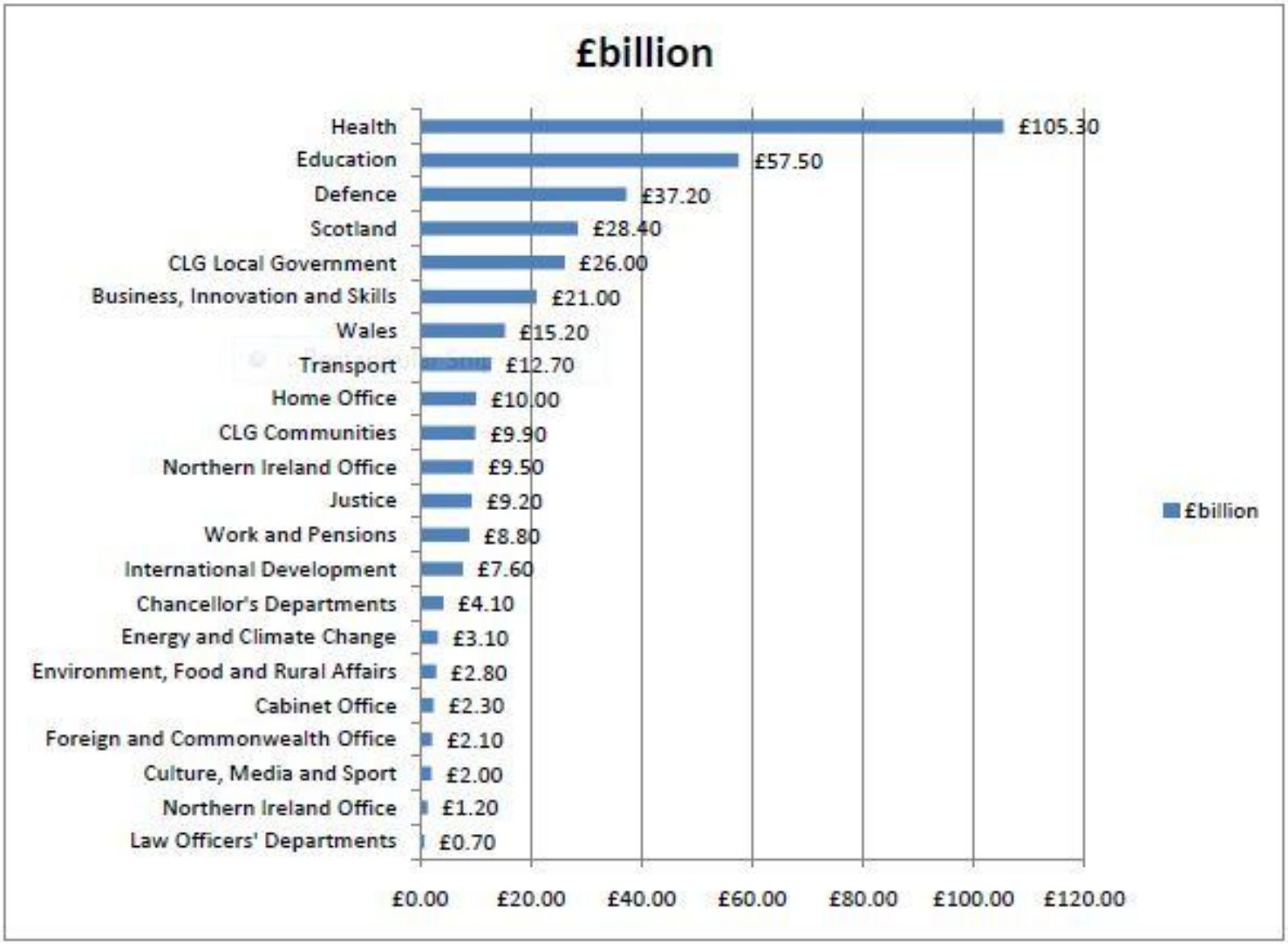
Microgynon
B 60
ยาอันตราย
ทะเบียนยาเลขที่
2C 25/41
21 tablets, each containing
Levonorgestrel 0.15 mg
Ethinylestradiol 0.03 mg
7 tablets, each containing
Lactose
Store below 30°C

NDC 0074-1940-63
240 mL
NORVIR®
(RITONAVIR ORAL SOLUTION)
80 mg per mL
Shake well before each use.
DO NOT REFRIGERATE
Use by product expiration date.
Rx only
ALERT
Find out about medicines that should NOT be taken with NORVIR.
Note to Pharmacist: Do not cover ALERT box with pharmacy label.

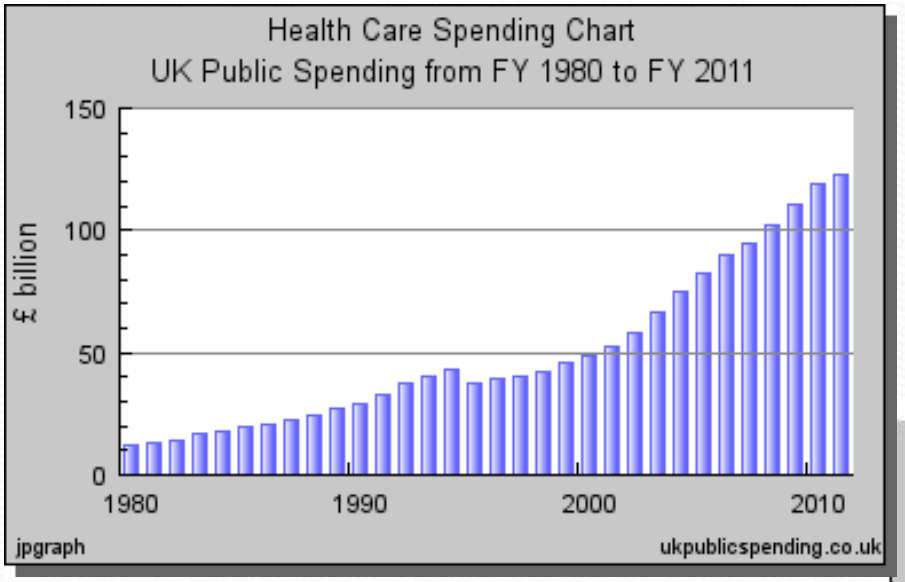
28
tablets
oral

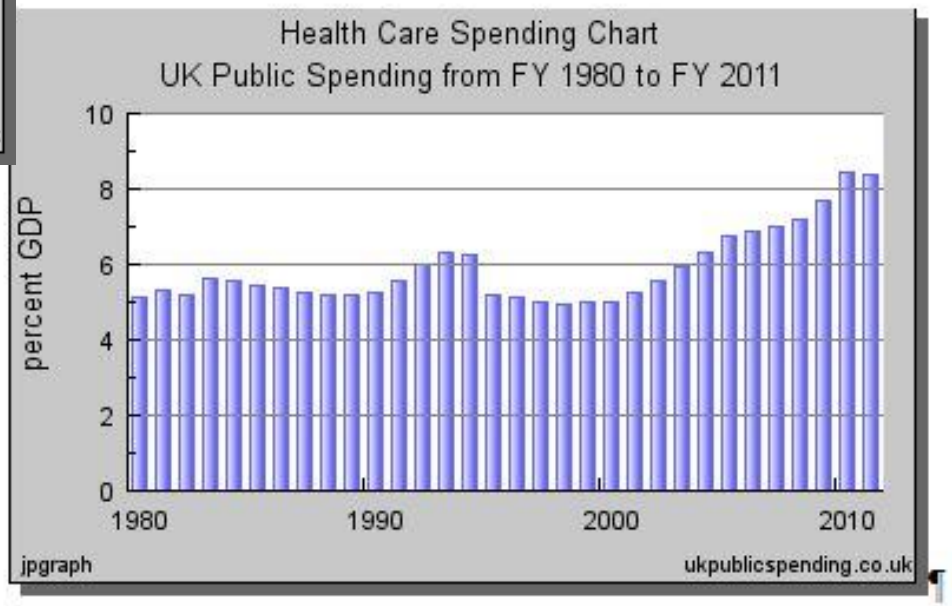
Economic Impacts

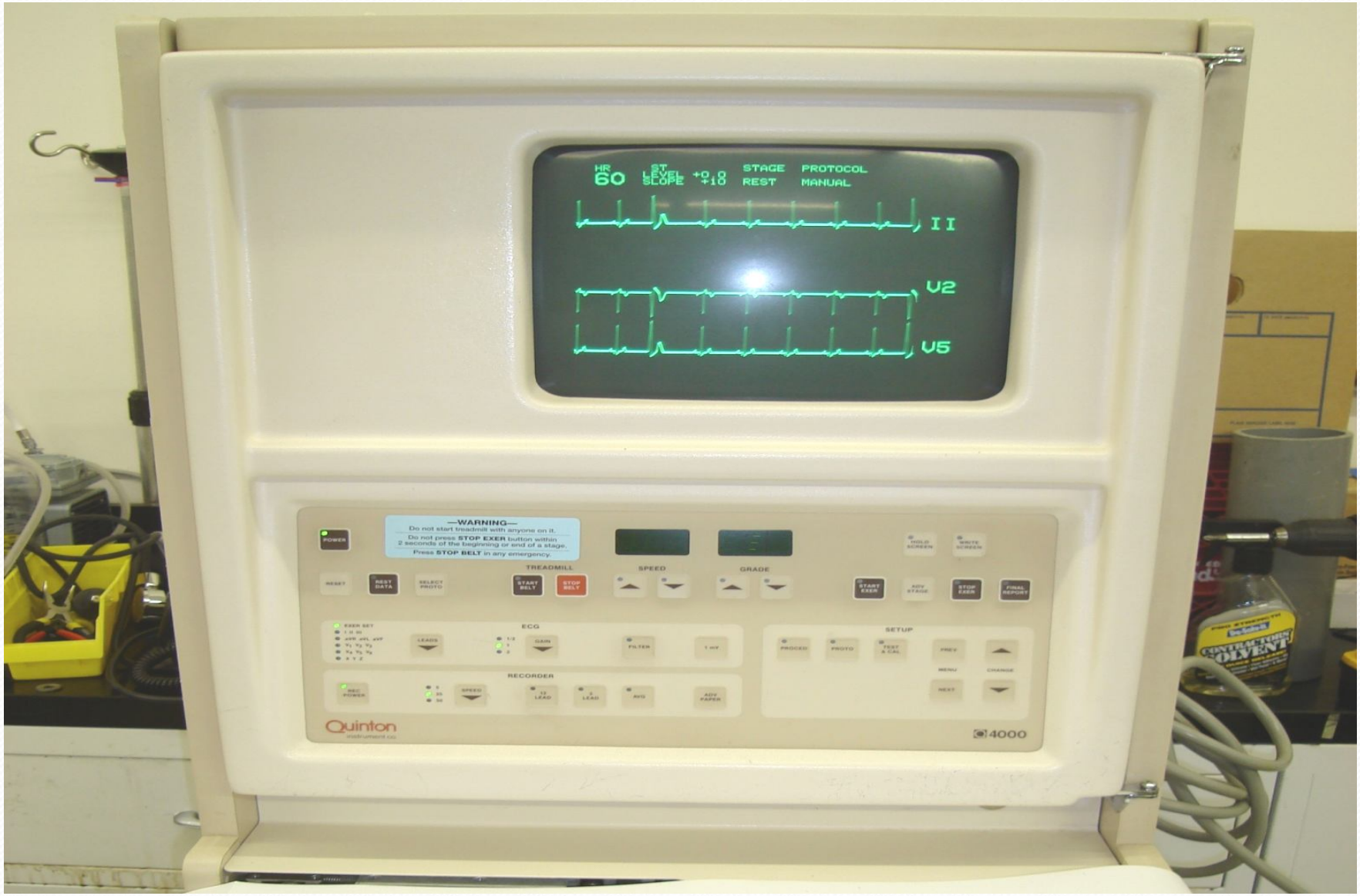
Departmental Expenditure 2010 / 11

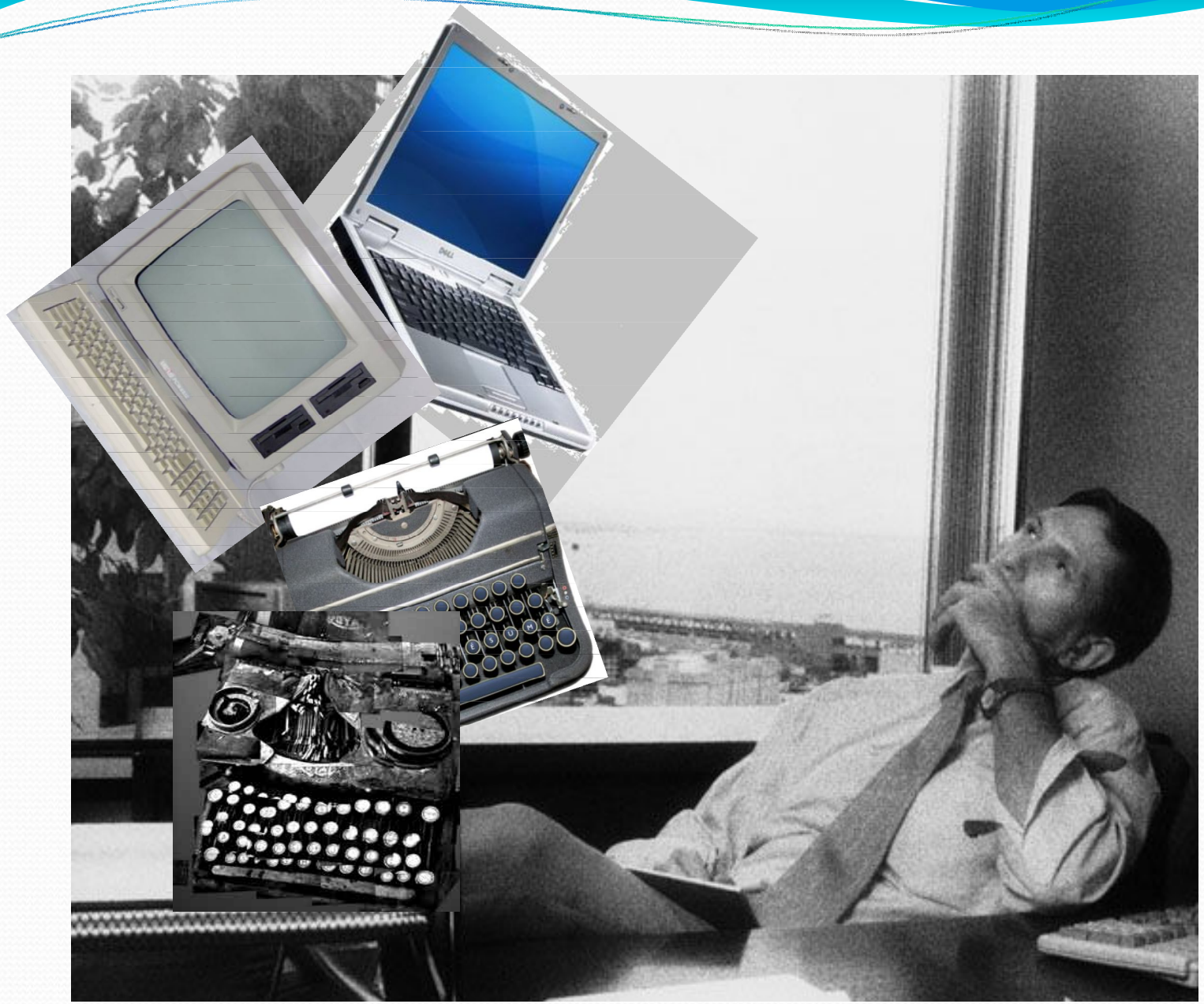


Healthcare spending 1980 - 2011






HR
60
ST
LEVEL +0.0
SLOPE +10
STAGE
REST
PROTOCOL
MANUAL
I I
V2
V5
—WARNING—
Do not start treadmill with anyone on it.
Do not press STOP EXER button within 2 seconds of the beginning or end of a stage.
Press STOP BELT in any emergency.
POWER
TREADMILL
SPEED
GRADE
START BELT
STOP BELT
START EXER
STOP EXER
ECG
RECORDER
SETUP
Quinton
4000

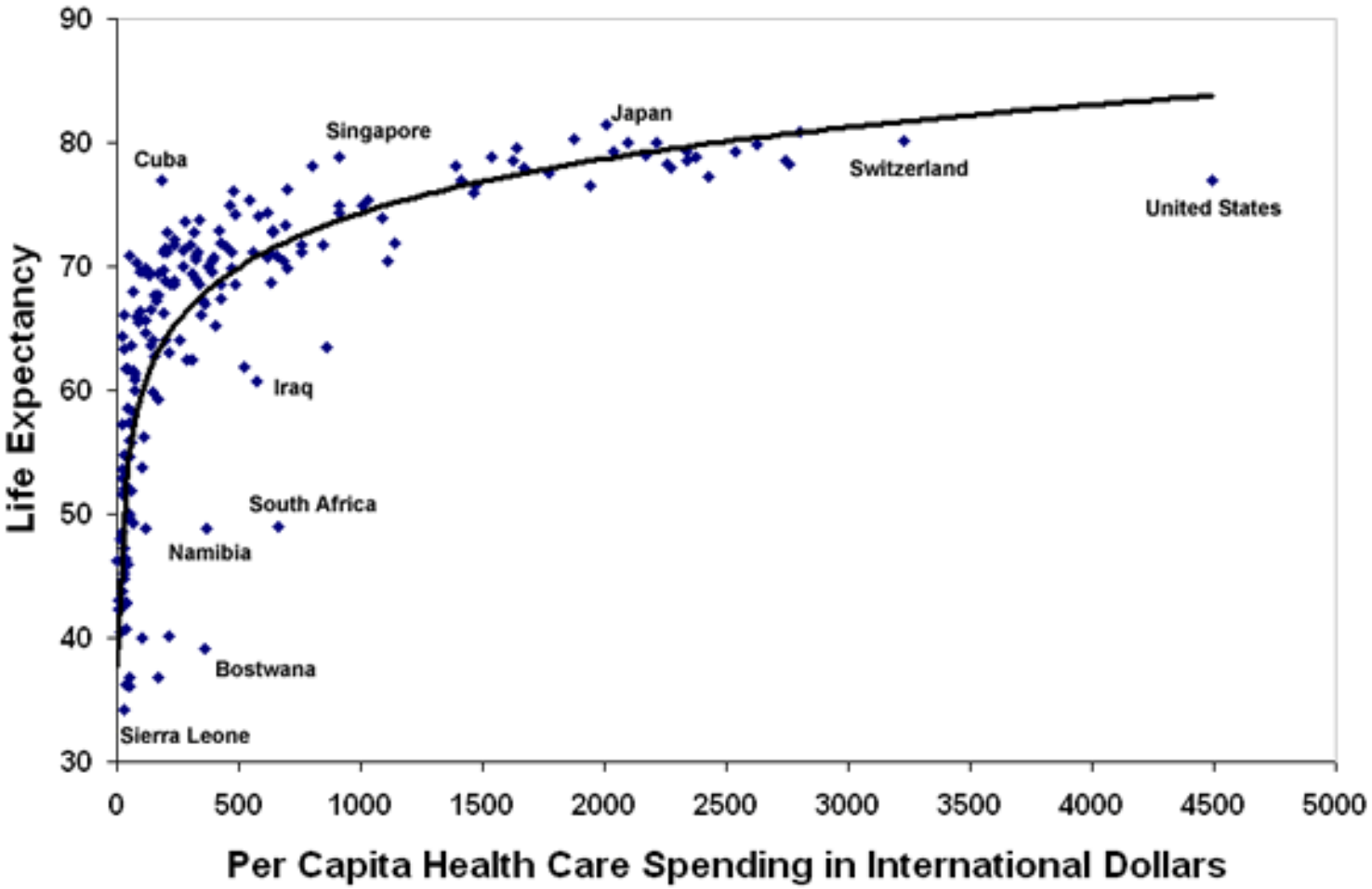


UK Prescriptions

- 2008 – 50,000,000 for statins
  36,000,000 for anti-depressants
- 2007 – 420,000 for ADHD drugs

Social Impacts

Life Expectancy v Spending



US Health Facts

- 50% of Americans will have cancer in their lifetime
- 14% of Americans are diabetic. By 2050, 33% will be
- 66% of Americans are overweight or obese
- >27 million Americans take anti-depressants
- Someone dies of heart disease every 34 seconds

‘The vast majority of drugs – more than 90% - only work in 30 – 50% of people’

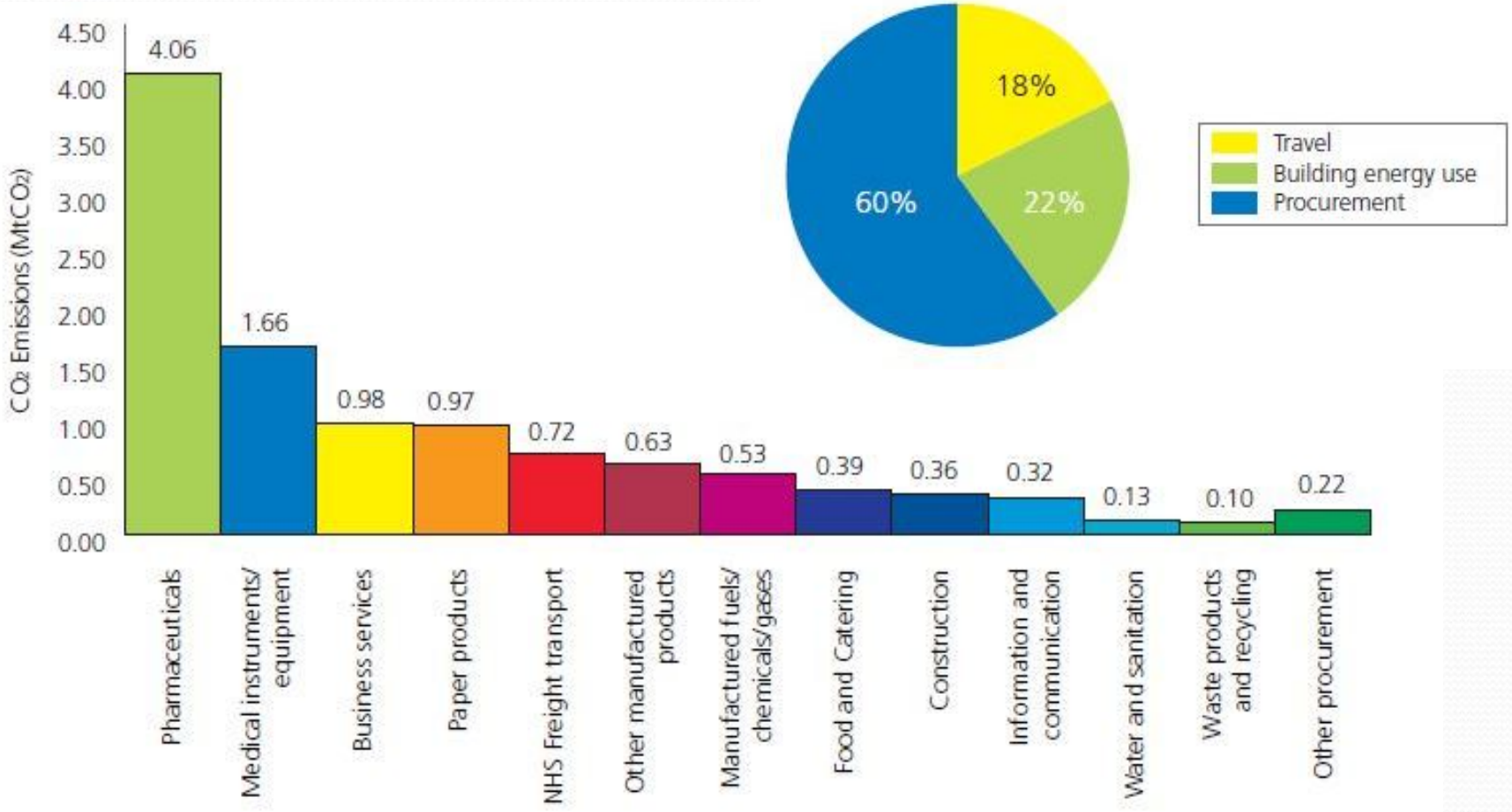
Sir Allen Roses, worldwide Vice President of Genetics, GlaxoSmithKline, 2003

Environmental Impacts

QMC NHS

Breakdown of NHS England 2004 procurement emissions

(NHS Carbon Reduction Strategy for England. NHS Sustainable Development Unit 2009)

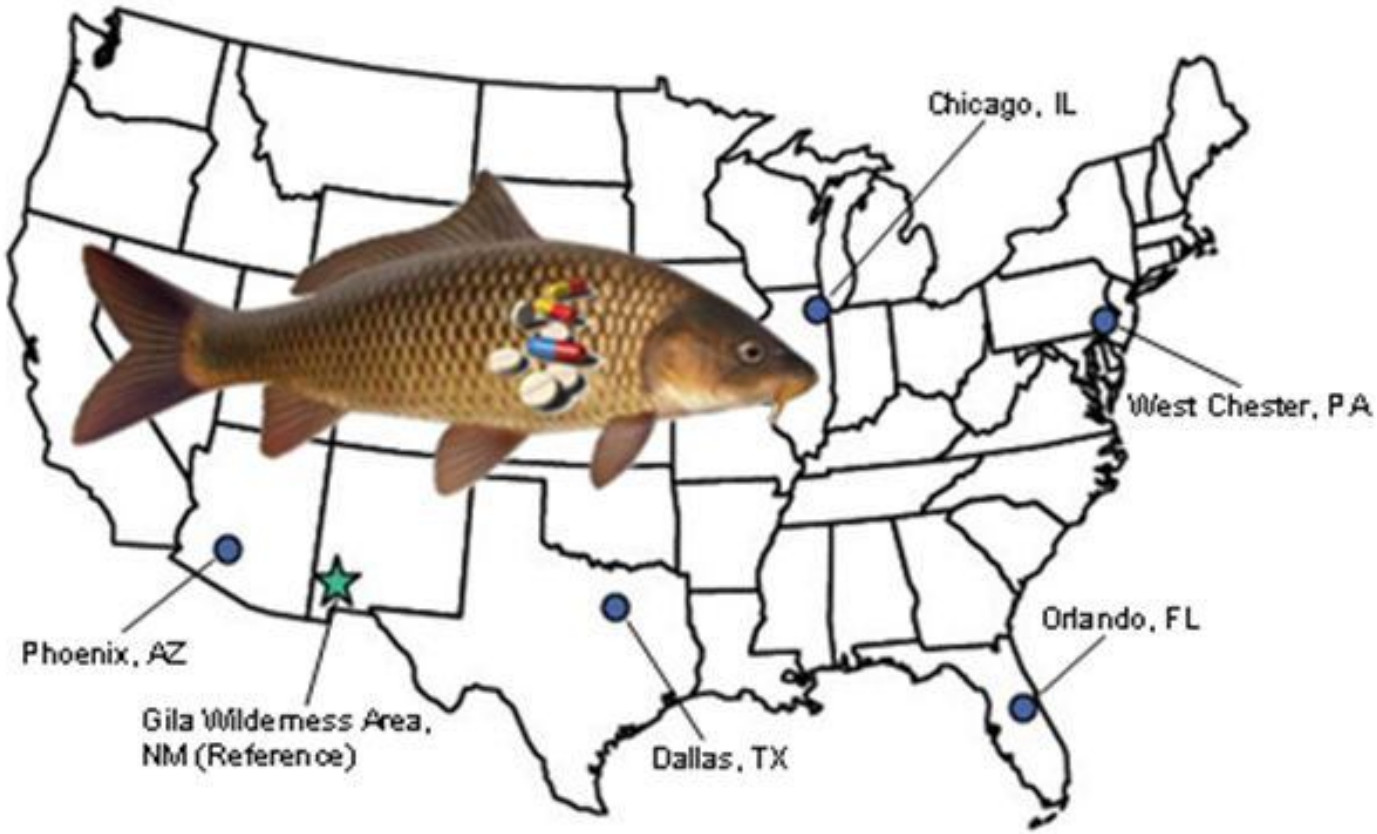


Pharmaceutical pollution, Patancheru

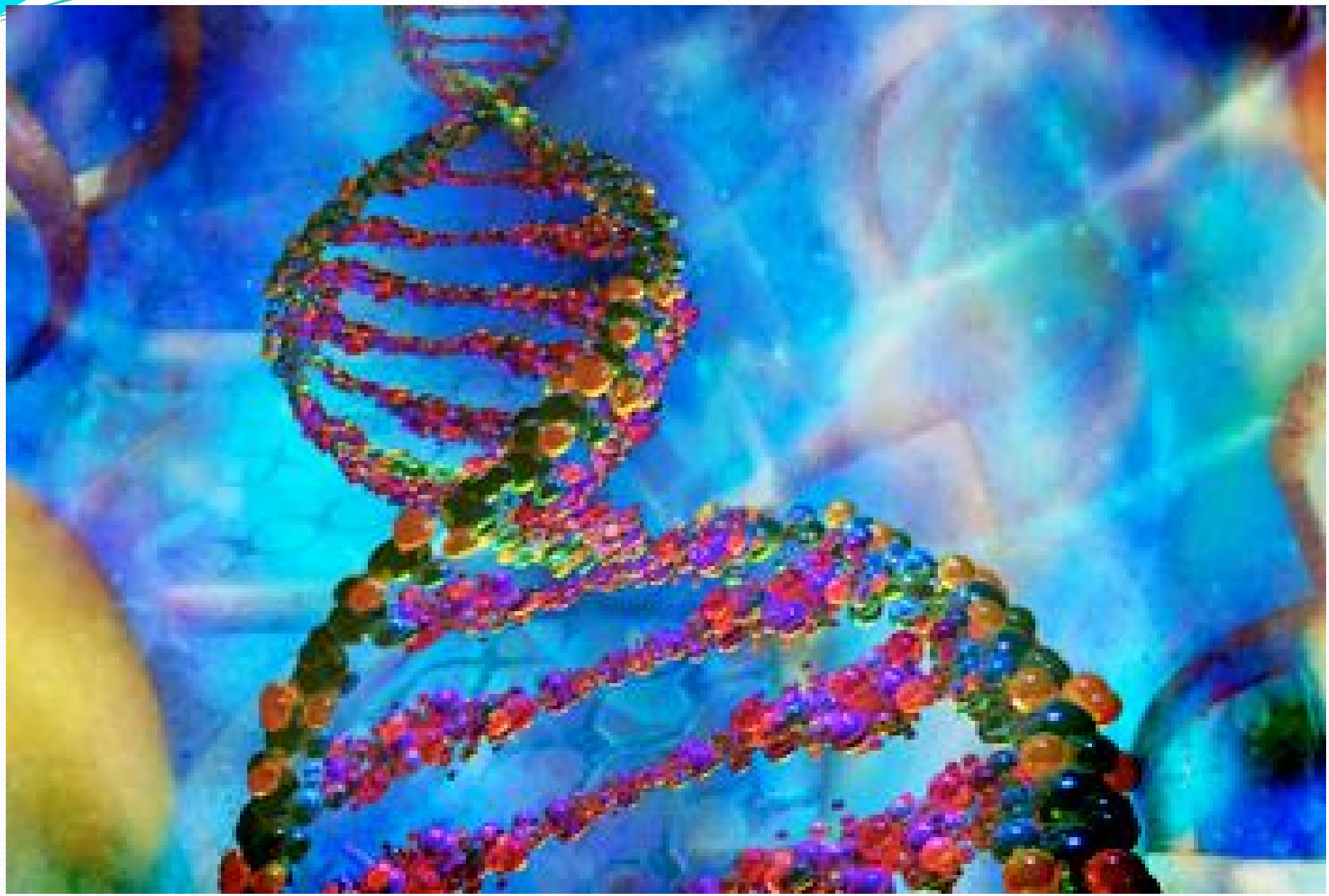
‘Sustainable development meets the needs of the present generation without compromising the ability of future generations to meet their own needs.’

Brundtland Report 1987

Drug residues found in fish across the US

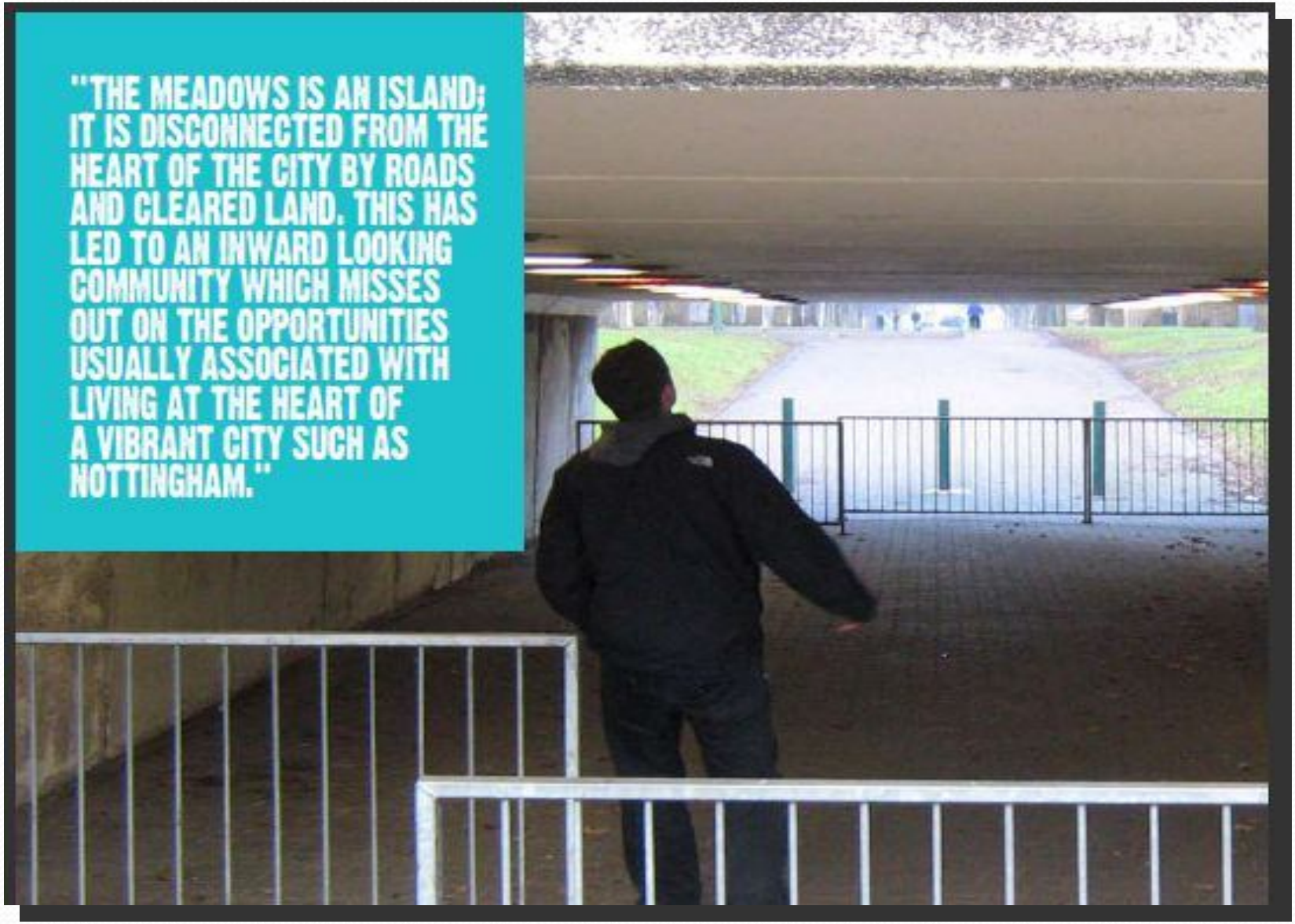


Sustainable Medicine?



Cuba 1997 – 2002

- **Deaths from diabetes:** down **51%**
- **Deaths from heart disease:** down **35%**
- **Deaths from strokes:** down **20%**


"THE MEADOWS IS AN ISLAND; IT IS DISCONNECTED FROM THE HEART OF THE CITY BY ROADS AND CLEARED LAND. THIS HAS LED TO AN INWARD LOOKING COMMUNITY WHICH MISSES OUT ON THE OPPORTUNITIES USUALLY ASSOCIATED WITH LIVING AT THE HEART OF A VIBRANT CITY SUCH AS NOTTINGHAM."

Recommendations for reducing health inequalities

- Improve active travel
- Improve availability of open and green spaces
- Improve food environment in local areas
- Improve energy efficiency of housing
- Fully integrate planning, transport, housing, environmental and health systems

Integrated Medicine

Mainstream medicine: main strengths and weaknesses

STRONG

- Acute and emergency situations
- Where surgical intervention is required

WEAK

- Prevention and treatment of chronic disease
- Disempowering

Alternative/Traditional medicine: main strengths and weaknesses

STRONG

- Treatment of chronic mental & physical disease
- Health promotion: self-care, self-healing, self-empowerment
- Addressing root cause of illness

WEAK

- Acute and emergency situations

Japanese Integrated Medicine

Food as Medicine

Off the shelf, not over-the-counter

Research and Training

Sustainable Medicine

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