

# UK Digital Health post the WSD programme

Stanton P Newman,  
School of Health Sciences  
City University London

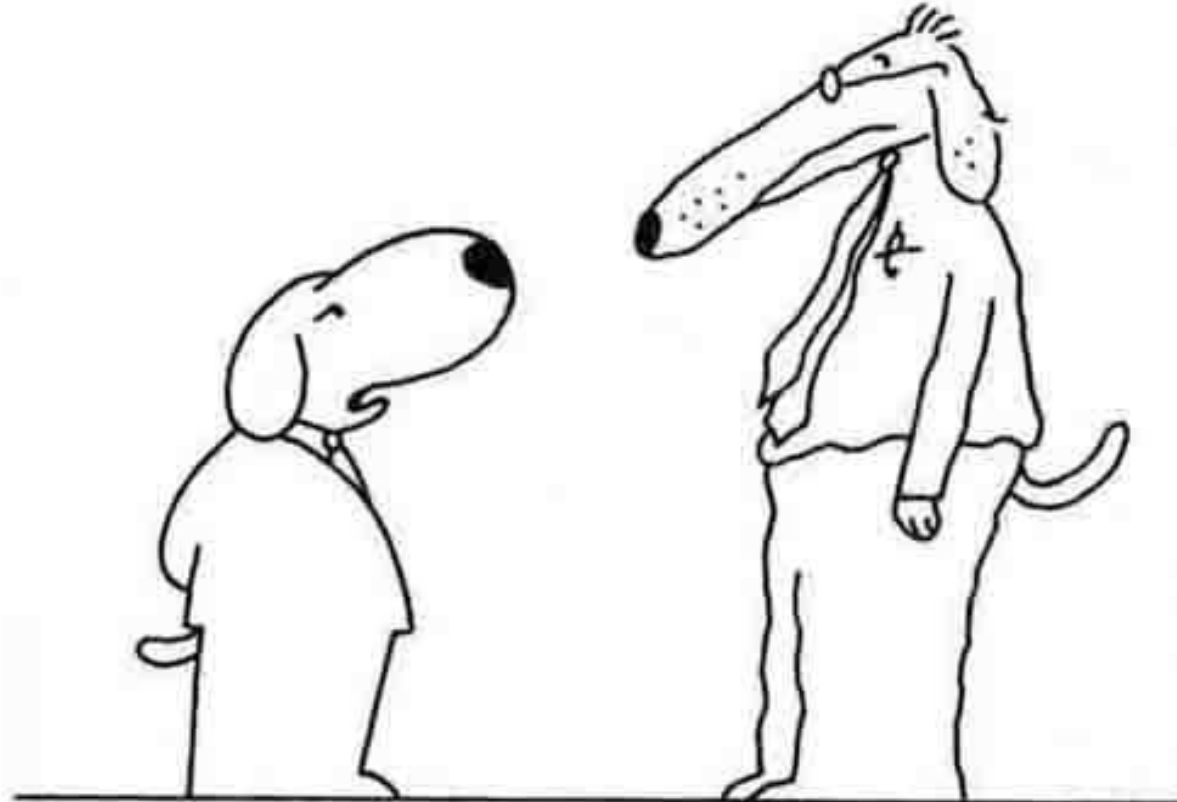
## Terminology - Assistive Technologies

- Telehealth (TH): The remote exchange of data between a patient and health care professional(s) to assist in the diagnosis and management of a health care condition(s).  
Examples include blood pressure monitoring, blood glucose monitoring and medication reminders.
- Telecare (TC): Remote and automatic (passive) monitoring of changes in an individual's condition or lifestyle, including emergencies, to manage the risks of independent living.  
Examples: movement sensors, falls sensors, and bed/chair occupancy Sensors.
- Telemedicine (TM): Remote transmission of patient information to a clinician for an expert diagnosis and/or management  
Examples: MRI, x-rays, symptom reports

# Terminology - Assistive Technologies

- **Telehealth (TH):** The remote exchange of data between a patient and health care professional(s) to assist in the diagnosis and management of a health care condition(s).  
Examples include blood pressure monitoring, blood glucose monitoring and medication reminders.
- **Telecare (TC):** Remote and automatic (passive) monitoring of changes in an individual's condition or lifestyle, including emergencies, to manage the risks of independent living.  
Examples: movement sensors, falls sensors, and bed/chair occupancy Sensors.
- **Telemedicine (TM):** Remote transmission of patient information to a clinician for an expert diagnosis and/or management  
Examples: MRI, x-rays, symptom reports

# Relatively Simple view of Telehealth and Telecare

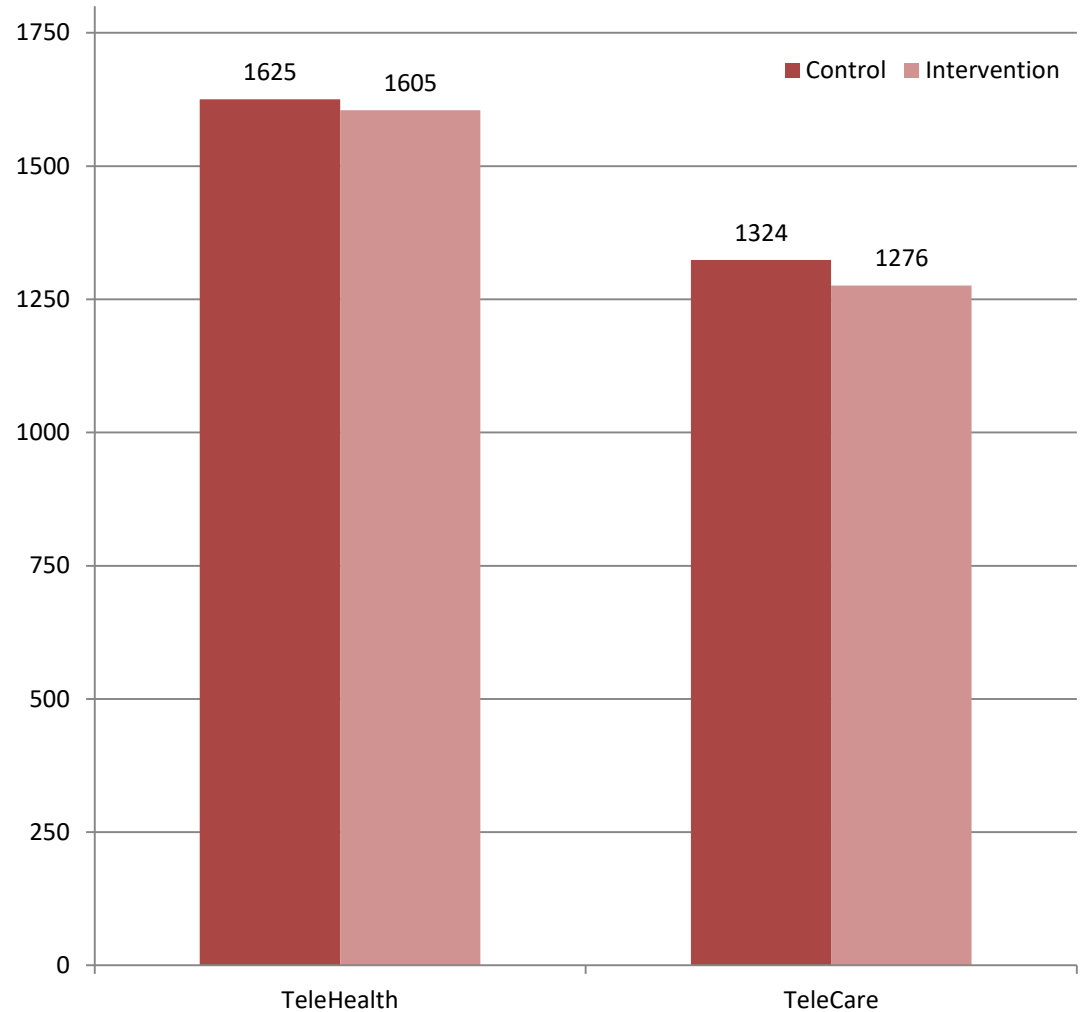
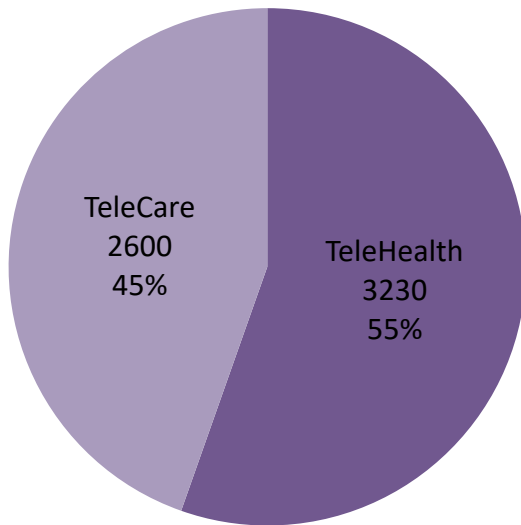


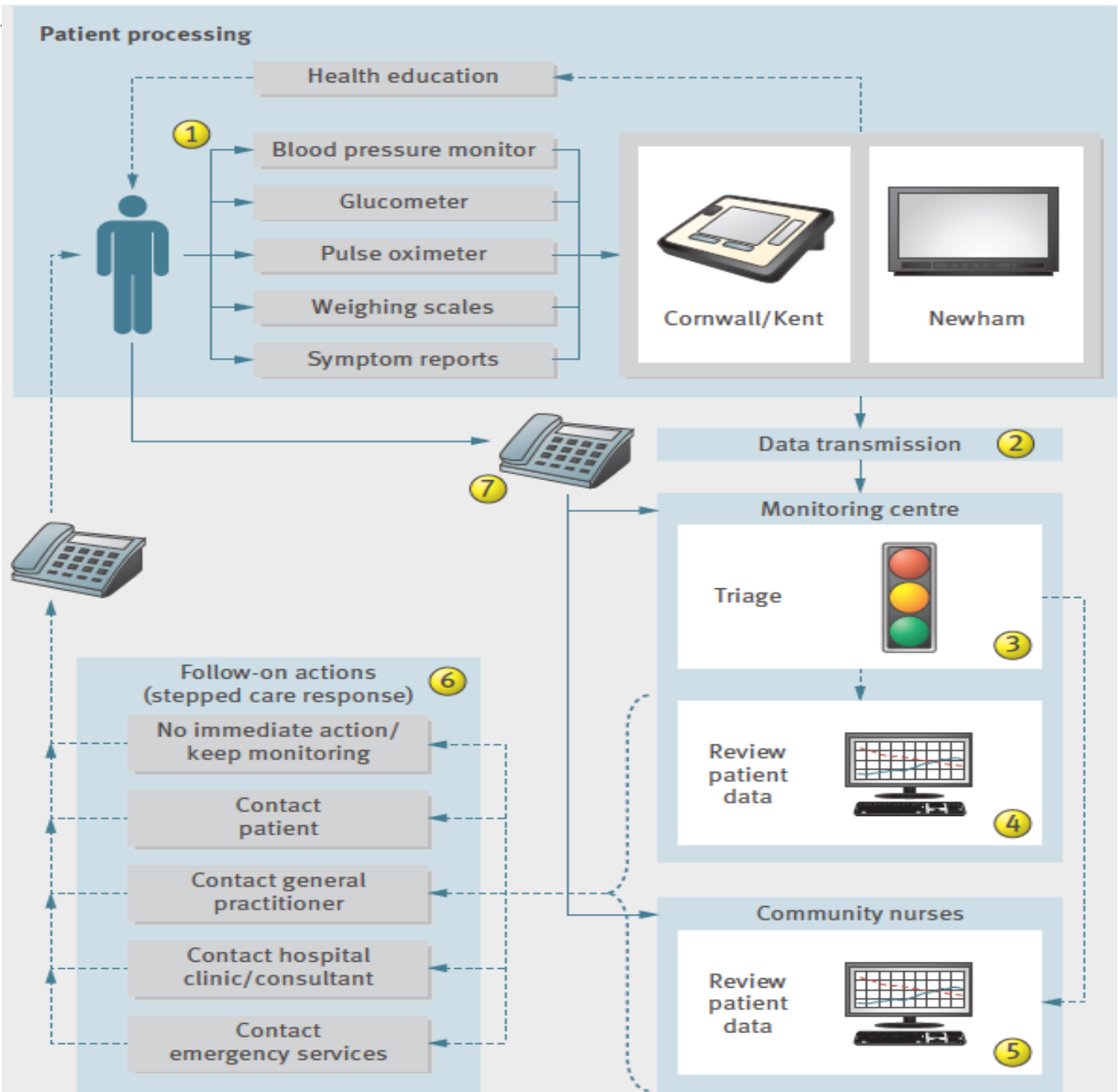
*C. Barozzi*

*"We do all those old tricks electronically now."*

# WSD Study

## Total Numbers recruited

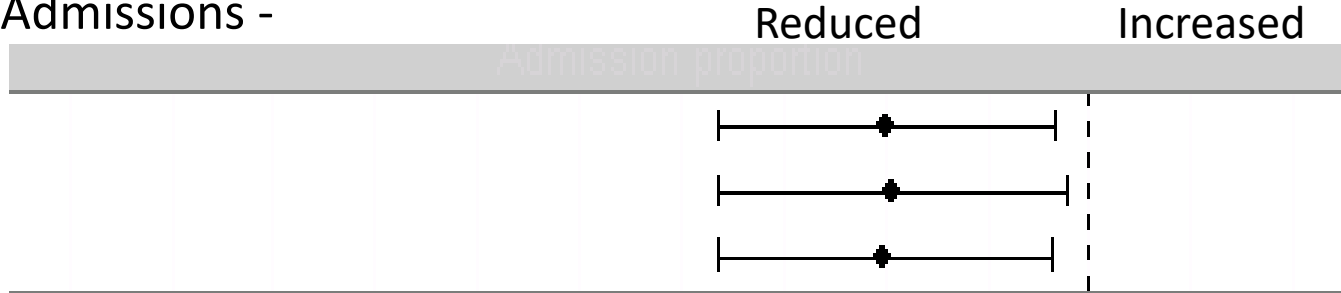




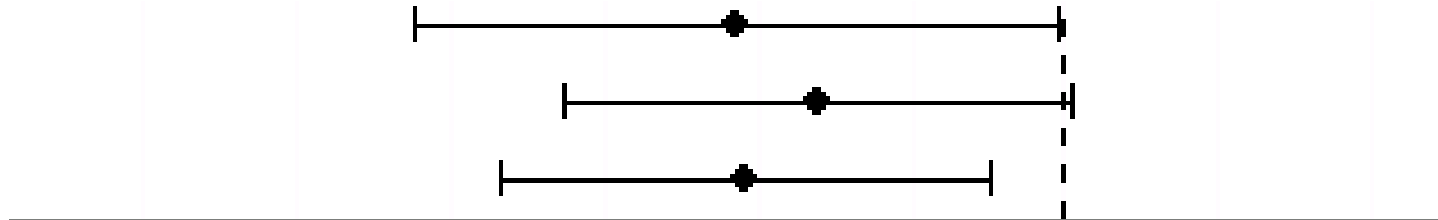
# WSD Headline results -TH

OR and 95% confidence intervals

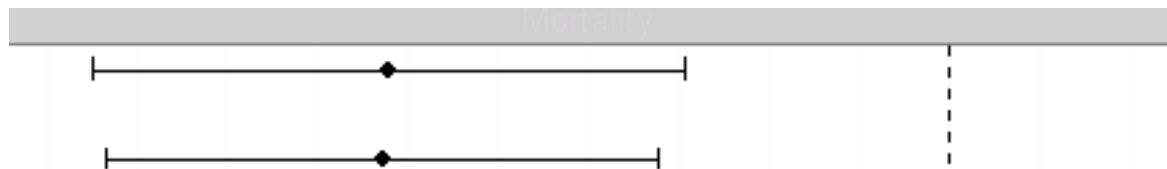
## Admissions -



## Emergency Admissions

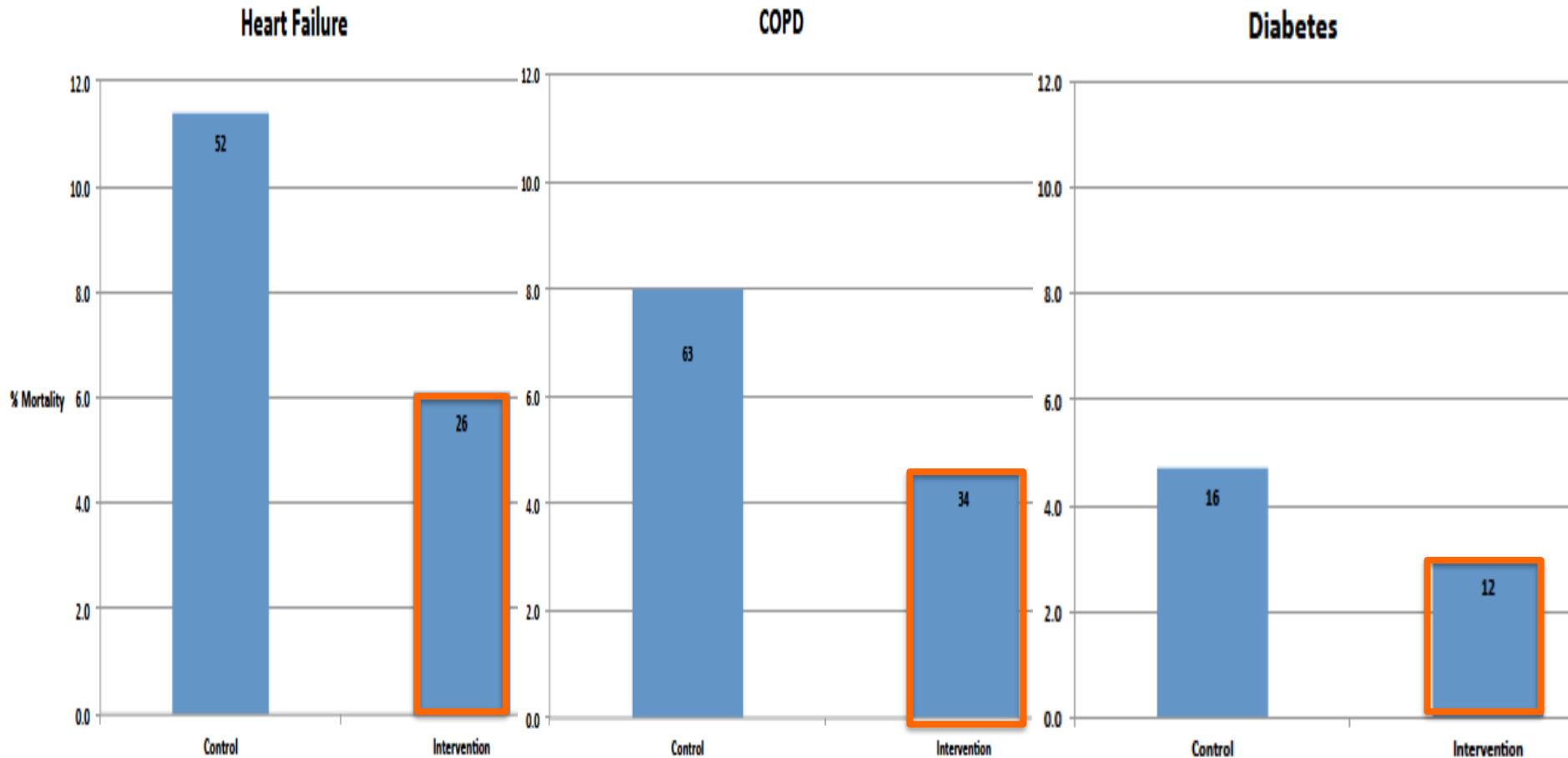


## Mortality





# WSD Mortality by condition



Overall 59 less death in TH



# WSD Results in Context

- Used fixed technology – one of many technologies
- Care pathways were added on to traditional service – i.e. not service redesign
- Examined 3 conditions of varying severity

Question is not does the technology work ?  
It does work (e.g. telephone, text etc)

Question should be :

Does this technology work for this group, at this place in the care pathway in the context of this health care organisation etc

# Government Response to WSD

## Findings

2011: Minister Paul Burstow said:

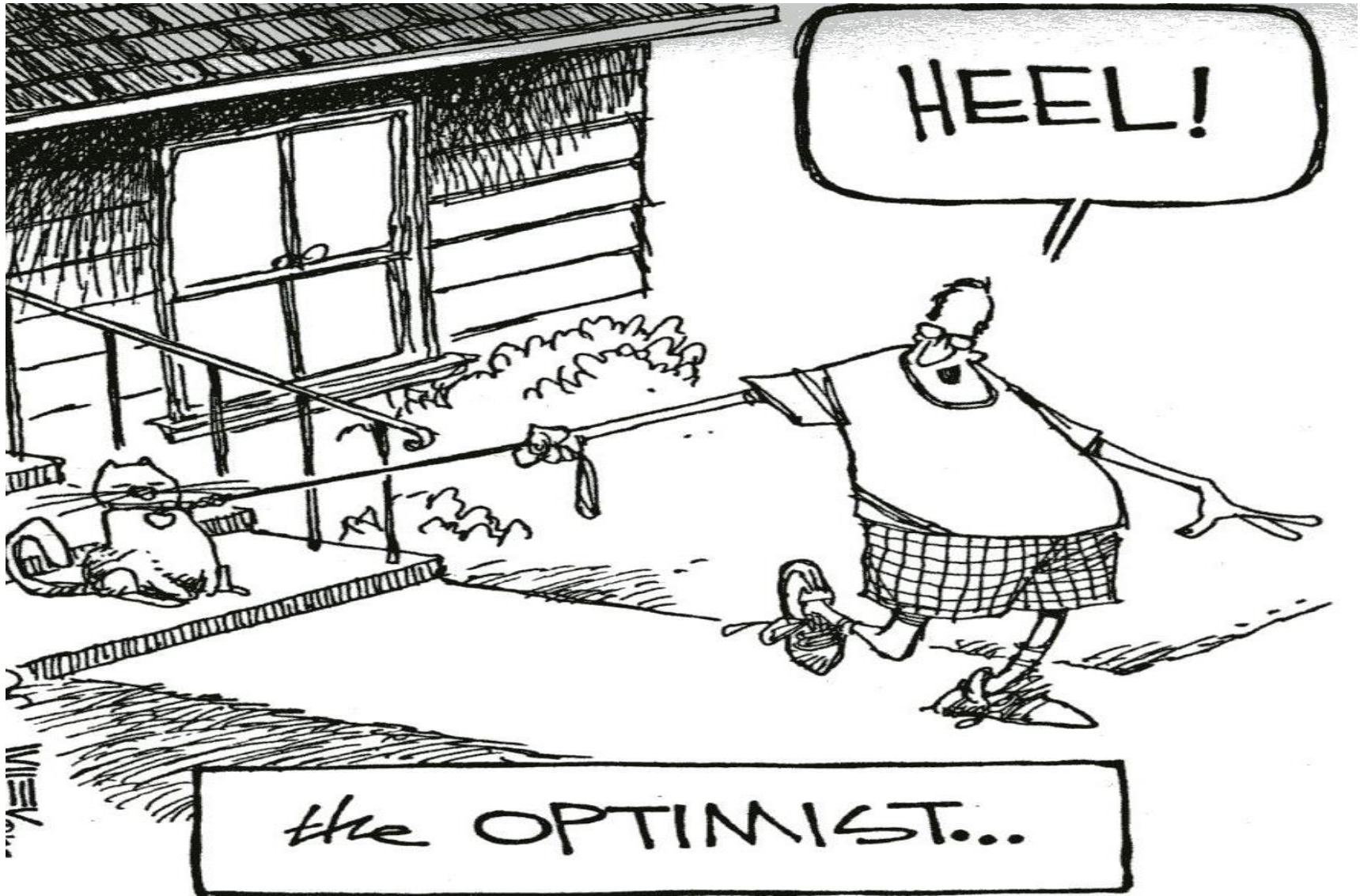
“The widespread adoption of telehealth and telecare as part of an integrated care plan will mean better quality of care and greater independence for people with long-term conditions.

Delivered from the front line it **could save the NHS up to £1.2 billion** over five years.

This new approach is not about the technology, it is about a revolution in personalised healthcare that can improve the lives of three million people, increase their independence and dignity as well as reduce the time they spend in hospital.”



# Unrealistic Optimism



# NHS Changes – always change

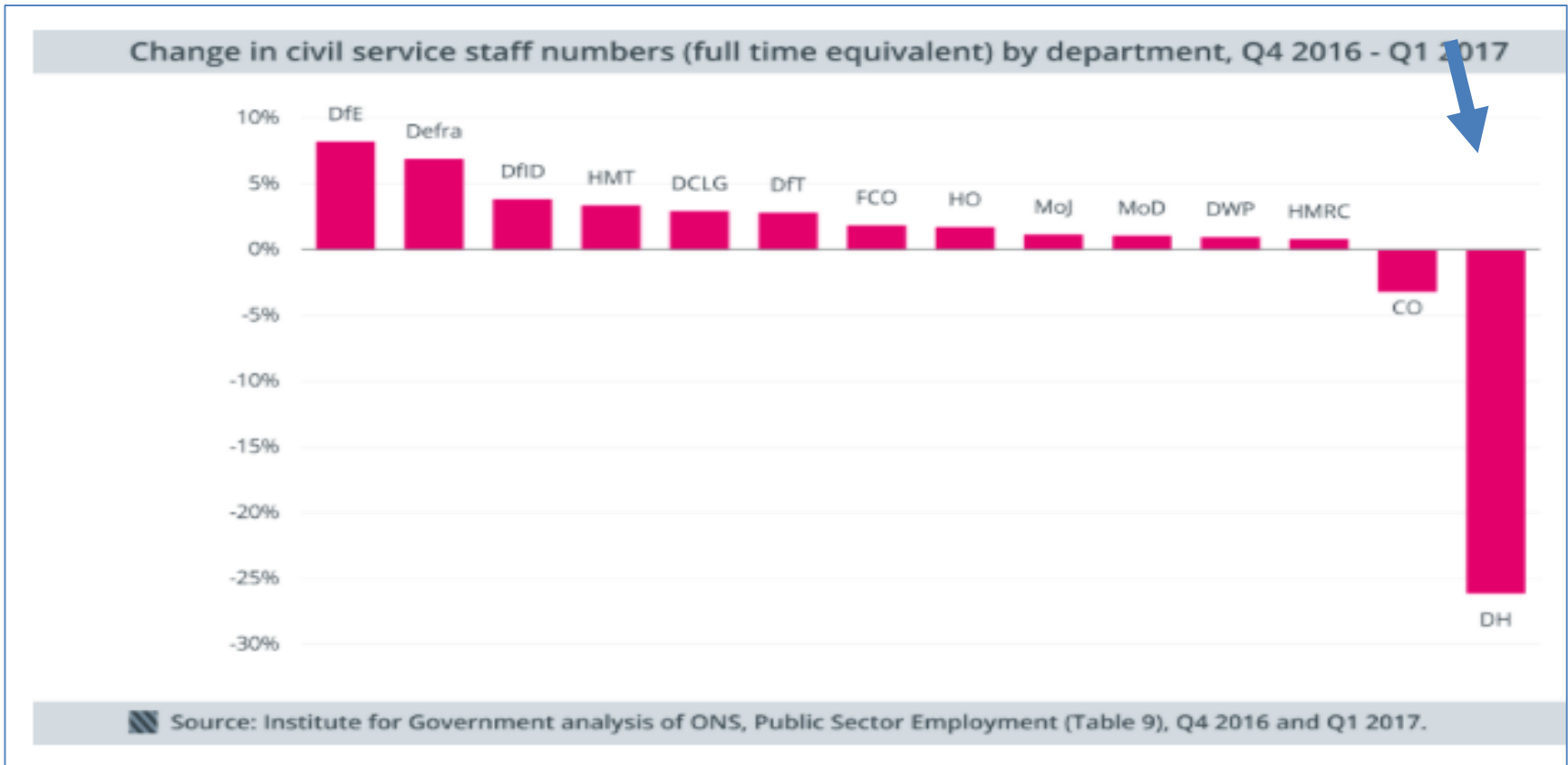
2011: **NHS reorganisation:** Andrew Lansley Sec State Health: The Health and Social Care Bill 2010/11 proposed significant reorganisation increase influence of GPs on commissioning, increase competition and abolish strategic health authorities (SHAs) and primary care trusts (PCTs).

2012: Health and Social Care Bill is passed. Thousand of amendments

2012: Established 211 Clinical Commissioning Groups to commission health care. (2016 – ability to merge established and if all mergers go ahead 174 should remain) Fractured commissioning health care so no consistency as decisions made at local level. No consistency of decision on telehealth.

# NHS Changes – always change

2010-17: Significant reduction in Dept of Health Civil Servants – 49% since 2010. Big impact on central leadership.  
Continuing reduction:



# The ever changing structure of the NHS





# Problem of Leadership

## **Problem of Leadership in the context of fractured commissioning**

There's lots of guidance around, but until it starts to be driven by government or the private market, it will remain slow.

Alison Mlot

Central government bodies can use their position to drive innovation and the adoption of new technologies.

The emphasis placed on digital technology in NHS Sustainability and Transformation Plans (STPs) suggests that NHS England is beginning to do this. But our roundtable agreed that both of these organisations need to be clearer on their roles and on the support they will offer to local trusts **beyond setting targets and outlining the broader healthcare agenda.**

Institute for Government 2016

# Leadership

- Political leadership required to embrace change in healthcare and gain population support
- Clinical leadership to support and lead change in health care practice
- Financial leadership from government and health care insurers to incentivise change



# Digitisation Timeline – Policy Rich

2011; National Programme for Information Technology (NPfIT), launched in 2002 shut down in 2011 after having mostly failed to achieve its goals

2012: Jeremy Hunt Appointed Secretary of State. Greater interest than predecessor in Digital Health but focus on electronic medical records

2013: Hunt challenges the NHS to go paperless by 2018

2013: second review published on Information Sharing in the NHS

2014: NHS 5 year Forward Review published – includes harnessing the “Information revolution”

# Digitisation Timeline – Policy Rich

2014: National Information Board (NIB) established. Publishes “Personalised Health and Care 2020” supports digital transformation of Health and Care

2015: Local commissioners, providers and care partners asked to provide Local Digital Transformation Roadmaps (LDR) so as to have improve digital functions and by 2018 have universal capabilities such that by 2020 to have a paperless NHS

Timeline for LDR pushed back to allow for greater alignment

2015 Resource for Commissioners of TECS published

2016: Wachter Review published on lessons learned from USA and recommends

- a. Modified Timetable for the Roadmaps
- b. Digitisation of acute care records

# Digitisation Timeline – Policy Rich

2016, the Treasury allocated £4.2 billion to support the digitisation of the NHS.

2016: 16 NHS Hospital Trusts named as “Global Digital Exemplars”  
Hoped to become leaders in digital health and personal care records. £100 million to support activity

2017: Digital Academy to be established to train and develop 300 digital leaders by 2021

2017: Funding for Global Digital Exemplars delayed by 1 year.

2017: Announced that 7 Mental health Trusts will become Digital Exemplars. £10 million funding.

# Wachter report 2016

Some Fundamental points made:

## **1. Digitise for the Correct Reasons**

The goal of digitisation of health systems is to promote what has become widely known as healthcare's Triple Aim: better health, better healthcare, and lower cost.

## **2. It is Better to Get Digitisation Right Than to Do it Quickly**

## **3. 'Return on Investment' from Digitisation Is Not Just Financial**

While it is natural to seek a short-term financial return on investment from health IT, experience has shown that the short-term ROI is more likely to come in the form of improvements in safety and quality than in raw financial terms. In fact, cost savings may take 10 years or more to emerge (the so-called 'productivity paradox' of IT)

# Wachter report 2016

## **4. When it Comes to Centralisation, the NHS Should Learn, but not Over-Learn, the Lessons of NPfIT**

NPfIT erred partly through overcentralisation, it is also important to note that centralisation sometimes makes sense, particularly in the context of a national health system. A new digital strategy should seek an appropriate balance between local/ regional control and engagement versus centralisation.

## **5. Interoperability Should be Built in from the Start**

## **6. While Privacy is Very Important, So Too is Data Sharing**

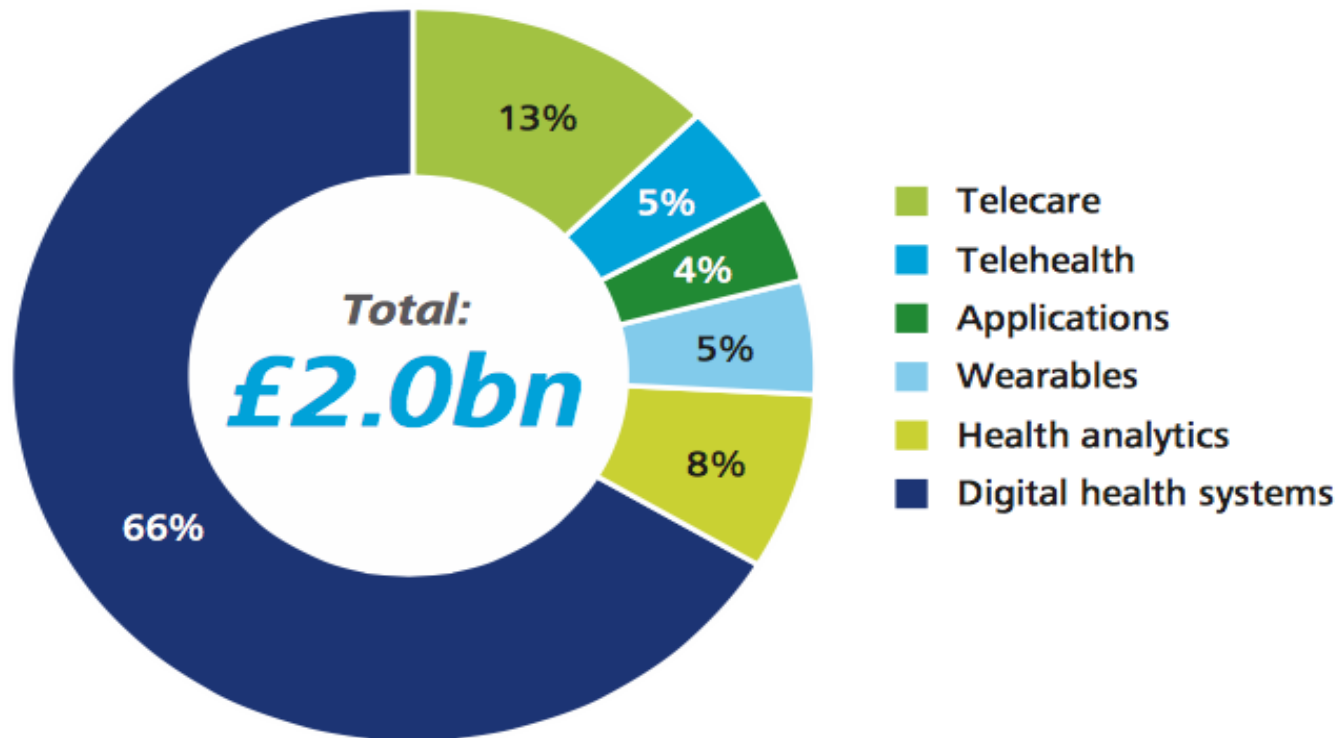
## **7. Health IT Systems Must Embrace User-Centered Design**

## **8. Going Live With a Health IT System is the Beginning, Not the End**

## **9. A Successful Digital Strategy Must be Multifaceted, and Requires Workforce Development**

# UK Digital Health Market 2014

Figure 5. UK digital health markets 2014

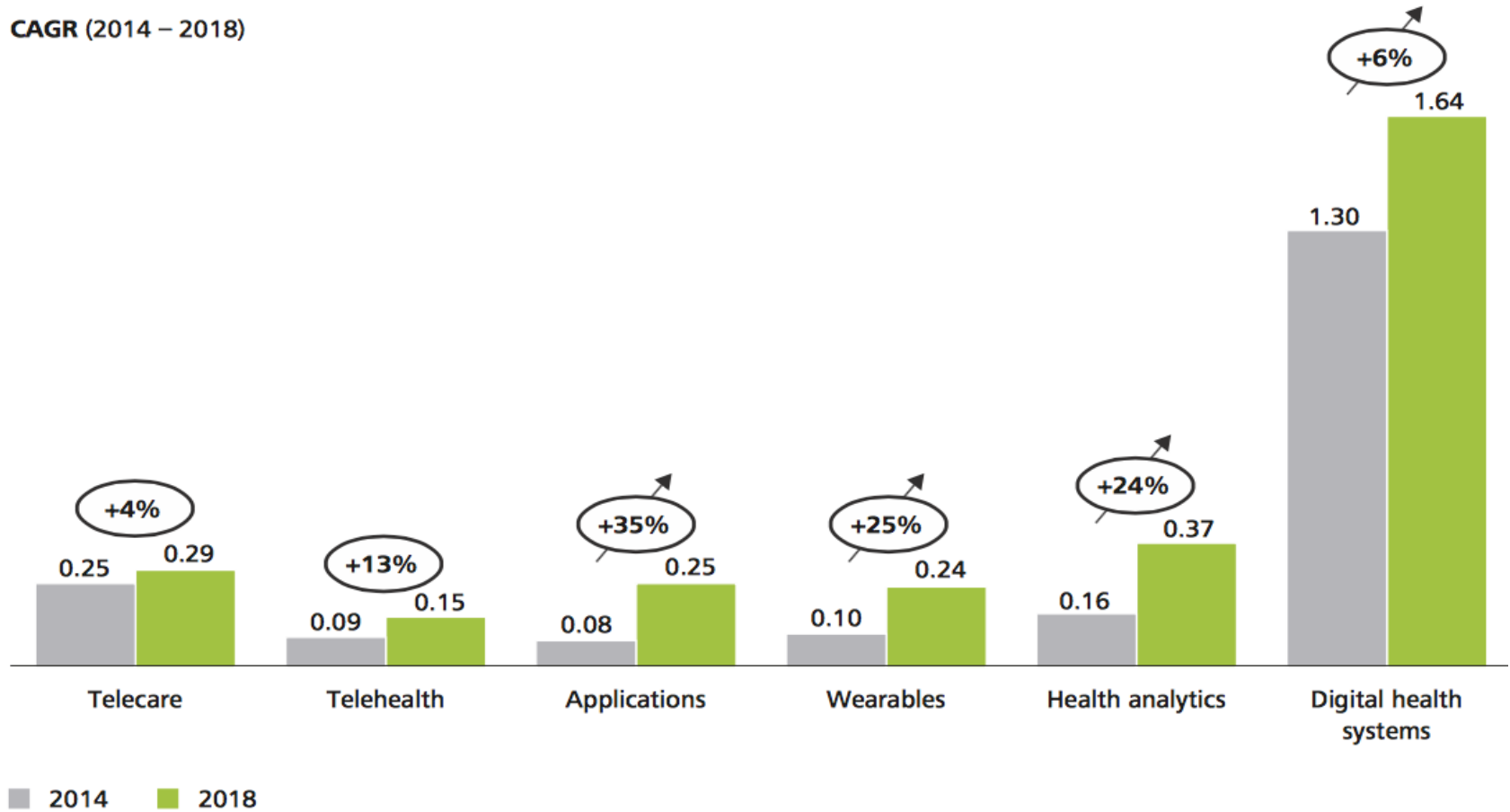


Source: Deloitte analysis

# UK Digital Health Market Growth 2014 -18 (£bn)

Figure 4. UK digital health markets 2014 – 2018 (£bn)

CAGR (2014 – 2018)



Source: Deloitte analysis

# Thank you

Stanton.Newman.1 @city.ac.uk