# Changing Behaviour to Change the NHS

### Anthony Tasgal [Tas] POV October 5<sup>th</sup> 2017 @taswellhill

## "Man of Many Lanyards"









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### PROLOGUE



## Two Threats [Or Opportunities]

### **TECHNOLOGY**

### ECONOMICS



## **Economics**

### Closing the NHS funding gap

Estimates, NHS England, 2020/21 prices

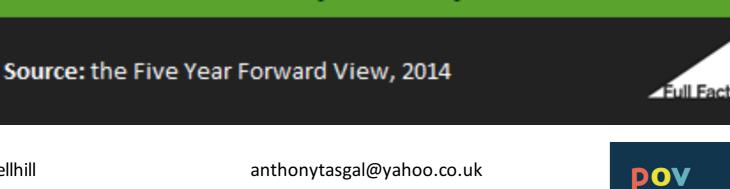
#### Efficiency savings

None 0.8% a year 1.5% a year 2-3% a year

#### Shortfall by 2020/21\*

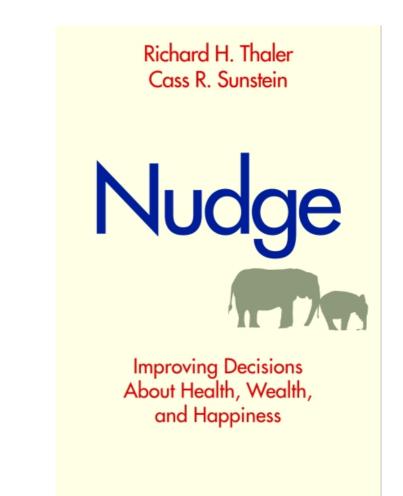
£30 billion £21 billion £16 billion £8 billion

#### \*assuming NHS funding rises in line with inflation

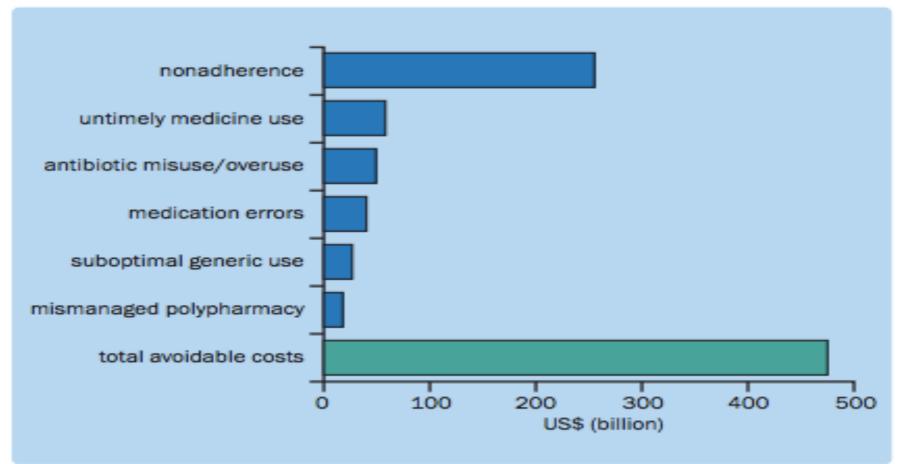


# Nudging

• "Approaches that steer people in certain directions while maintaining their freedom of choice"



## Cost of Non-Adherence



• IMS Institute for Healthcare Informatics. Advancing the responsible use of medicines: applying levers for change. Parsippany, USA, 2012



### PART 1. SOME BEHAVIOURAL ECONOMICS THEORY

### PART 2. SOME APPLICATIONS

### PART 3. CHANGING THE MODEL

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# PART 1. SOME BEHAVIOURAL ECONOMICS THEORY



# NUMBERS NUMB US

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# The brain is an "ignoring machine"

 A number of scientists estimate that 90%– 95% of our decision-making is preconscious, or intuitive

## We are the products of biology, psychology and culture NOT

# physics, mathematics and engineering

### WE CARE ABOUT PEOPLE, NOT THINGS



## Behavioural Economics Shows...

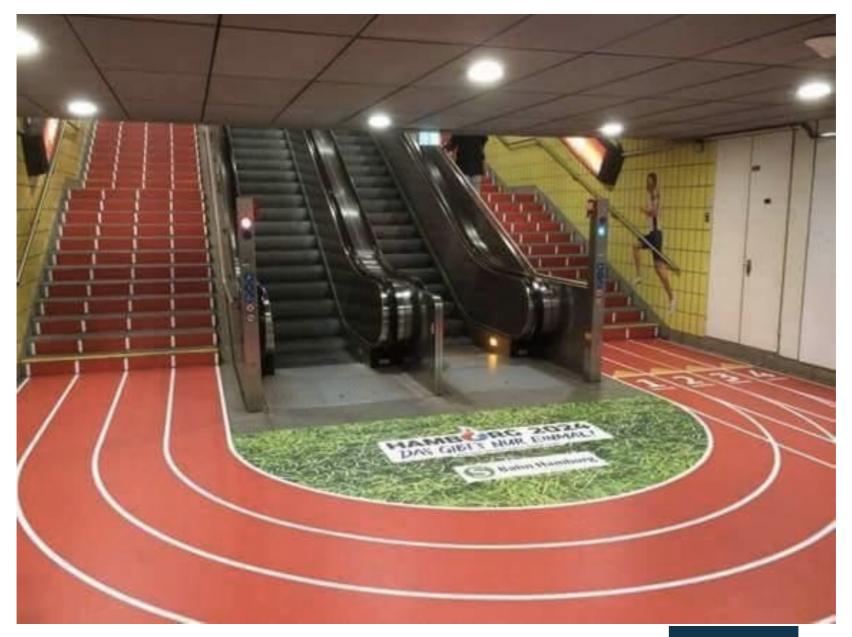
- 1. We don't think the way we think we think
- 2. Behaviour often happens automatically, unconsciously and "heuristically"
- 3. People don't always make the best choices
- 4. Emotion trumps information and creates memory
- 5. Surprise Cuts Through



Pilot SYSTEM 2 RATIONAL

# EFFORTLESSNESS for COGNITIVE MISERS

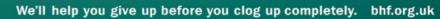




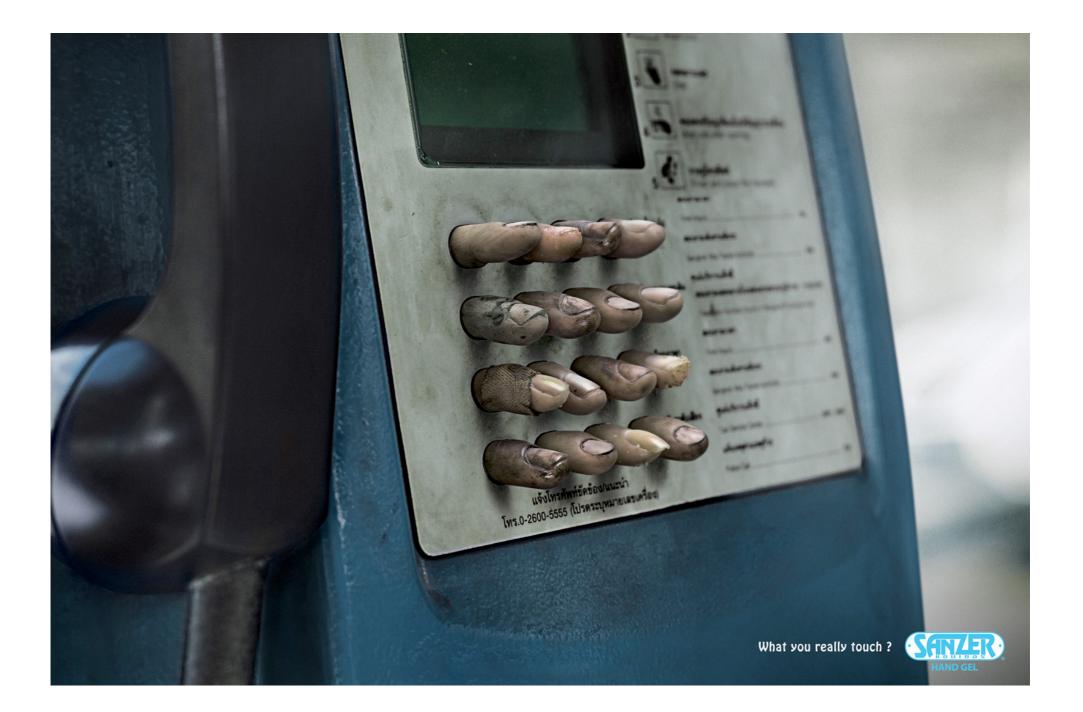
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Every cigarette we smoke makes fatty deposits stick in our arteries.

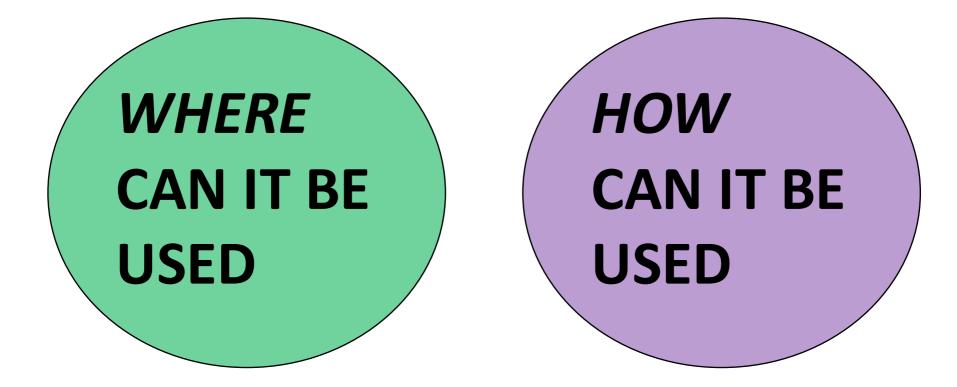




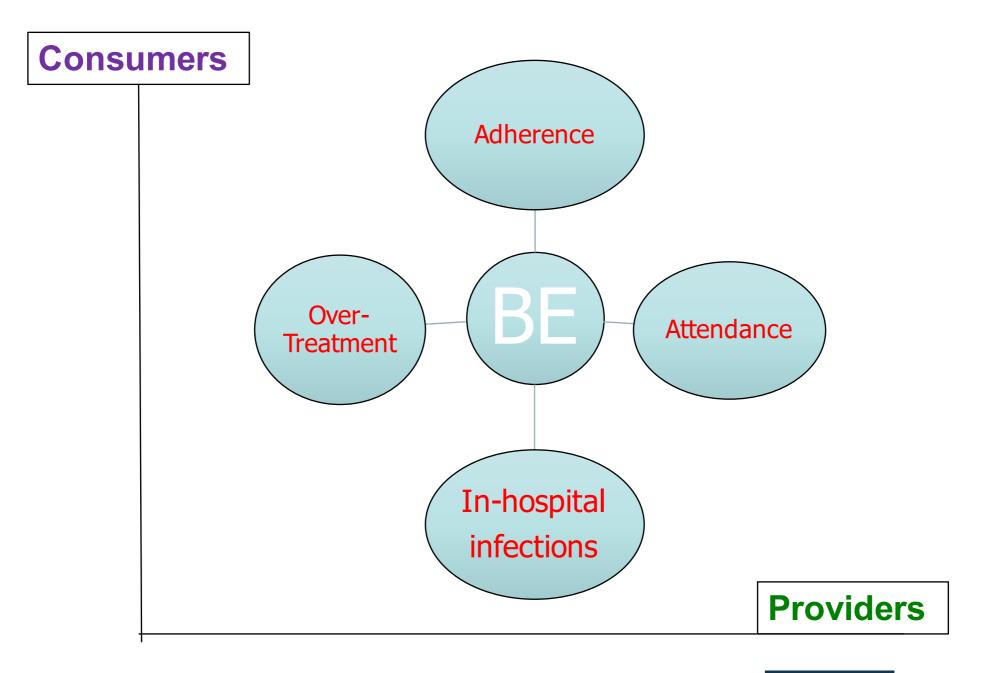


## PART 2. SOME APPLICATIONS











### Some Hows....

- 1. Framing
- 2. Massage Don't Message
- 3. Using Social norms and comparison
- 4. Ironic Process Theory
- 5. Default options
- 6. Context Beats Content
- 7. Behavioural contracts and commitments

## 1. Framing positively

- Would you agree to undergo a medical operation if your doctor told you: of those who have this procedure, 10 per cent are dead after five years?
- Would it have made a difference if the question had been phrased differently: if those who have this procedure, 90 per cent are alive after five years?
- This shows that framing makes a difference: the prospect of a 90 per cent chance of living is, for most people, better than a 10 per cent chance of dying.

## 2. MASSAGE DON'T MESSAGE

- How to make people look and feel:
  - -SMART
  - -RIGHT
  - -ATTRACTIVE



## 3. Social Norms

### Did You Know That...

Most Cooper Middle School students (8 out of 10) think that students should tell a teacher or counselor if they or someone else are being bullied at school.

> Results are from a june 2006 survey of 466 C Middle School boys and girls in all grade

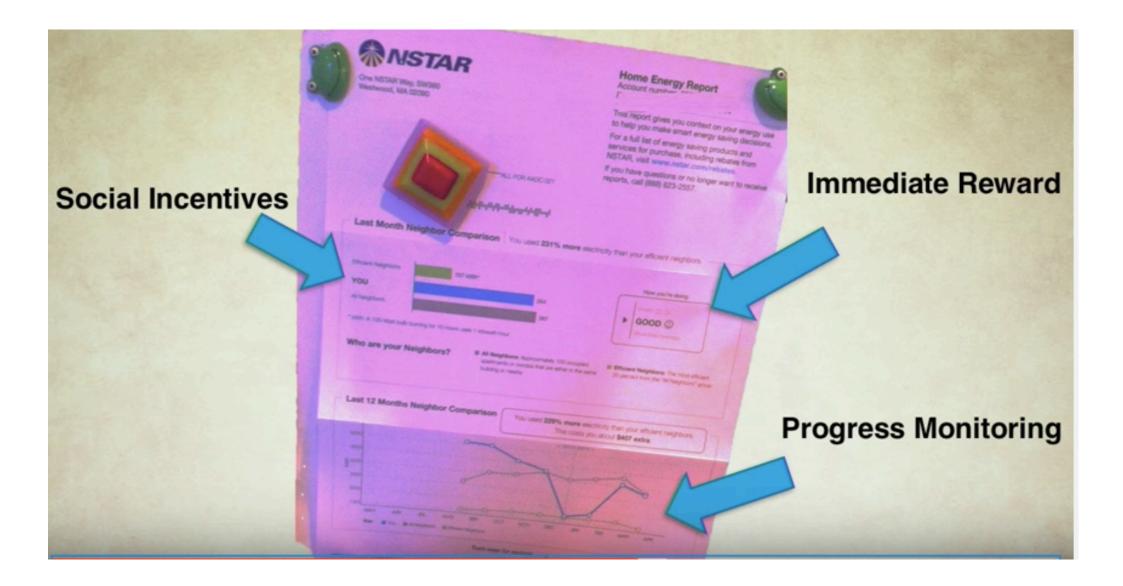
strength in Numbers

80% of crystal Lake 6 - 8th grade students say students should NOT tease in a mean way, call others hurtful names, or spread unkind stories about other students

Source: Results are from an Dotober 2008 survey of grades 6-8 at Crystal Lake Academy with 865 of students participating





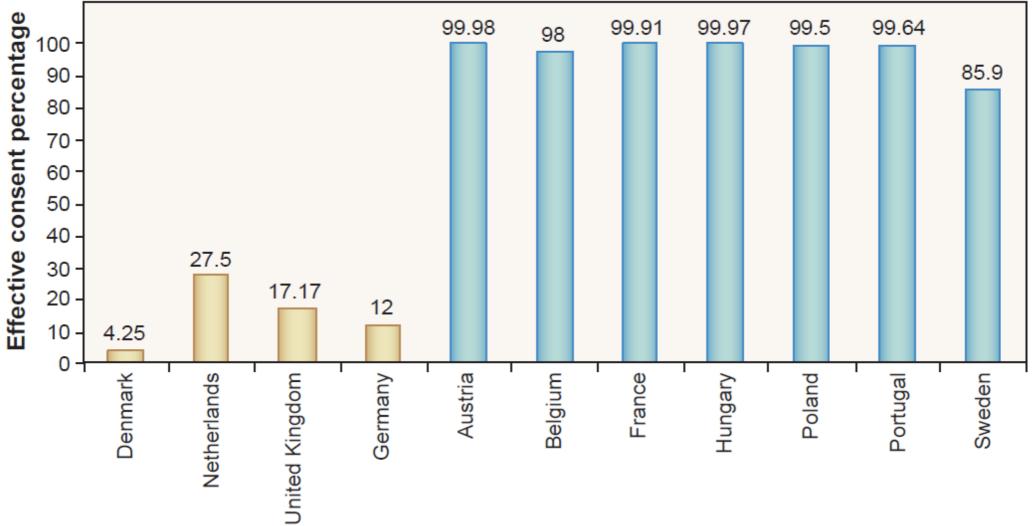




## 4. Ironic Process Theory



## 5. Defaults



Effective consent rates, by country. Explicit consent (opt-in, gold) and presumed consent (opt-out, blue).

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### 6. Context Beats Content



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## 7. "Ulysses Contracts"\*

- Individuals voluntarily deposit money into accounts which they can then only access upon reaching a specific goal
- They have been shown to help with:
  - weight loss,
  - healthier eating
  - and in one case increased the rate of successful smoking cessation by 40% after six months

\* Aka Monetary Contingency Contracts

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### PART 3. CHANGING THE MODEL



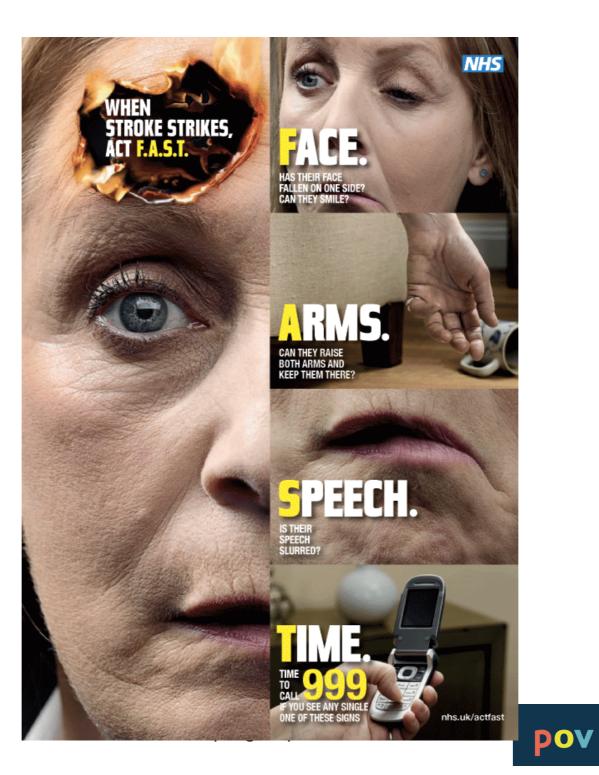
## So....

- 1. We need a new Theory of Influence
- BE emphasises that telling people doesn't work
- 3. [Patients and professionals]
- 4. But nudges, unconscious signals, defaults and norms do seem to work
- 5. And more emotional approaches may also bear fruit



## **One Final Thought- Language**





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#### Case study: Waldron et al (2014)<sup>164</sup>

### An automated minimum retest interval rejection rule reduces repeat CRP workload and expenditure, and influences clinician-requesting behaviour

Although not a nudge, Waldron et al demonstrate how a default setting can reduce waste and implement guideline recommended behaviour. Measuring and charting C-reactive Protein (CRP) values can be useful in determining disease progress or the effectiveness of treatments. However, guidelines recommend CRP should not be repeated within a 24-hour period and repeated measurement on the same or consecutive days are of limited clinical value. Waldron et al evaluated the effect of an automated IT-based 48-hour minimum retesting rejection rule for managing repeat CRP requests, looking at laboratory workload, expenditure and clinician requesting behaviour. Over one year, there was a 7% and 12.3% decrease in CRP requests and CRP tests respectively following the introduction of the rejection rule compared to control. They estimated that this equates to an annual saving of £10,500 in revenue costs and propose that this strategy offers a cheap and sustainable method for reducing unnecessary repeat testing, as well as making clinician test-requesting behaviour more appropriate.



