UWTASP

tele-antimicrobial stewardship program

July 23rd, 2019

Behavior Change - Theory

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REASONS ANTIBIOTIC PRESCRIBING GUIDELINES ARE NOT FOLLOWED

Belief that non-recommended agents may be more likely to cure an infection

Concern for parent or patient satisfaction, a common method by which clinicians are evaluated

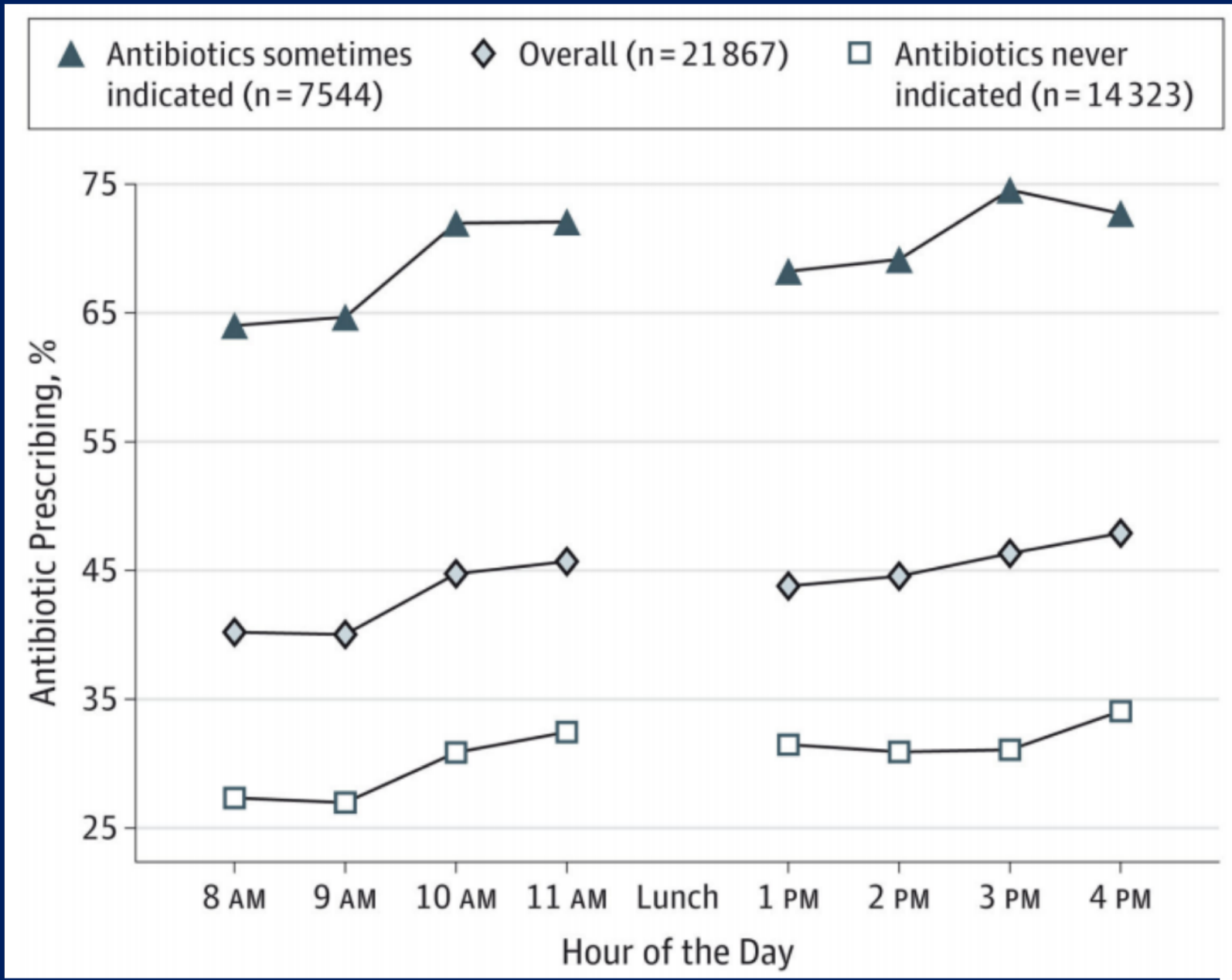
Fear of infection complications and related negative consequences

www.cdc.gov/getsmart

CDC GET SMART

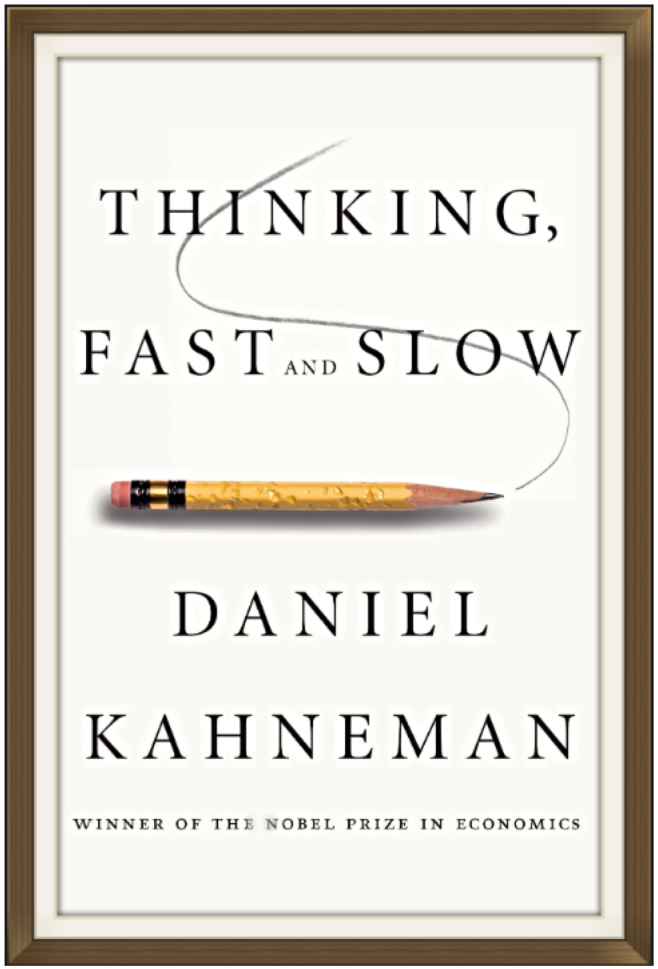
Sanchez GV, et al. Effects of primary care provider knowledge, attitudes, and practices on antibiotic drug selection, United States. *Emerg Infect Dis.* 2014;20:2041-7.

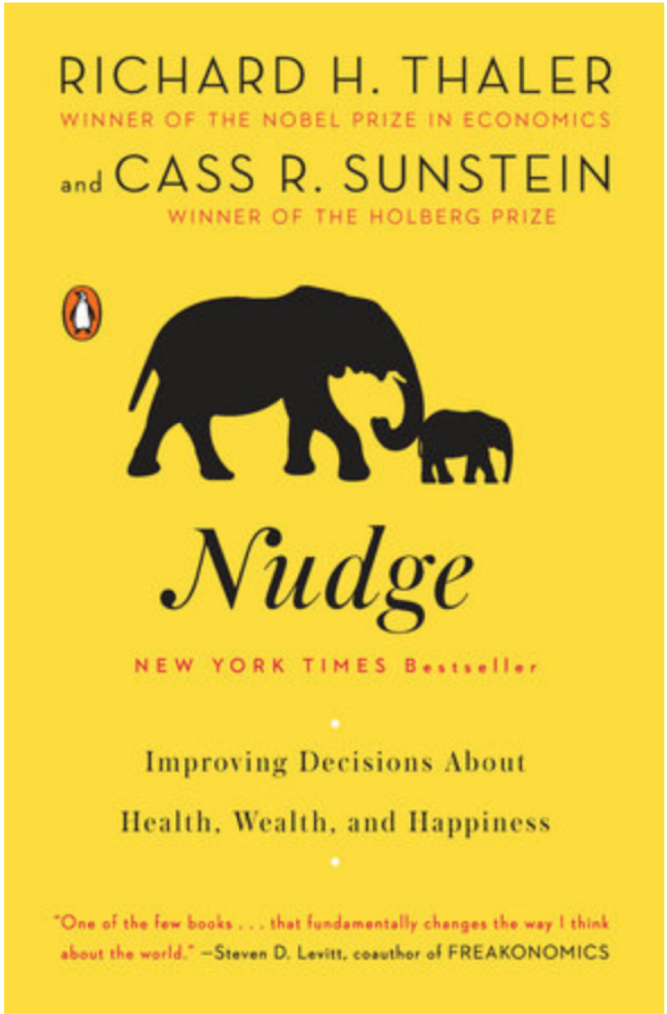
11/2014



Linder, JAMA Intern Med, 2014

Behavior Theory





System 1	System 2
Fast	Slow
Unconscious	Conscious
Automatic	Effortful
Everyday Decisions	Complex Decisions
Error prone	Reliable

MINDSPACE

Messenger	we are heavily influenced by who communicates information
Incentives	our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	we are strongly influenced by what others do
Defaults	we 'go with the flow' of pre-set options
Salience	our attention is drawn to what is novel and seems relevant to us
Priming	our acts are often influenced by sub-conscious cues
Affect	our emotional associations can powerfully shape our actions
Commitments	we seek to be consistent with our public promises, and reciprocate acts
Ego	we act in ways that make us feel better about ourselves

Nudging

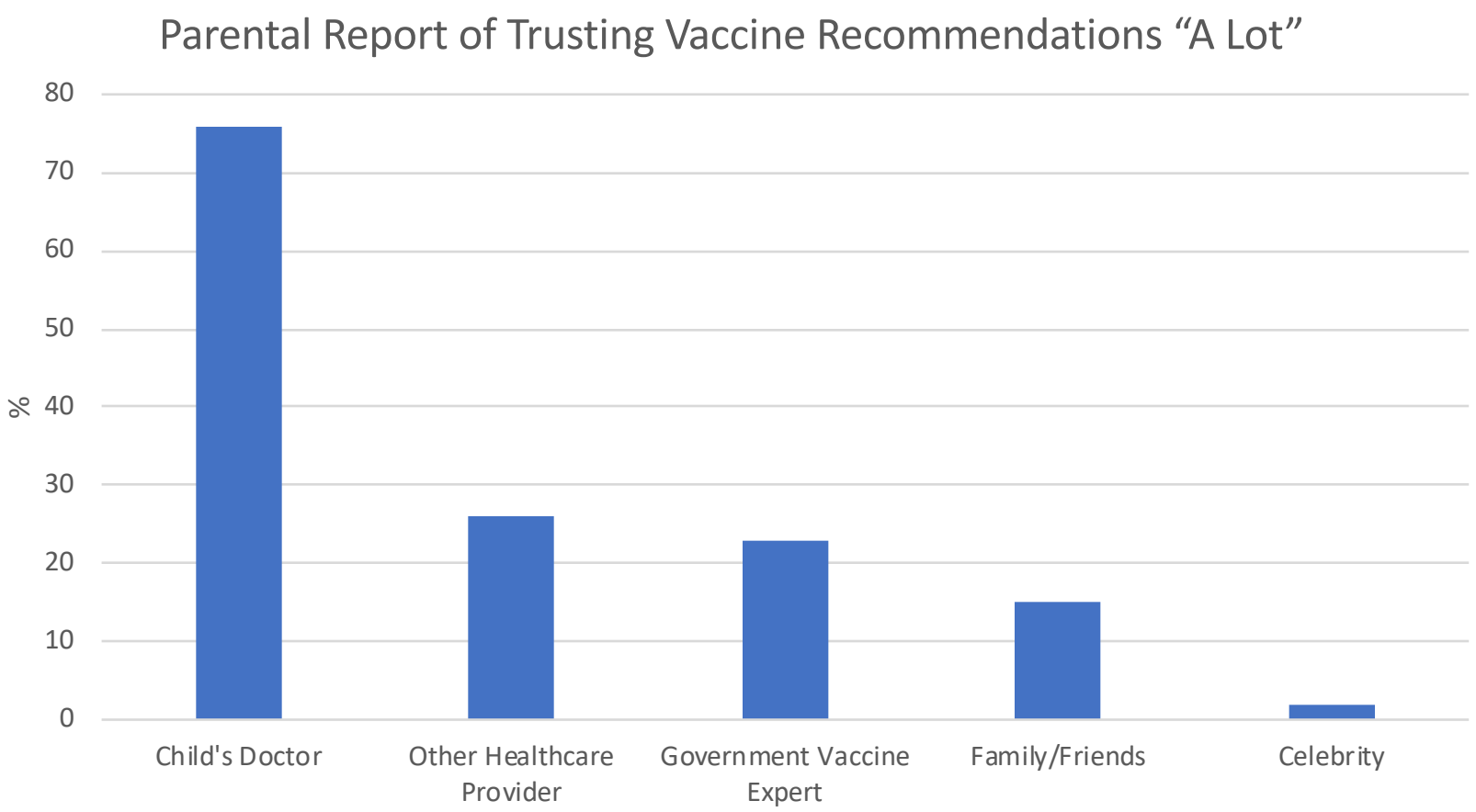
- Any aspect of decision making that alters behavior in a predictable way without forbidding any options

- “Nudges are not mandates. Putting fruit at eye level counts as a nudge. Banning junk food does not.”

Ly ‘A Practitioner’s Guide to Nudging’ 2013

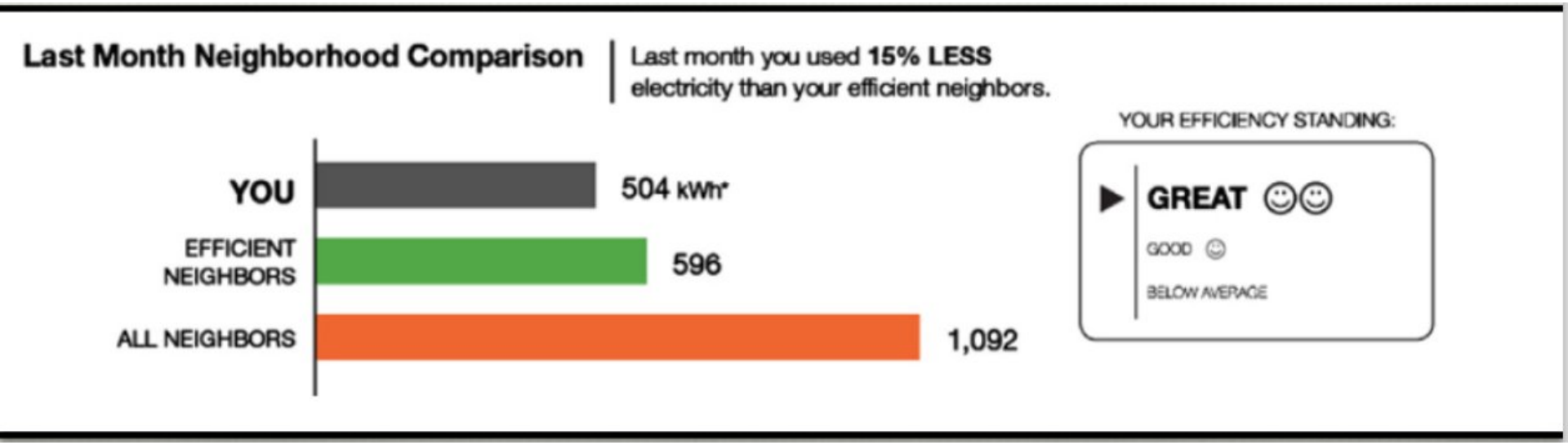
A Famous Nudge

Messenger



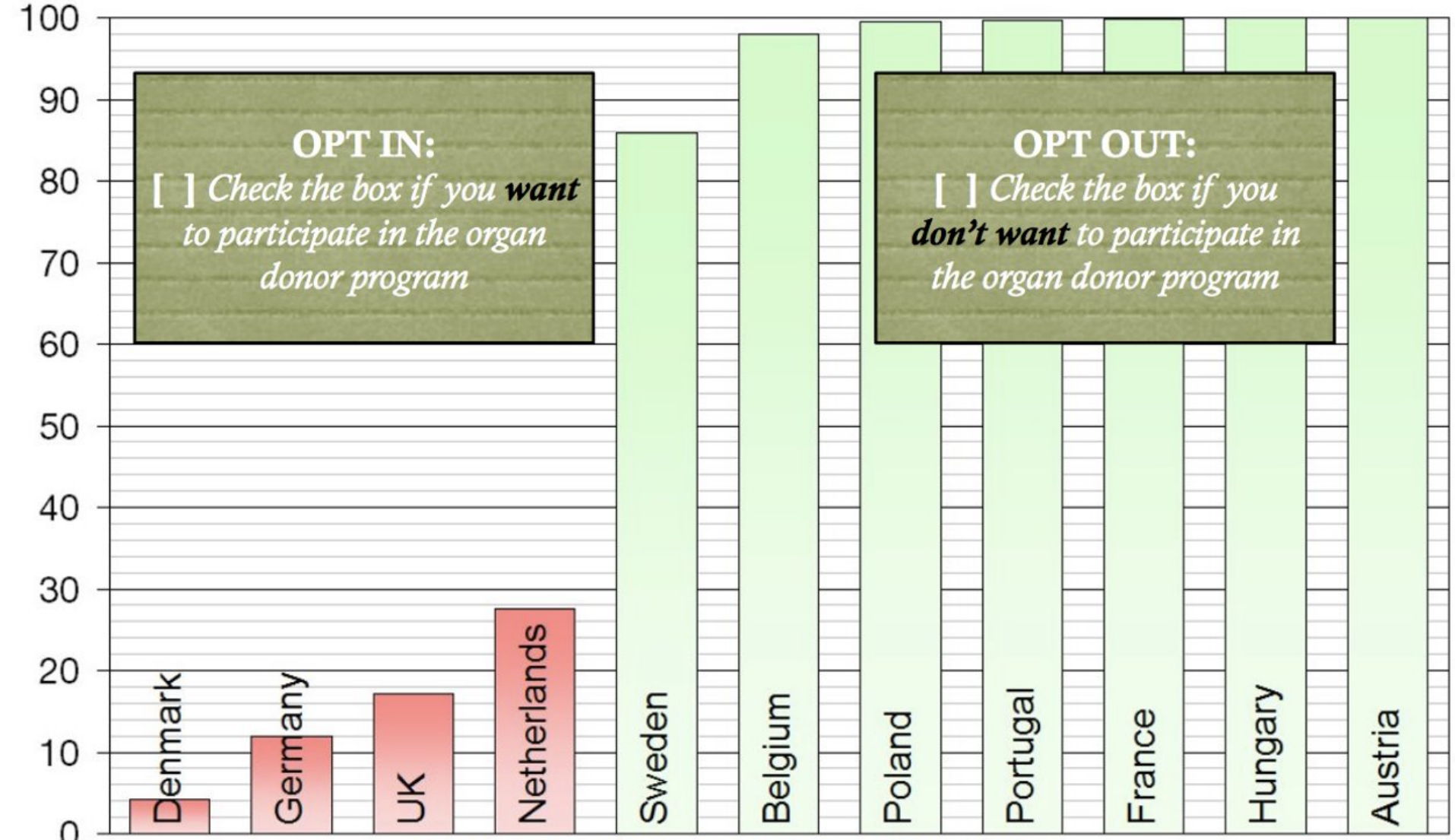
Freed, Pediatrics, 2011

Norms



Schultz Psych Sci 2007

Defaults


100
90
80
70
60
50
40
30
20
10
0
OPT IN:
[ ] Check the box if you want to participate in the organ donor program
OPT OUT:
[ ] Check the box if you don't want to participate in the organ donor program
Denmark
Germany
UK
Netherlands
Sweden
Belgium
Poland
Portugal
France
Hungary
Austria

Priming

+18% (p<.05)

No Difference

+32% (p<.001)

Commitment (and incentives)

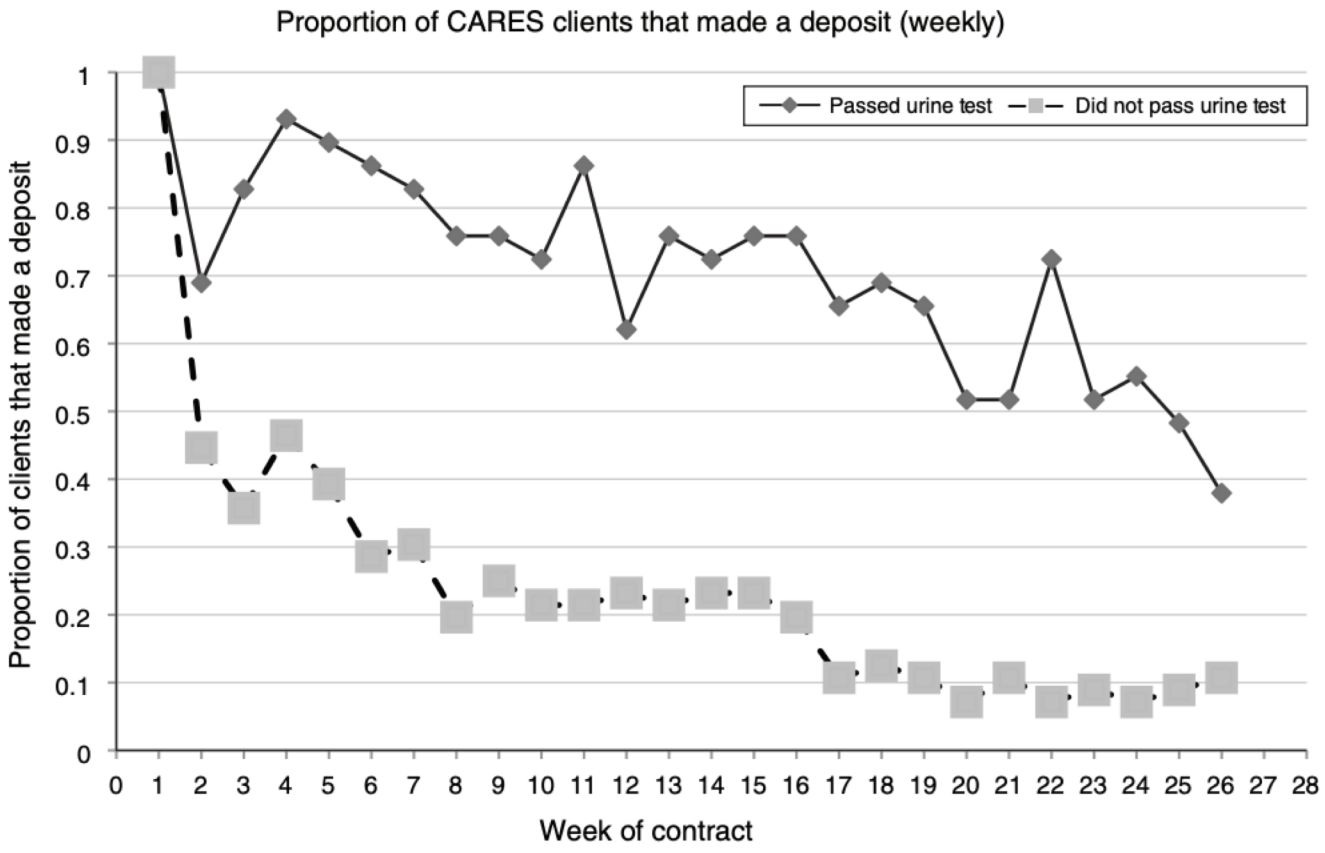


FIGURE 2

Gine, “Put your money where your butt is…”, American Economic J: applied economics, 2010

Summary

- Traditional approaches to behavioral change may ignore important opportunities
- Cleaver approaches to “choice architecture” are all around us
- Next time, stewardship specific behavior change