

September 30th, 2021

F-ASB Behavior Change

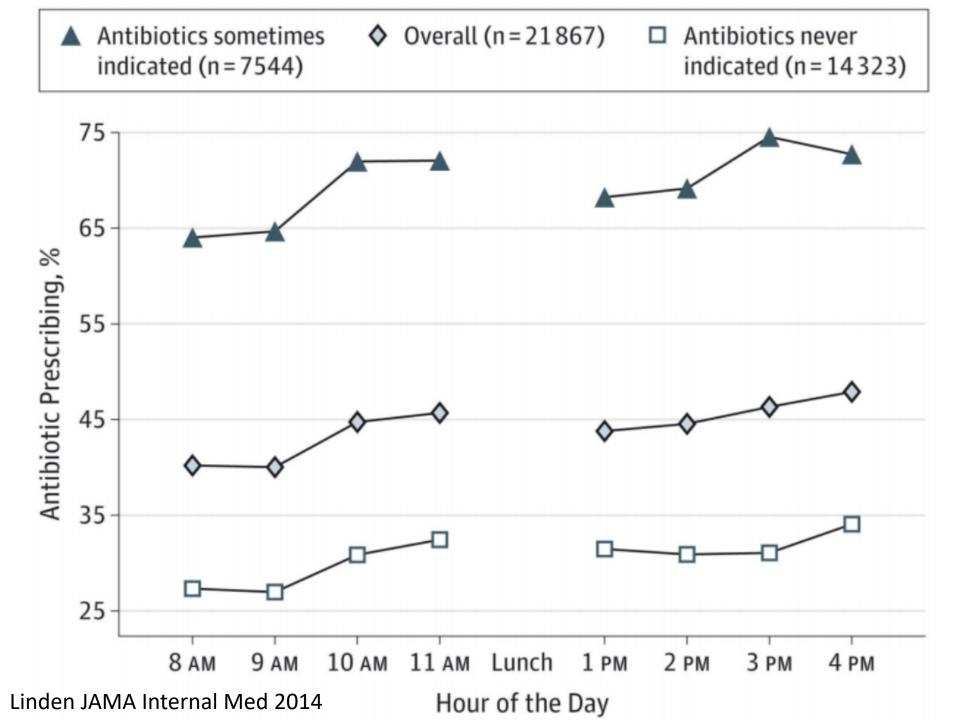
John Lynch, MD, MPH

IDWEEK 2015

164. Overtreatment of Asymptomatic Bacteriuria: A Qualitative Study Myriam Eyer, MD^{1,2}; Matthias Läng, MD¹; Drahomir Aujesky, MD³; Jonas Marschall, MD¹; Department of Infectious Diseases, Bern University Hospital, Bern, Switzerland; Division of Infectious Diseases, Valais Hospital, Sion, Switzerland; Division of General Internal Medicine, Bern University Hospital, Bern, Switzerland

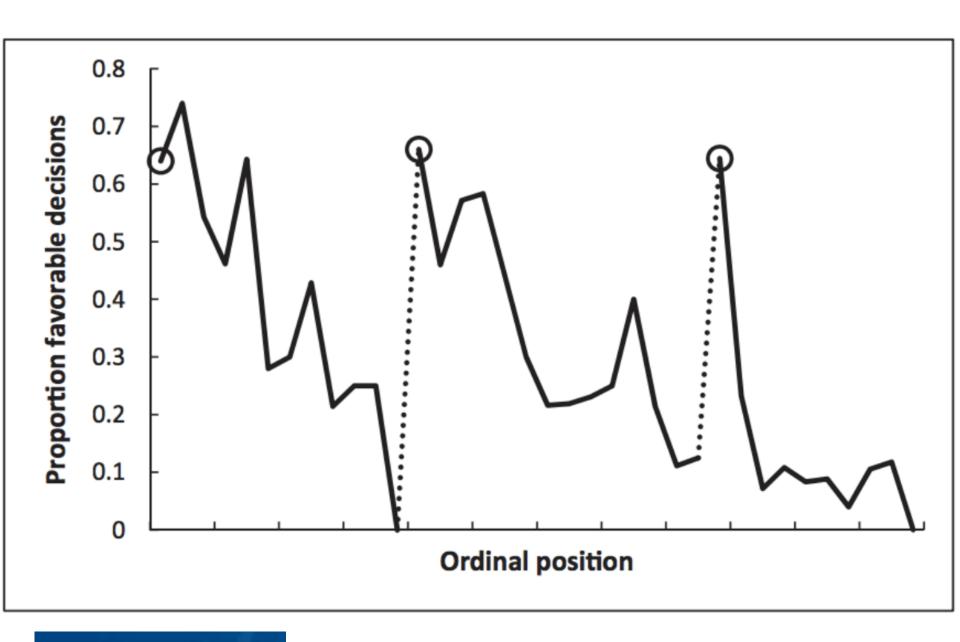
Results. In the 21 interviews, the following thematic rationales for antibiotic overtreatment of ASB were reported (in order of reporting frequency): (1) Treating laboratory findings without taking the clinical picture into account (n = 17); (2) Psychological factors such as anxiousness, overcautiousness or anticipated positive impact on patient outcomes (n = 13); (3) External pressors such as institutional culture, peer pressure, patient expectation, and excessive workload that interferes with proper decision-making (n = 9); 4) Difficulty with interpreting clinical signs and symptoms (n = 8).

Conclusion. In this qualitative study we identified both physician-centered factors (e.g. overcautiousness) and external pressors (e.g. excessive workload) as motivators for prescribing unnecessary antibiotics. Also, we interpreted the frequently cited practice of treating asymptomatic patients based on laboratory findings alone as lack of awareness of evidence-based best practices.



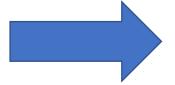
Influences That Impact Physician Decision Making

- 80% of physicians feel that they have "little influence on the direction of healthcare"
- Half of all medical information is replaced every 5 years
- New information/data/interventions
- Loss of autonomy
- Habits
- Skepticism (and sometimes fear)



What Influences Clinician Behavior?

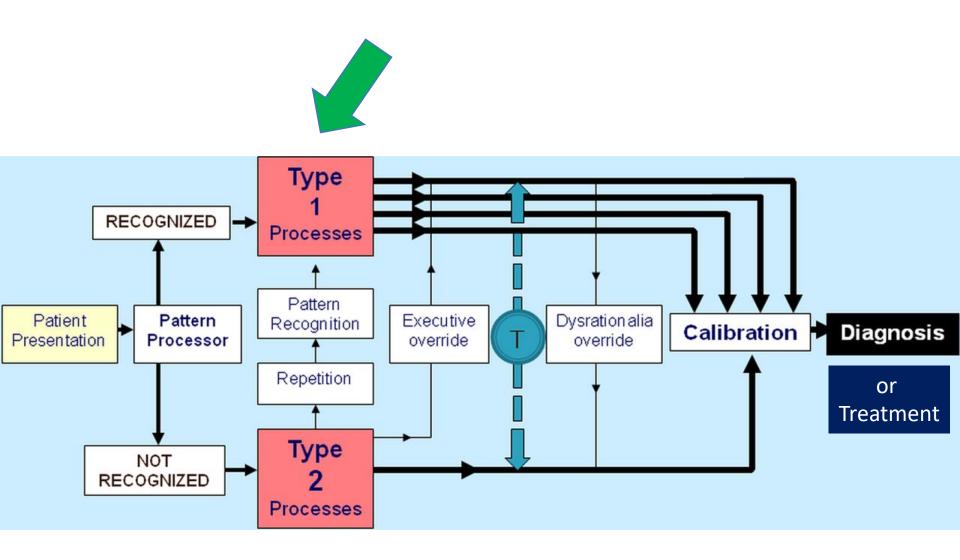
- Data (usually)
- Ease of use
- Peers (esp. influential ones)
- Outcomes



The heart and the head

How do people make choices?

System	Automatic (System 1)	Reflective (System 2)
Characteristic	Uncontrolled	Controlled
	Effortless	Effortful
	Emotional	Deductive
	Fast	Slow
	Unconscious	Self-aware
Examples of use	Speaking in your mother tongue	Learning another language
	Taking the daily commute	Planning an unfamiliar journey



Context and Decision Making

- Wok compression
- Fatigue
- Burnout
- Time of day
- Friday afternoons
- Holidays
- Treatment availability

Limits of Willpower

"Relying on provider vigilance to achieve optimal performance is unlikely to produce sustained improvement"

- Ezekiel Emanuel, Annals of Internal Medicine, 2016

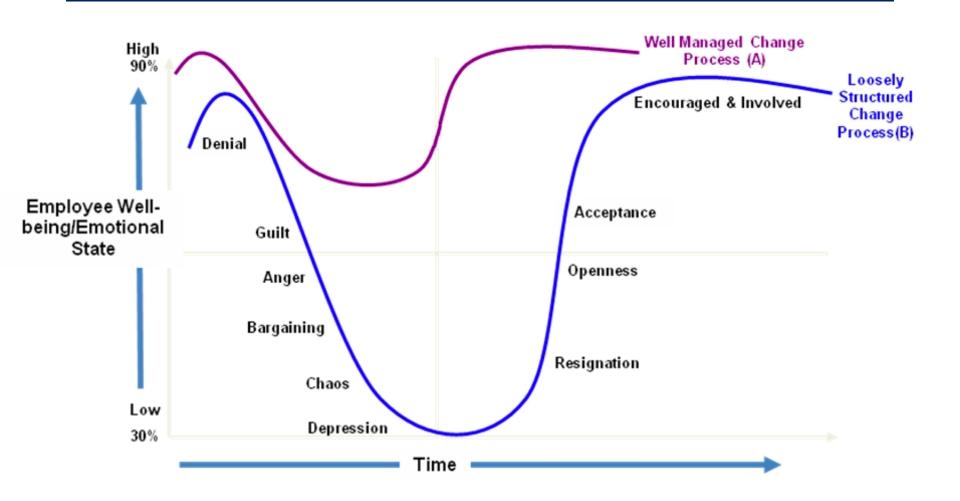
We must make the right thing to do, the easy thing to do.



https://knowhownonprofit.org/

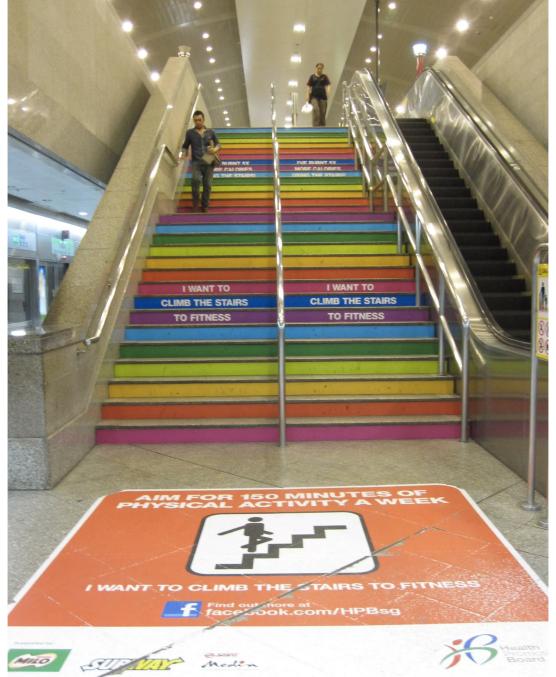
Time

Change Management



The Nudge

- A nudge is any aspect of decision making that alters people's 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."











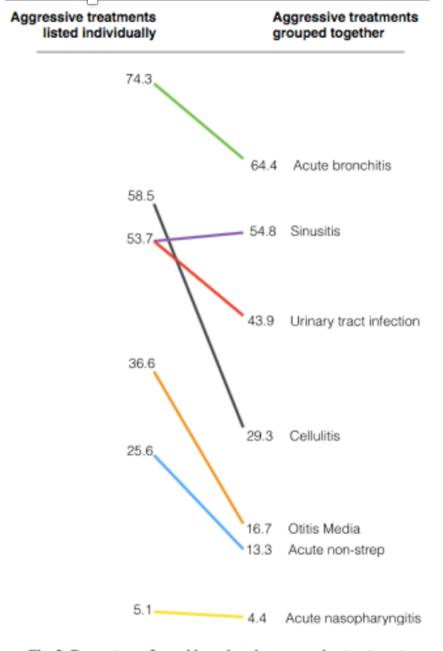


Fig. 2. Percentage of providers choosing aggressive treatment options (i.e., prescription drugs for antibiotic-inappropriate vignettes and broad-spectrum antibiotics for antibiotic-appropriate vignettes) as a function of menu partition

MINDSPACE

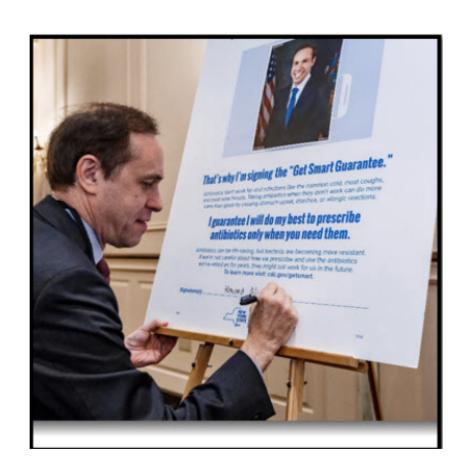
Messenger	we are heavily influenced by who communicates information
Incentives	our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses
Norms	we are strongly influenced by what others do
Defaults	we 'go with the flow' of pre-set options
Salience	our attention 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

Messenger



Commitment

- Displayed poster sized "commitment letters" in exam rooms for 12 weeks during cold and influenza season
- Letters had photo of PCP and signature
- Randomized 14 clinicians, 5 clinics, 1000 adult patients with URI
- Baseline prescribing rates 42.8% intervention arm and 43.5% control arm
- Reduction of 10% in Rx rate in intervention arm (p<.05)



Summary

- Overuse and underuse are pervasive throughout US healthcare
- How we make decisions (bias and context) impact our ability to provide high value care
- Changing behavior is hard
- Nudges can systematically move us toward higher value decision making without overriding autonomy

"The best way to predict the future is to create it"

Peter Drucker