

July 18, 2023

Agenda

- How to Help People Make Better Decisions
- Case Discussions
- Open Discussion

“In contrast to economic models of rational choice suggesting that we respond to information and price signals, insights from across the behavioral sciences suggest that human behavior is actually led by our very human, emotional and fallible brain, and influenced greatly by the context or environment within which many of our decisions are taken (Kahneman, 2011; Thaler & Sunstein, 2008). In other words, behavior is not so much thought about; it simply comes about. The human brain uses a number of heuristics to simplify decision making, but these ‘rules of thumb’ can also lead people into predictable systematic biases and errors (Kahneman, 2003; Kahneman & Tversky, 2000).”



8 oz



12 oz



16 oz



12 oz



16 oz



20 oz



Barriers

- Lack of guidelines
- Poor familiarity of guidelines
- Time pressure (emphasis on shorter LOS or productivity)
- Explaining to patients why tests/tx not indicated takes time
- Discomfort with diagnostic uncertainty
- Lack of appreciation of harms
- Patient Expectations
- Lack of knowledge of cost including impact of setting on cost
- Lack of centrally available information on prior tests
- Local Standards of care
- Defensive Medicine (i.e. fear of litigation)
- Local Standards
- Misaligned financial incentives



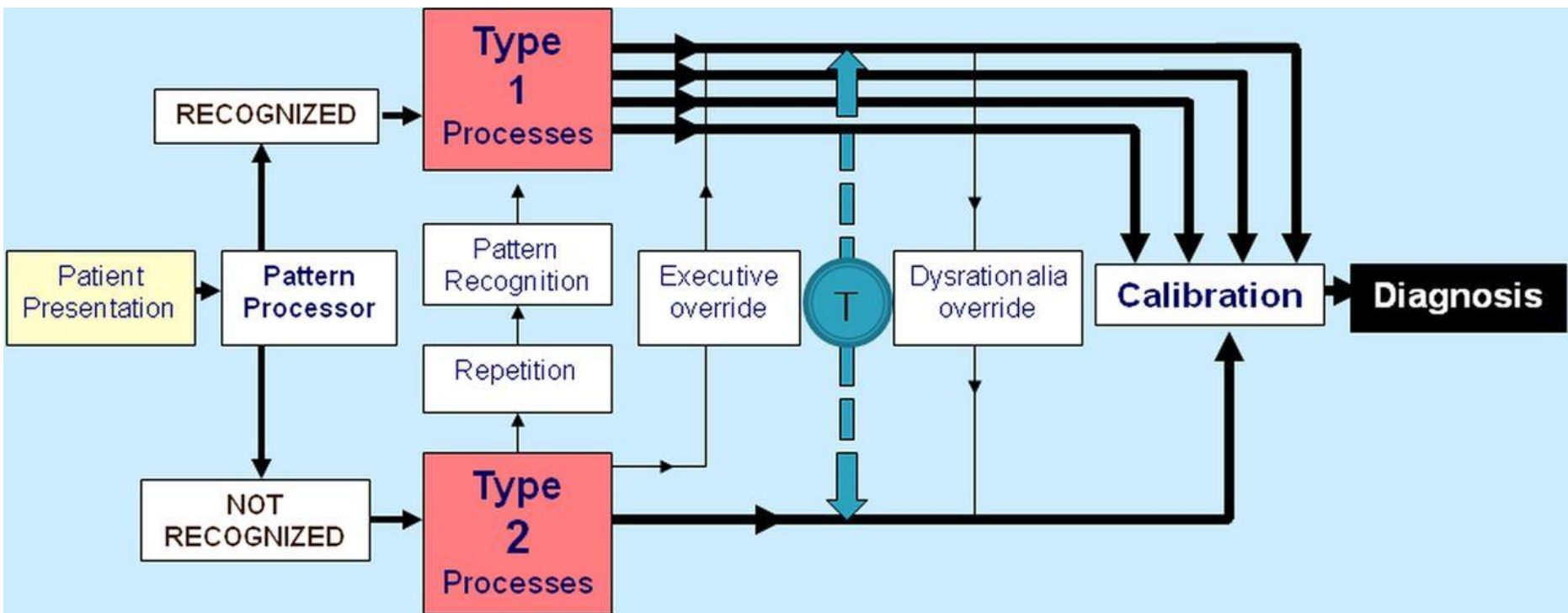
Illusions

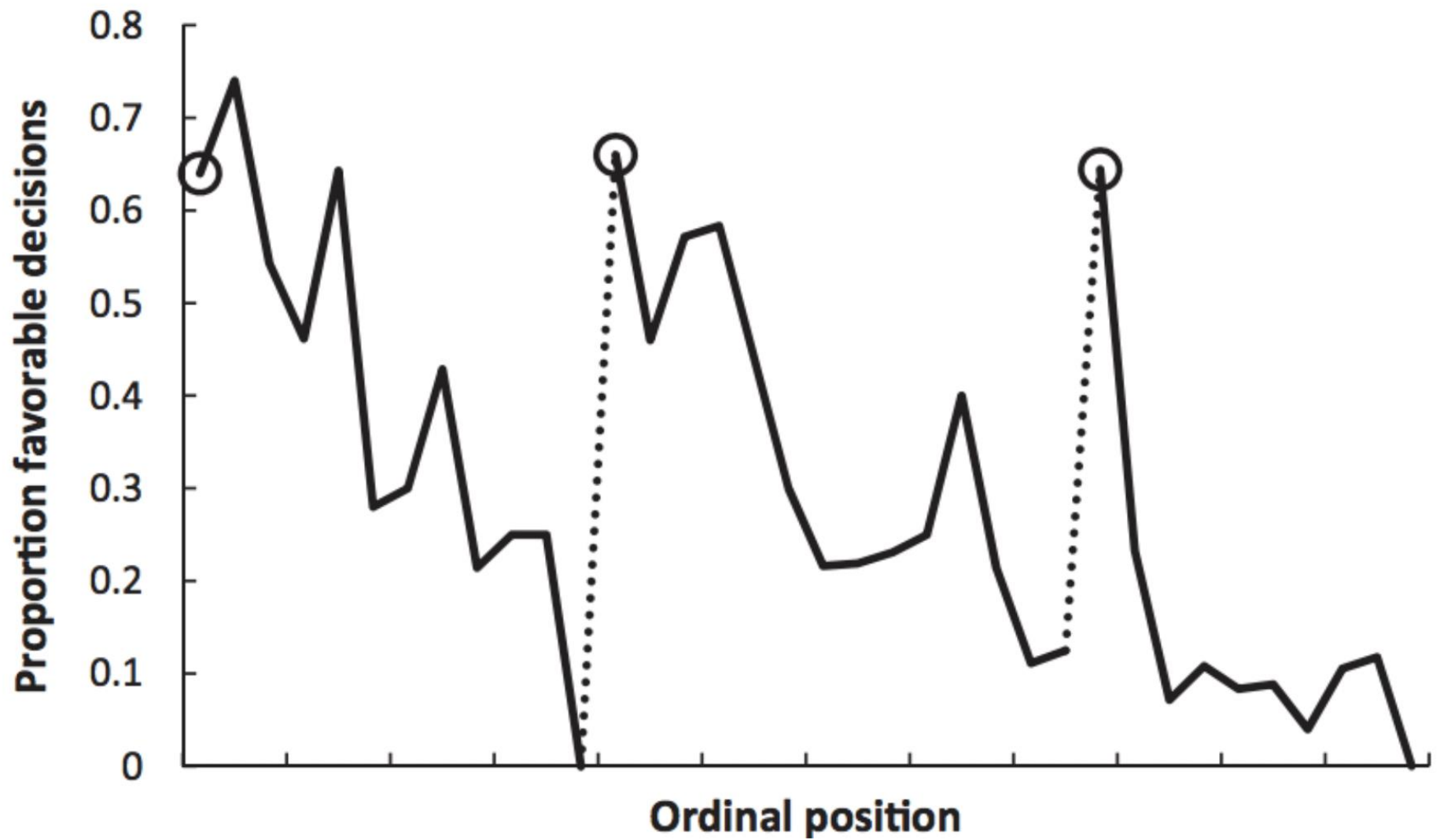
- **Illusion of control**
 - We tend to overestimate the benefits of the actions we take
- **Illusion of superiority**
 - We tend to think we do perform better than we actually do
- **Illusion of individuality**
 - “But my patients are different”

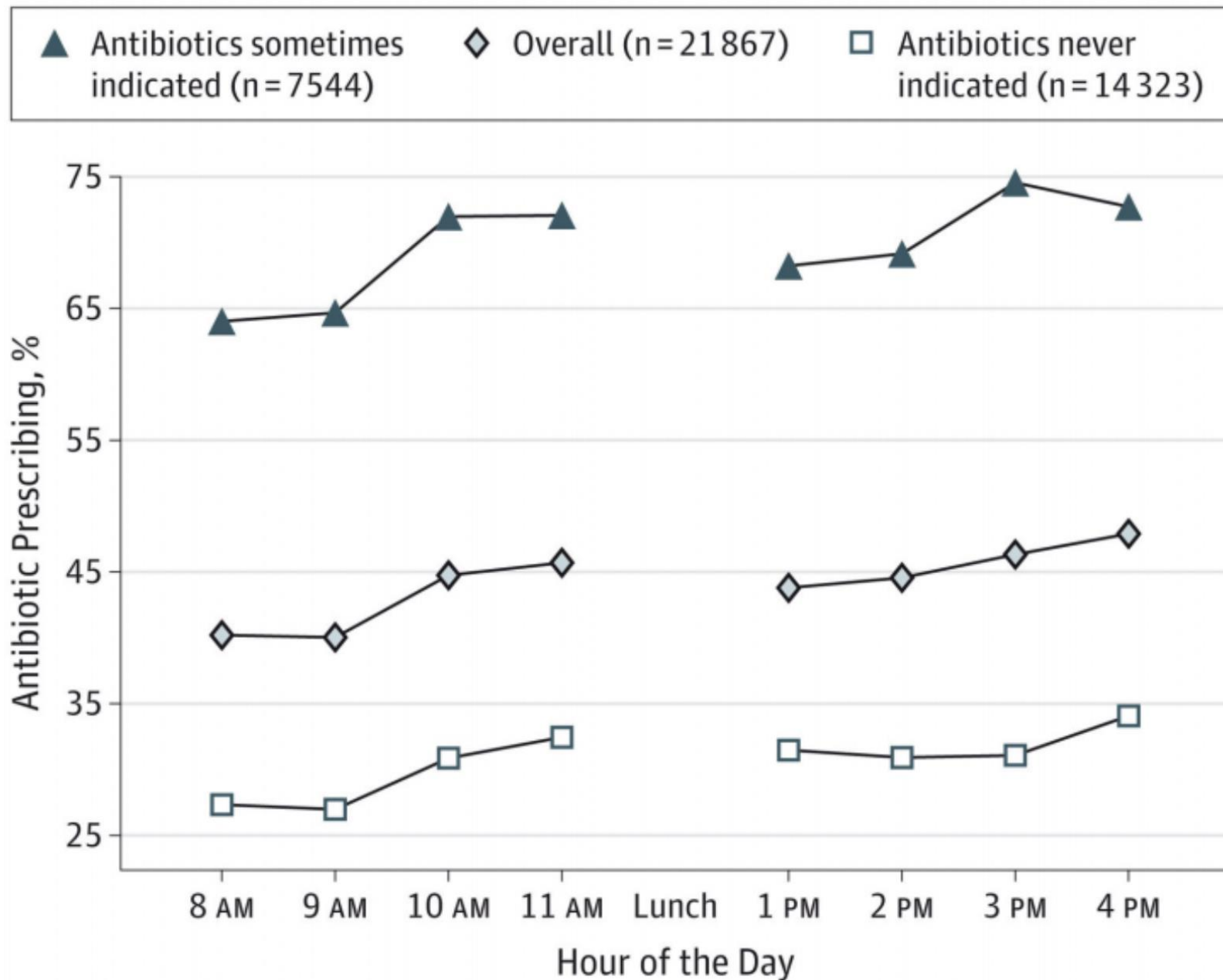


| System | Automatic (System 1) | Reflective (System 2) |
|------------------------|--|---|
| Characteristic | Uncontrolled | Controlled |
| | Effortless | Effortful |
| | Emotional | Deductive |
| | Fast | Slow |
| | Unconscious | Self-aware |
| Examples of use | Speaking in your mother tongue Taking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









Context and Decision Making

- Work Compression (Vidyarthi, JGIM 2007,)
- Fatigue (Landrigan NEJM 2004)
- Burnout (Welp, Front Psychol 2015)
- Time of the day(Lee,AmericanJGastroenterology, 2011)
- Friday Afternoons(Brown,JHealthEcon,1996)
- Holidays (Smith, Emerg Med Journal 2012)
- Treatment availability (Scherr, Health Commun 2017)



Normal Human Limits

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

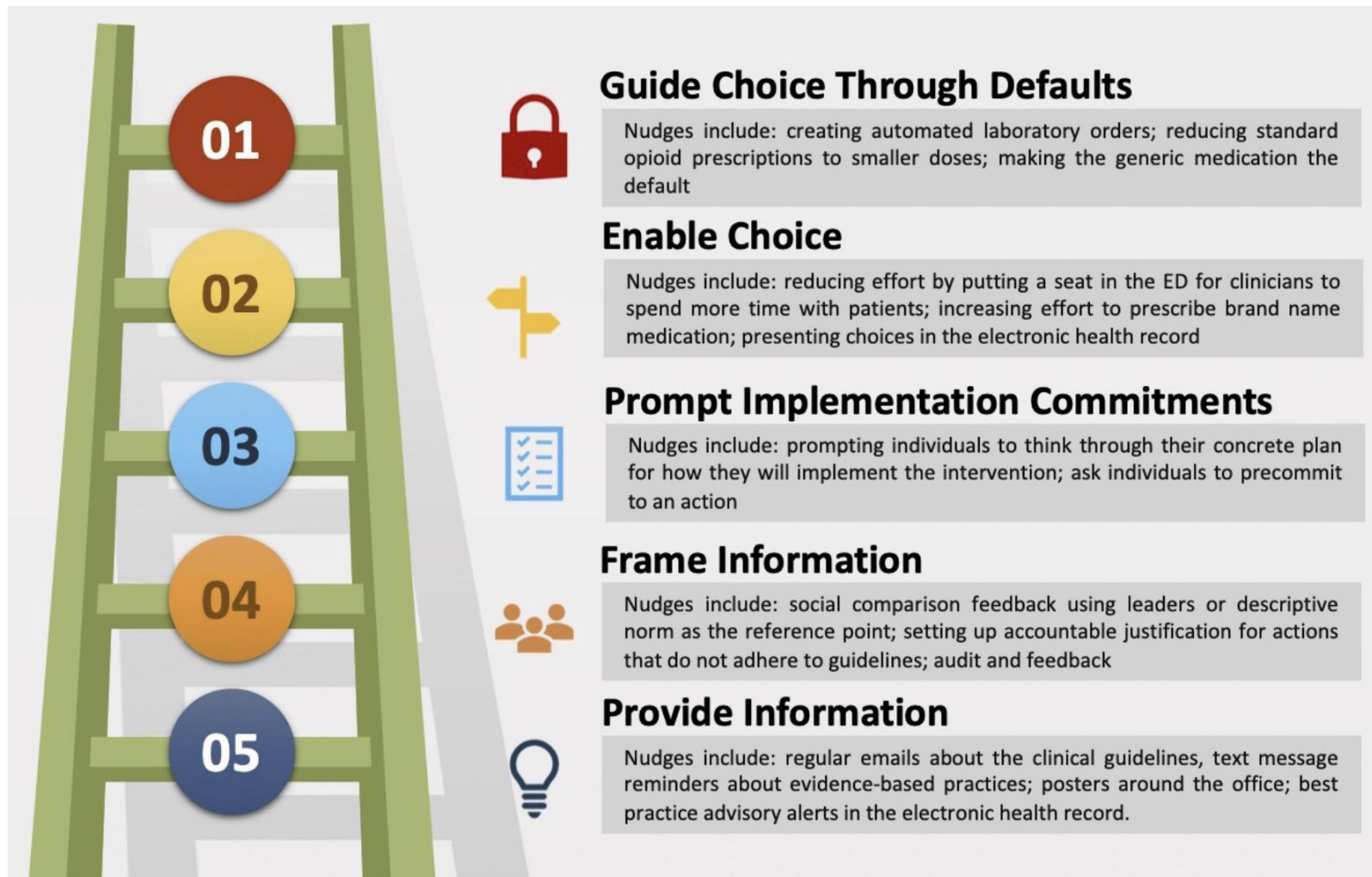
- Ezekiel Emanuel Ann Int Med 2016

We have to make the right thing to do,
the easy thing to do





The Nudge Ladder



Nudges That Work

| Nudge category/ author | Type of nudge | Mode | Description | Intervention effect* |
|---|---------------------------|--------------------------|---|----------------------|
| Decision structure—change option consequences | | | | |
| Meeker <i>et al</i> ⁴⁴ | Accountable justification | Electronic health record | At time of prescribing an antibiotic, physicians were asked to justify their treatment decision in a mandatory free text field. The prompt informed physicians the justification would be visible in the patient's record | Reduction |
| Persell <i>et al</i> ⁴⁶ | Accountable justification | Electronic health record | At time of prescribing an antibiotic, physicians were asked to justify their treatment decision in a mandatory free text field. The prompt informed physicians the justification would be visible in the patient's record | No change |
| Yang <i>et al</i> ⁴⁹ | Public reporting | Posters and reports | Posters with antibiotic prescribing data were publicly displayed in the primary care clinics and reports with the data were sent to clinic managers and local health authorities | Reduction |
| Decision assistance—provide reminders | | | | |
| Meeker <i>et al</i> ⁴⁴ | Suggested alternatives | Electronic health record | At time of prescribing an antibiotic, a pop-up screen stated antibiotics are generally not indicated for the diagnosis and showed a list of alternative treatments | Reduction |
| Persell <i>et al</i> ⁴⁶ | Suggested alternatives | Electronic health record | At time of prescribing an antibiotic, a computerised order set appeared with treatment alternatives and education materials for the patient | Reduction |
| Decision assistance—facilitate commitment | | | | |
| Meeker <i>et al</i> ⁴³ | Public commitment | Poster | A poster-sized letter signed by physicians and posted in examination rooms indicating commitment to reducing antibiotics for RTIs | Reduction |



MINDSPACE

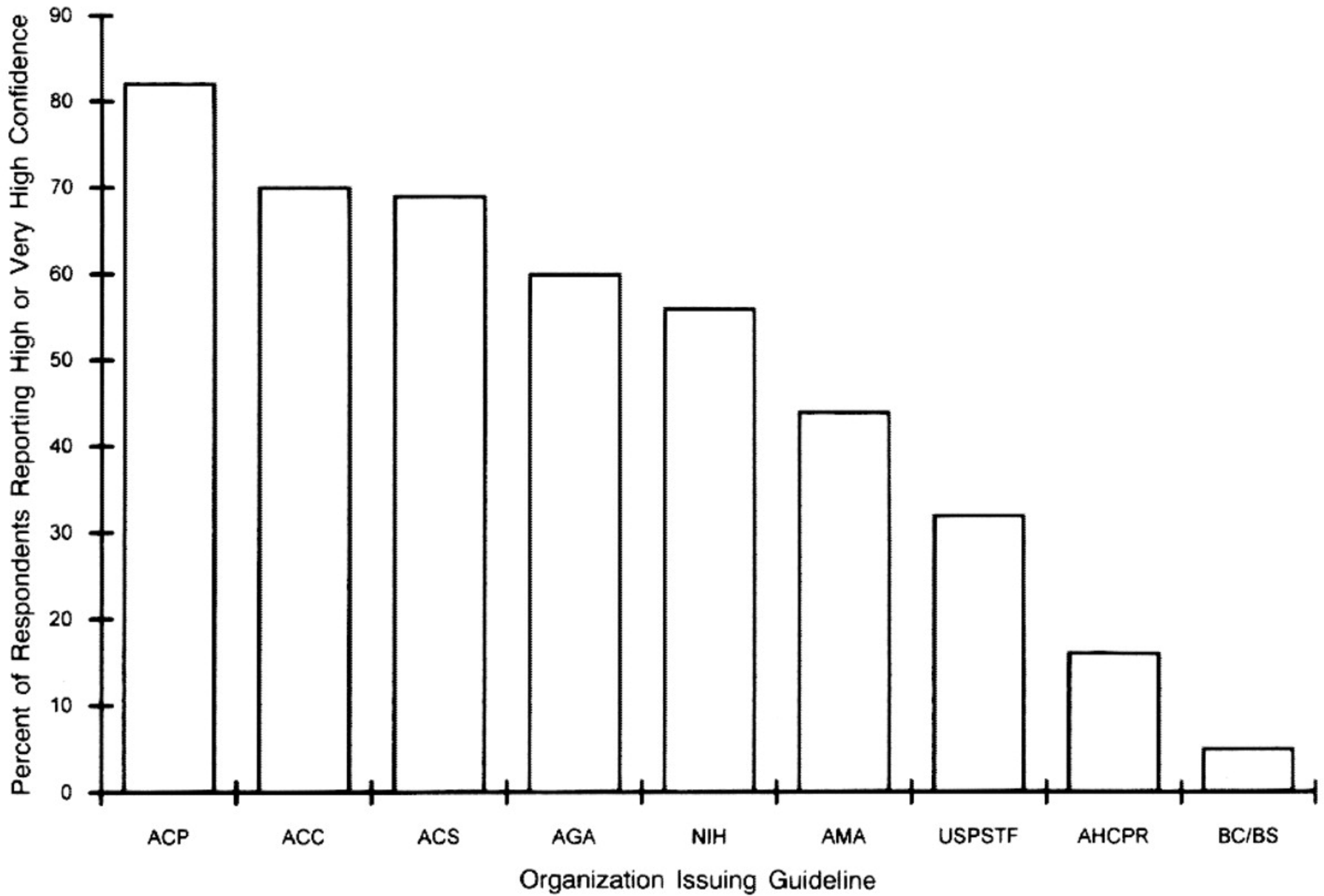
| | |
|--------------------|---|
| Messenger | we are heavily influenced by who communicates information |
| Incentives | our responses to incentives are shaped by predictable mental shortcuts such as strongly avoiding losses |
| Norms | we are strongly influenced by what others do |
| Defaults | we '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

Stop Freakin' ... Call Beacon Spokesman 206.452.3130



Beast Mode #24/7 Marshawn Lynch | Beast Mode !



Incentives

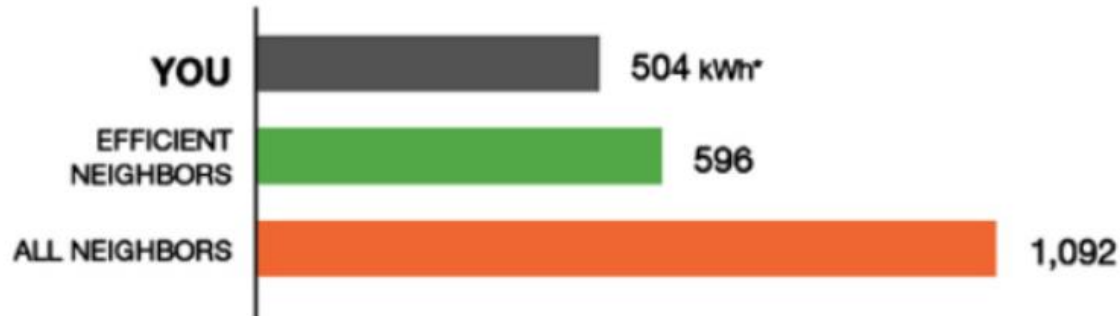
- Massachusetts General Physicians Organization Quality Incentive Program
 - Advance Incentive Payment
- MACRA and MIPS
 - Medicare Payment Adjustments (+/-) based on measures of quality/value



Norms

Last Month Neighborhood Comparison

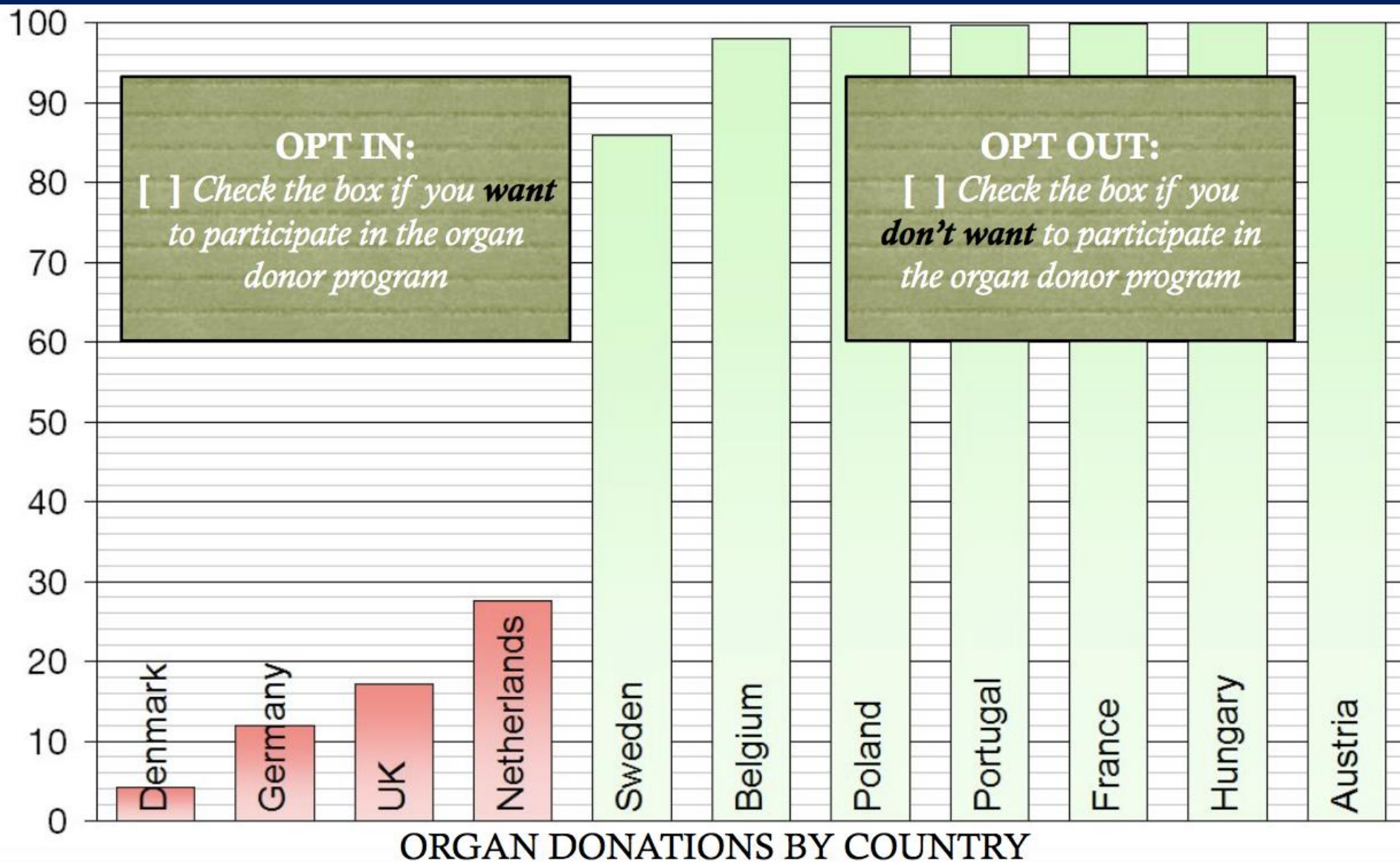
Last month you used **15% LESS** electricity than your efficient neighbors.



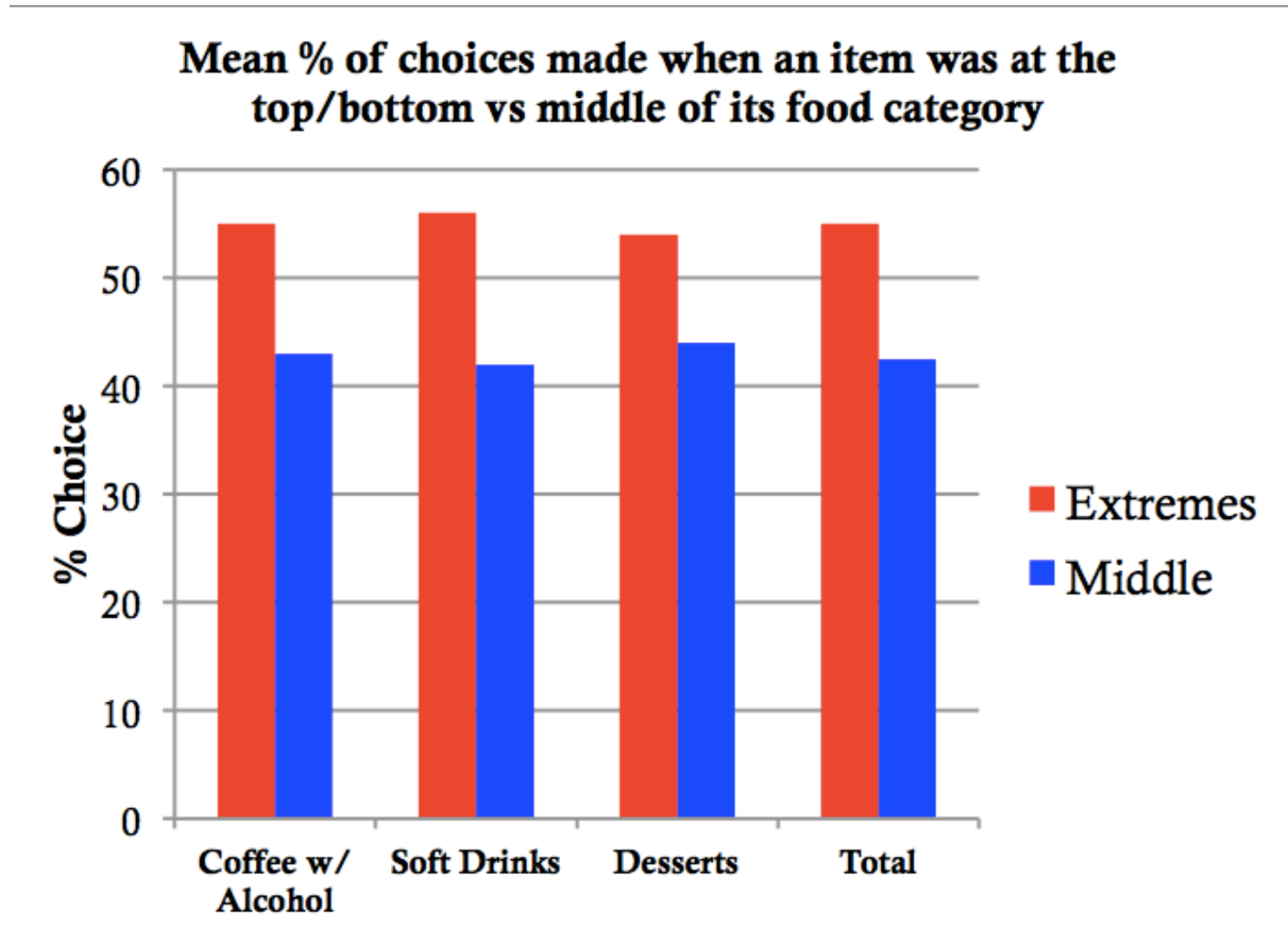
YOUR EFFICIENCY STANDING:



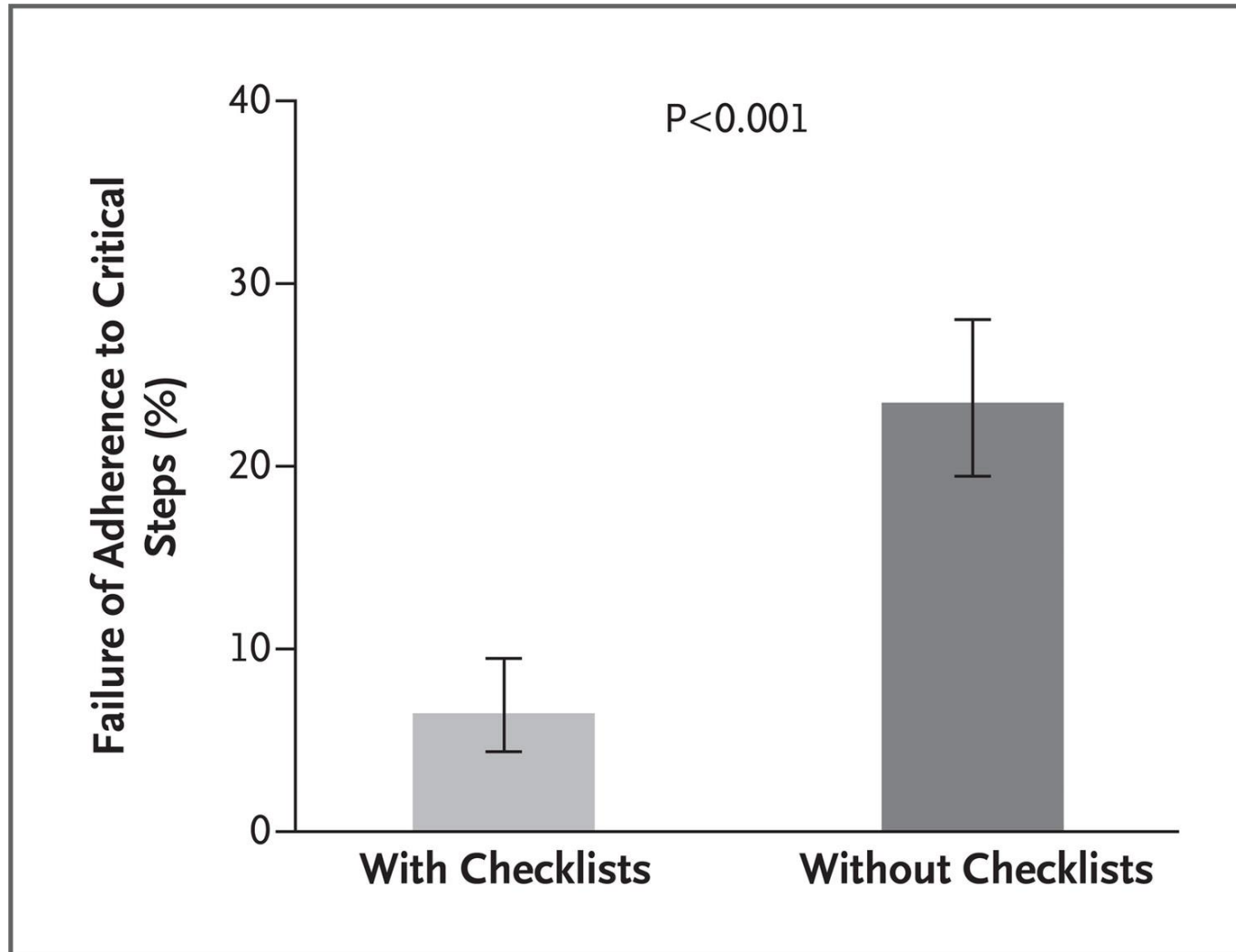
Defaults



Salience



Salience



Priming



+18% ($p < .05$)



No Difference



+32% ($p < .001$)

Affect

- Stories and individuals

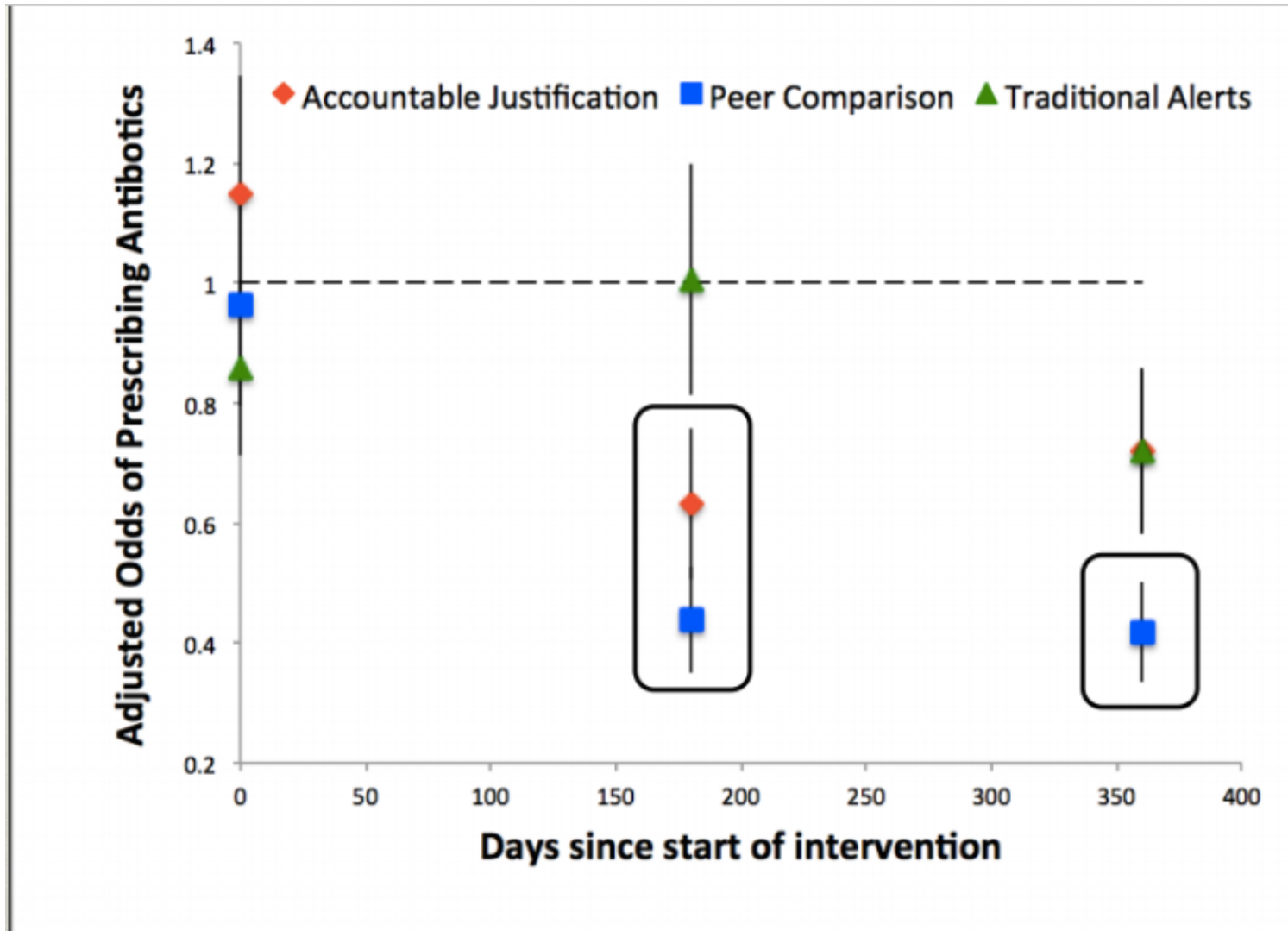


Commitment

- 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 ($p < .05$)



Ego



Summary

- How we make decisions (bias and context) impact our ability to provide high value care
- Changing behavior is hard but we can leverage our understanding of how humans make decisions to help us make better decisions

