

# January 23, 2018

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## Agenda

- Didactic: Behavior Change
- Case Discussion
- Open Discussion

*This presentation is intended for educational use only, and does not in any way constitute medical consultation or advice related to any specific patient.*

# Behavior Change

Thanks to John Lynch for slides

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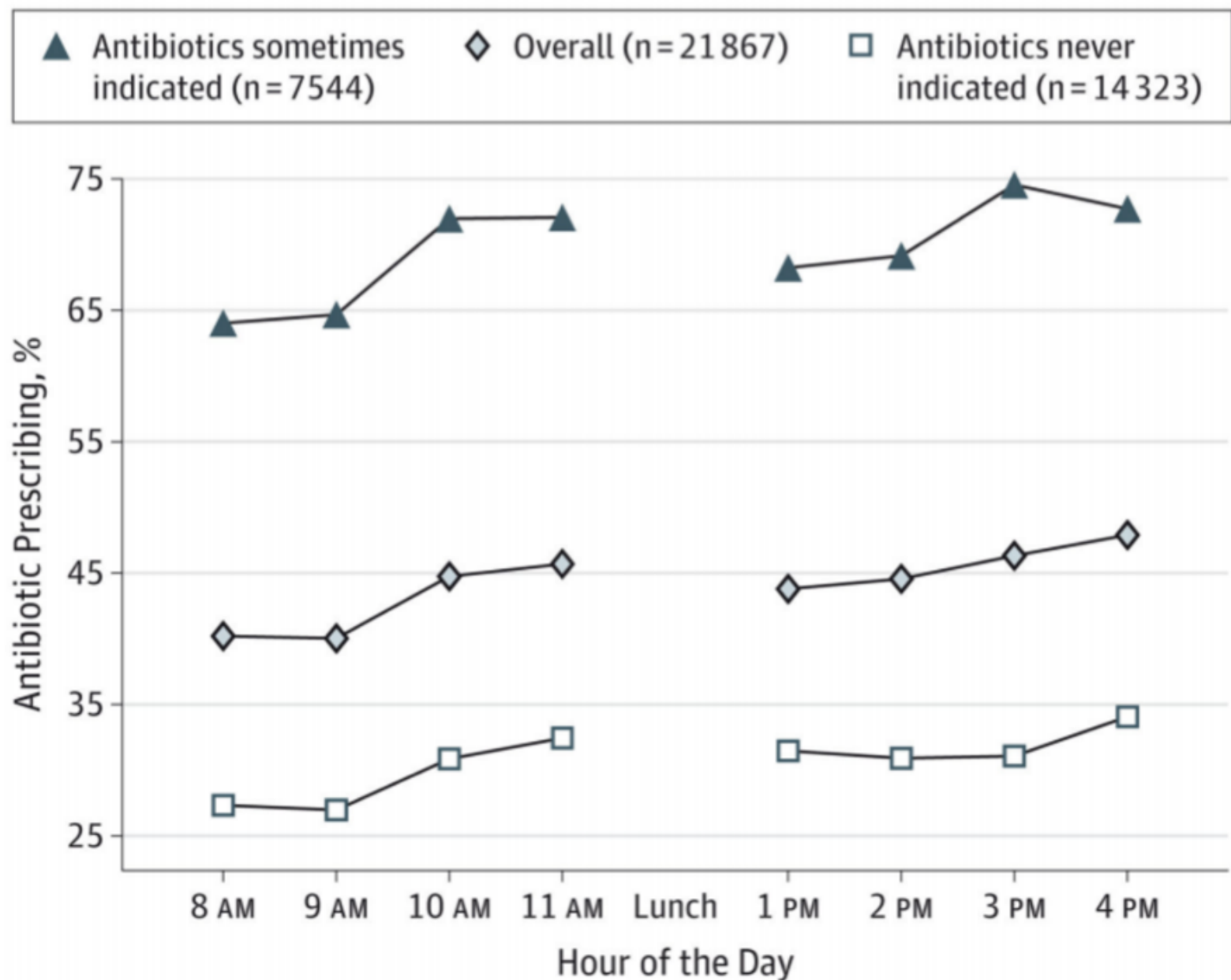
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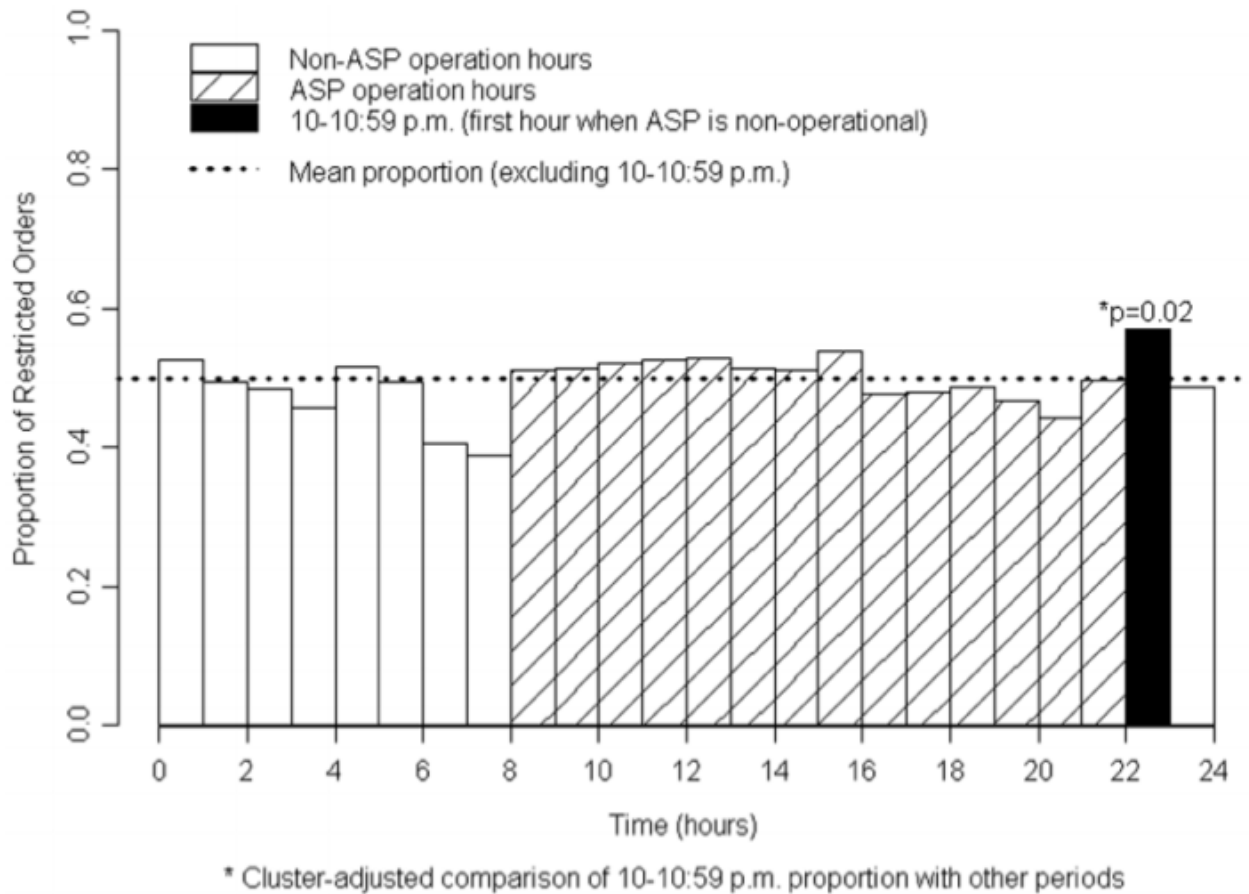
# The Challenge

“Despite clear evidence, guidelines, quality measures and more than 15 years of educational efforts stating the antibiotic prescribing rate should be zero, the antibiotic prescribing rate for acute bronchitis is around 70%”

Barnett, JAMA, 2014



# “Stealth” Dosing



**Figure 2. Proportion of Orders for Restricted Antimicrobials by Hour**

# Barriers to Change

- Lack of guidelines
- Poor familiarity with guidelines
- Time pressure
- Explaining why tests/tx not indicated takes time
- Discomfort with diagnostic uncertainty
- Lack of appreciation of harms
- Patient Expectations
- Lack of knowledge of cost
- Lack of centrally available information on prior tests
- Local standards of care
- Defensive Medicine (fear of litigation)
- Misaligned financial incentives

# Barriers to Change – “wisdom”

- Lack of guidelines
- Poor familiarity with guidelines
- Lack of knowledge of cost including impact of setting on cost
- Lack on centrally available information on prior tests

# Barriers to Change – “choice”

- Time pressure (emphasis on shorter LOS or productivity)
- Explaining why tests/ tx not indicated takes time
- Discomfort with diagnostic uncertainty
- Lack of appreciation of harms
- Patient Expectations
- Local standards of care
- Defensive Medicine (fear of litigation)
- Misaligned financial incentives



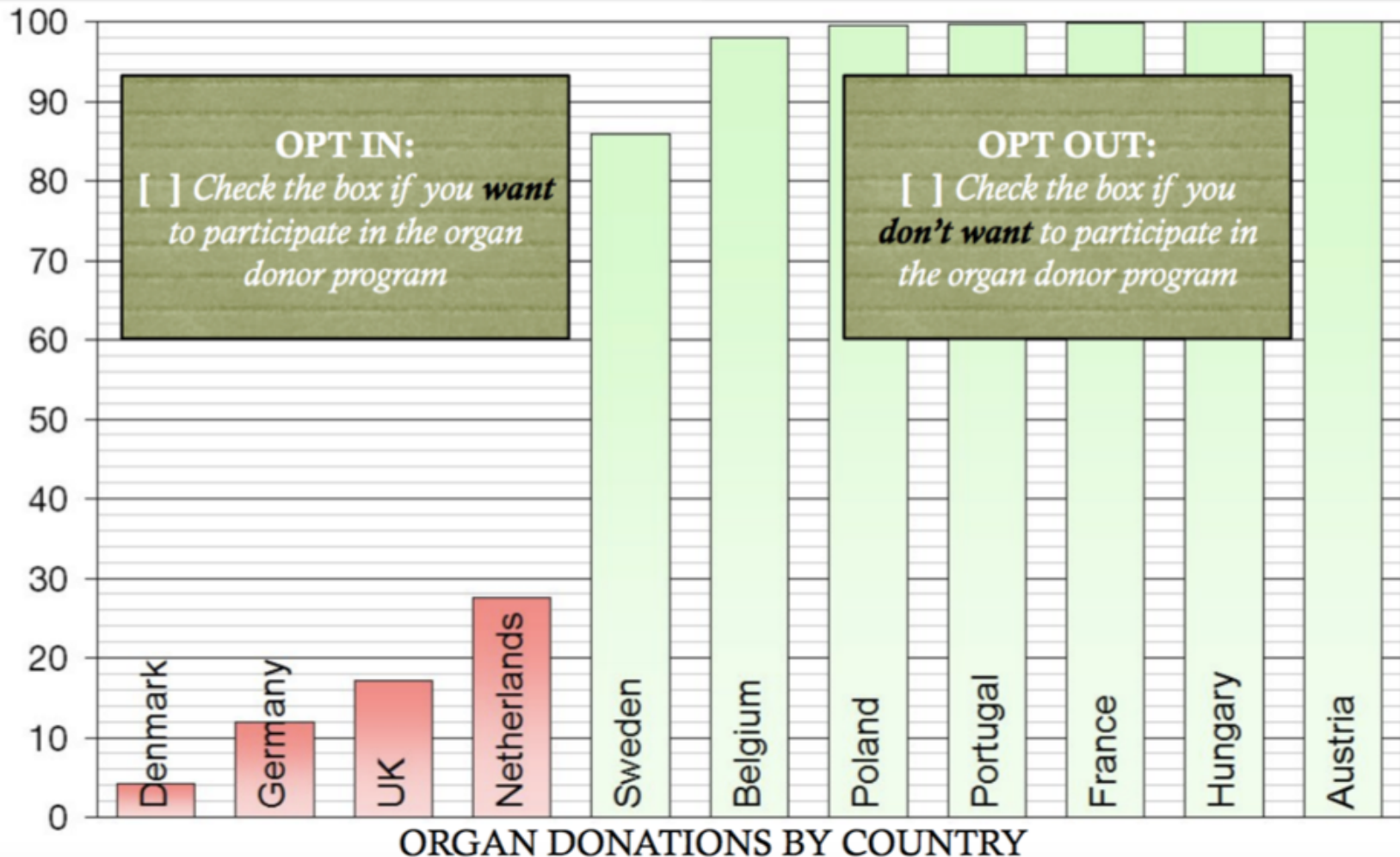
# The Nudge

- 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.”

# A Famous Nudge



# Nudges in Healthcare



# Nudges in Stewardship

- Displayed poster sized “commitment letters” in exam rooms during cold/flu season
- Letters had photo and signature of PCP
- Reduction of 10% in abx prescribed in intervention arm ( $p < .05$ )



# Nudges in Stewardship

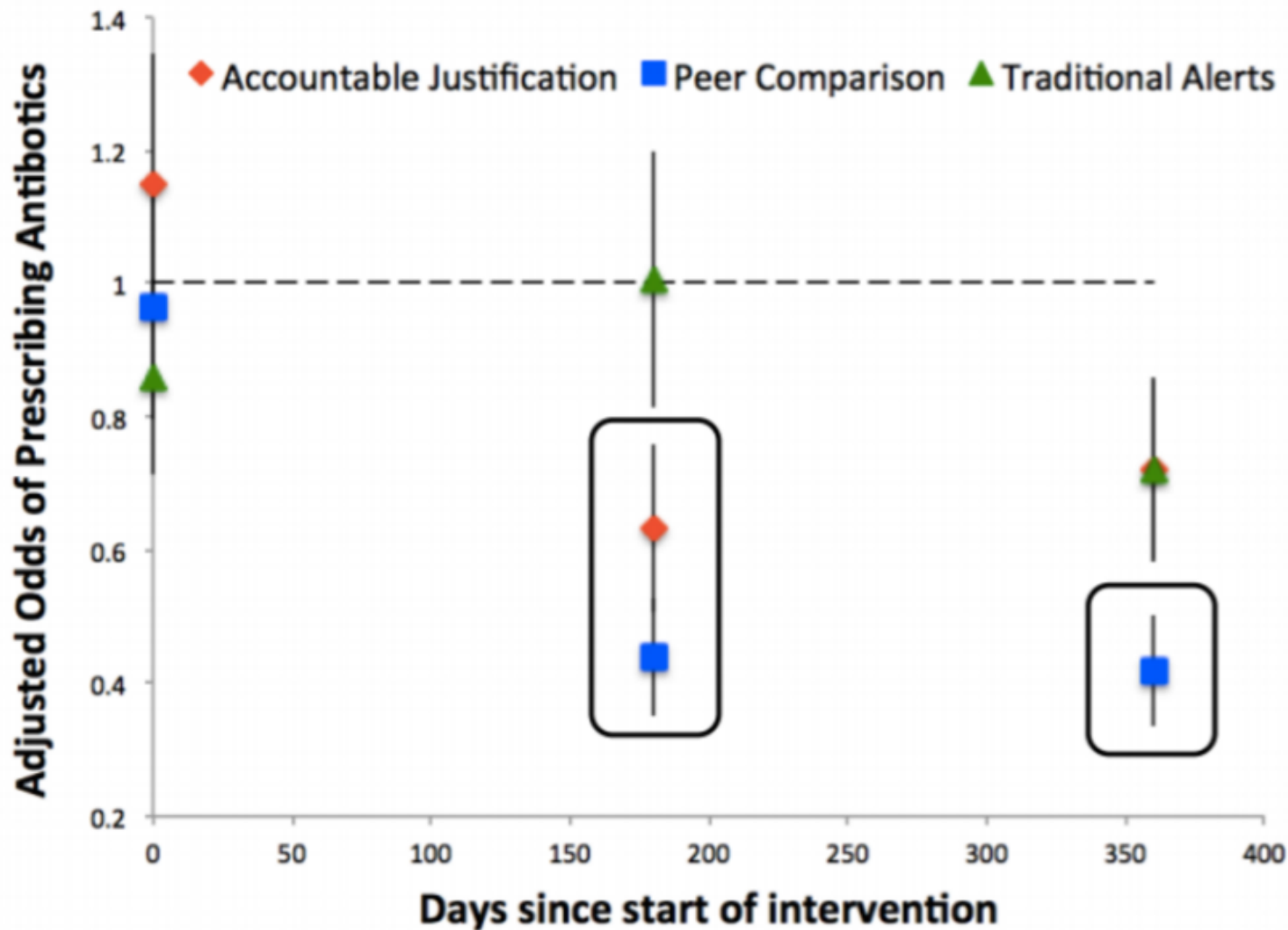
## ***“You are a Top Performer”***

You are in the top 10% of clinicians. You wrote 0 prescriptions out of 21 acute respiratory infection cases that did not warrant antibiotics.

## ***“You are not a Top Performer”***

Your inappropriate antibiotic prescribing rate is 15%. Top performers' rate is 0%. You wrote 3 prescriptions out of 20 acute respiratory infection cases that did not warrant antibiotics.

# Nudges in Stewardship





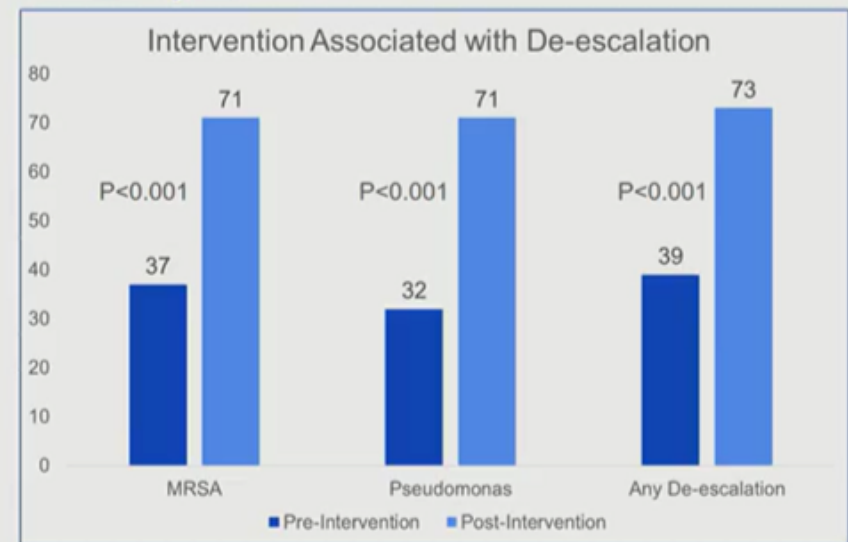
# Communicating Microbiology Results: It's Not Just What You Say, But How You Say It.

## Intervention

Special Requests	8/30/16 8:59 AM
Gram Stain	Culture with gram stain
Gram Stain	Many WBCs
Gram Stain	Moderate Epithelial cells (squamous)
Gram Stain	Rare Gram positive cocci in pairs
Results	Commensal Respiratory Flora only; No <i>S. aureus</i> /MRSA or <i>P. aeruginosa</i>
Resulting Agency	HFH
Specimen Collected: 08/30/16 8:59 AM      Last Resulted: 08/31/16 8:20 AM	

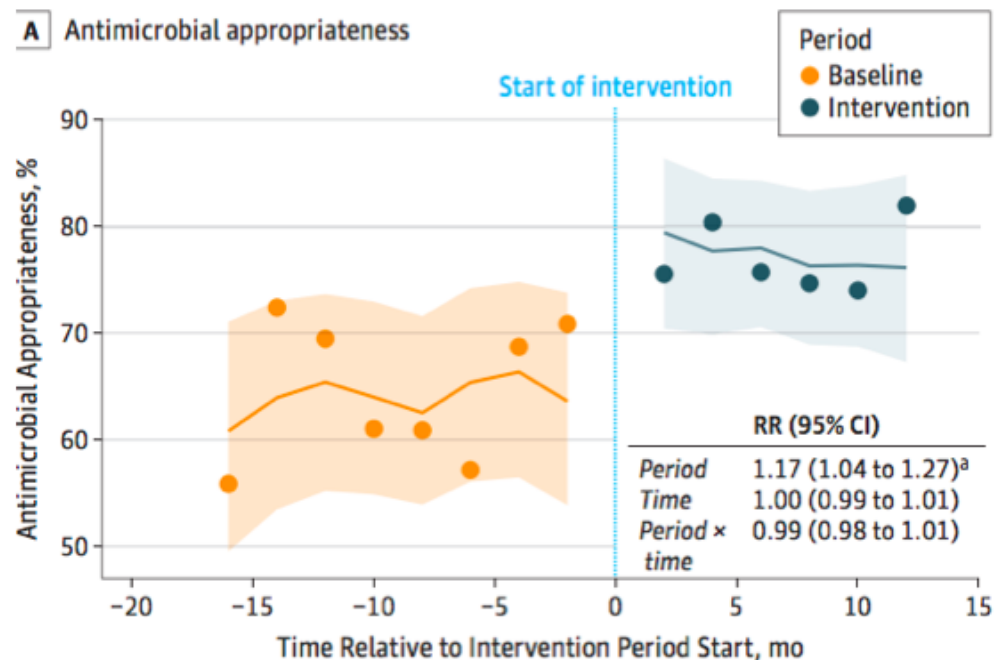
McBride et al., University of Wisconsin, ID Week 2015

## Primary Outcome



# DUMAS Participatory Intervention Study

- 7 departments within the hospital was offered a choice of how to improve antibiotic prescribing (after a root cause analysis).
- 26% reduction in use of penicillin + beta lactamase inhibitor





# Barriers to Change – “culture”

- Sociologist Dr. Julia Szymczak argues social factors are very important and overlooked in antimicrobial stewardship
- Relationships between clinicians (“prescribing etiquette”, hierarchy)
- Risk, fear, anxiety, emotion
  - Under-treating is much worse than over treating
- (Mis)perception of the problem (exceptionalism)
- Context and environment (time pressures, patient satisfaction, time of day)

# Culture

“Try to create a culture in which it is OK to talk about each other’s prescribing decisions so that you are comfortable asking questions and being questioned. Half of it is just bringing the decision-making out into the open. You may still do the same thing, but if people don’t talk about it you don’t have an opportunity to make change.”

Szymczak, AHC Media 2018

# Summary

- Antimicrobial usage remains too high in the US
- How we make decisions impacts our ability to provide high value care
- Changing behavior is hard
- Nudges can move us toward higher value decision making
- Looking at the hospital as a small society may help too – Dr. Szymczak to expand on this April 17 on TASP