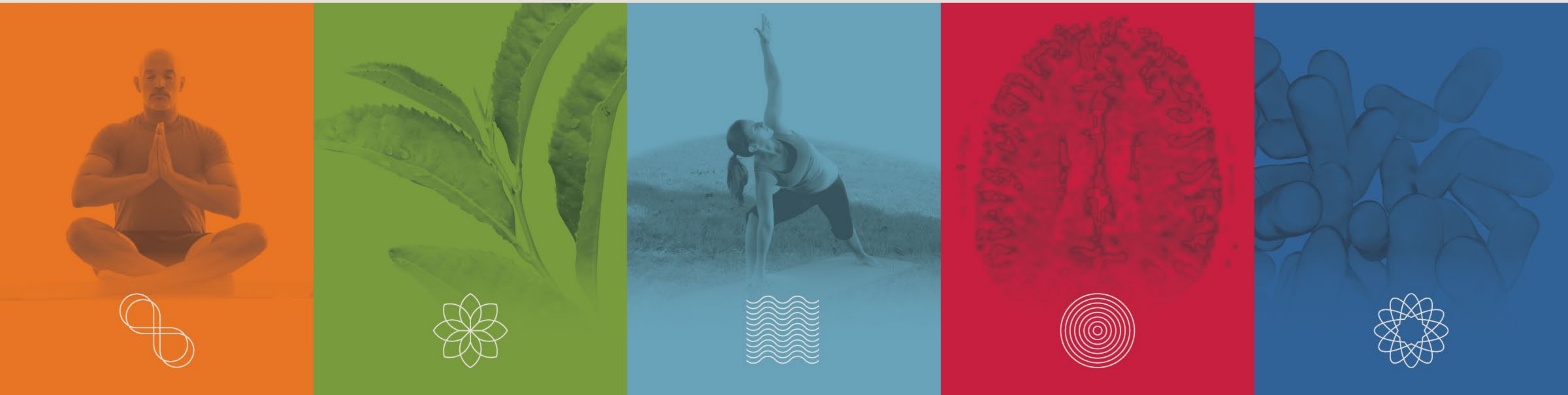




Funding Opportunities for Implementation Science at NIH

November 29, 2021



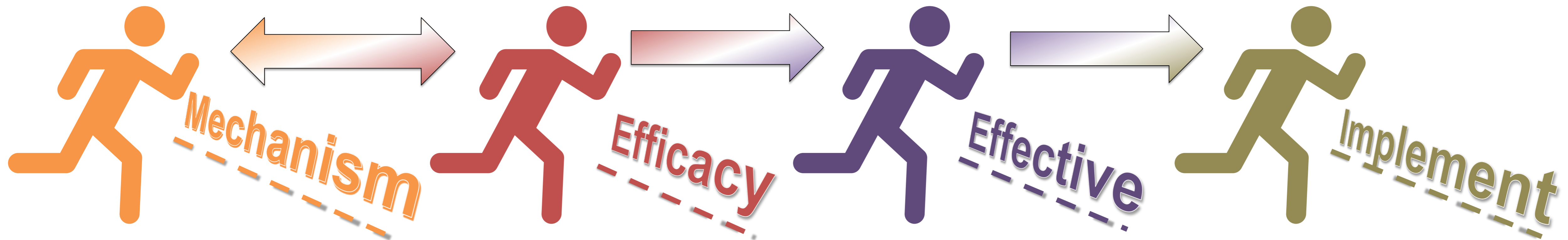
Disclaimer

The materials presented/discussed today are based on my experience as a program official and do not necessarily represent the official views of the NIH, or the Federal Government.



We Excel at Asking “What”

- At the NIH, we spend the vast majority of our resources on answering the question, “What should we do?”
 - Implementation Science asks “How?”
 - Each step has its own finishing line:



Implementation Science

- Implementation Science is the scientific study of methods to promote the integration of research findings and evidence-based interventions into health care practice and policy.
 - “Intervention” means any practice, policy, tool, or strategy designed to improve health outcomes.
- Doing implementation ≠ doing implementation science
 - Hypothesis-driven tests of one or more specified strategies to draw generalizable conclusions about how implementation happens.
- Implementation research ≠ dissemination research
 - Dissemination is the targeted distribution of information and intervention materials to a specific public health or clinical practice audience.



Multiple Ecological Levels



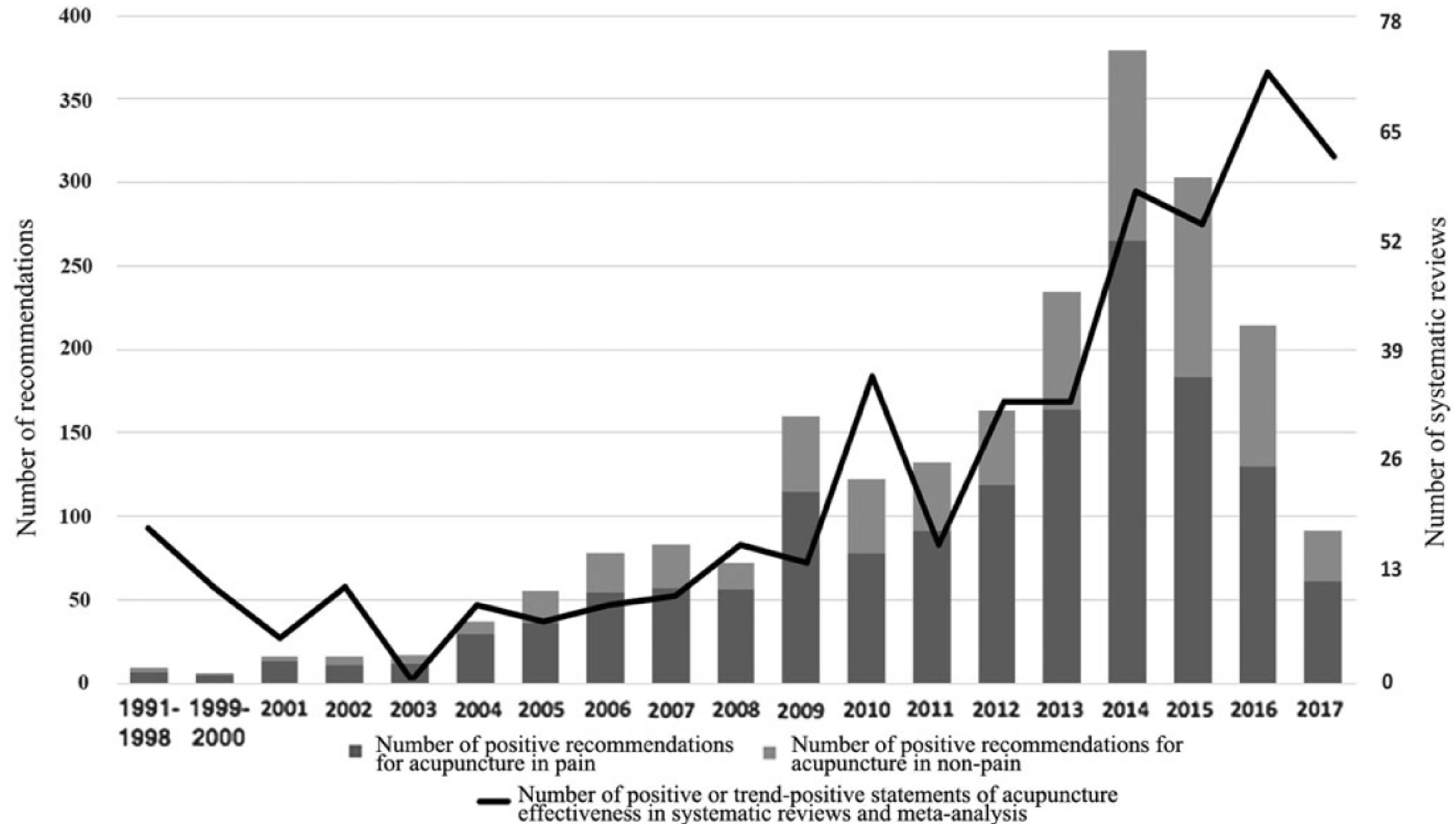
Patient Referrals



"I've got it, too, Omar ... a strange feeling like we've just been going in circles."



Treatment Guidelines for Acupuncture

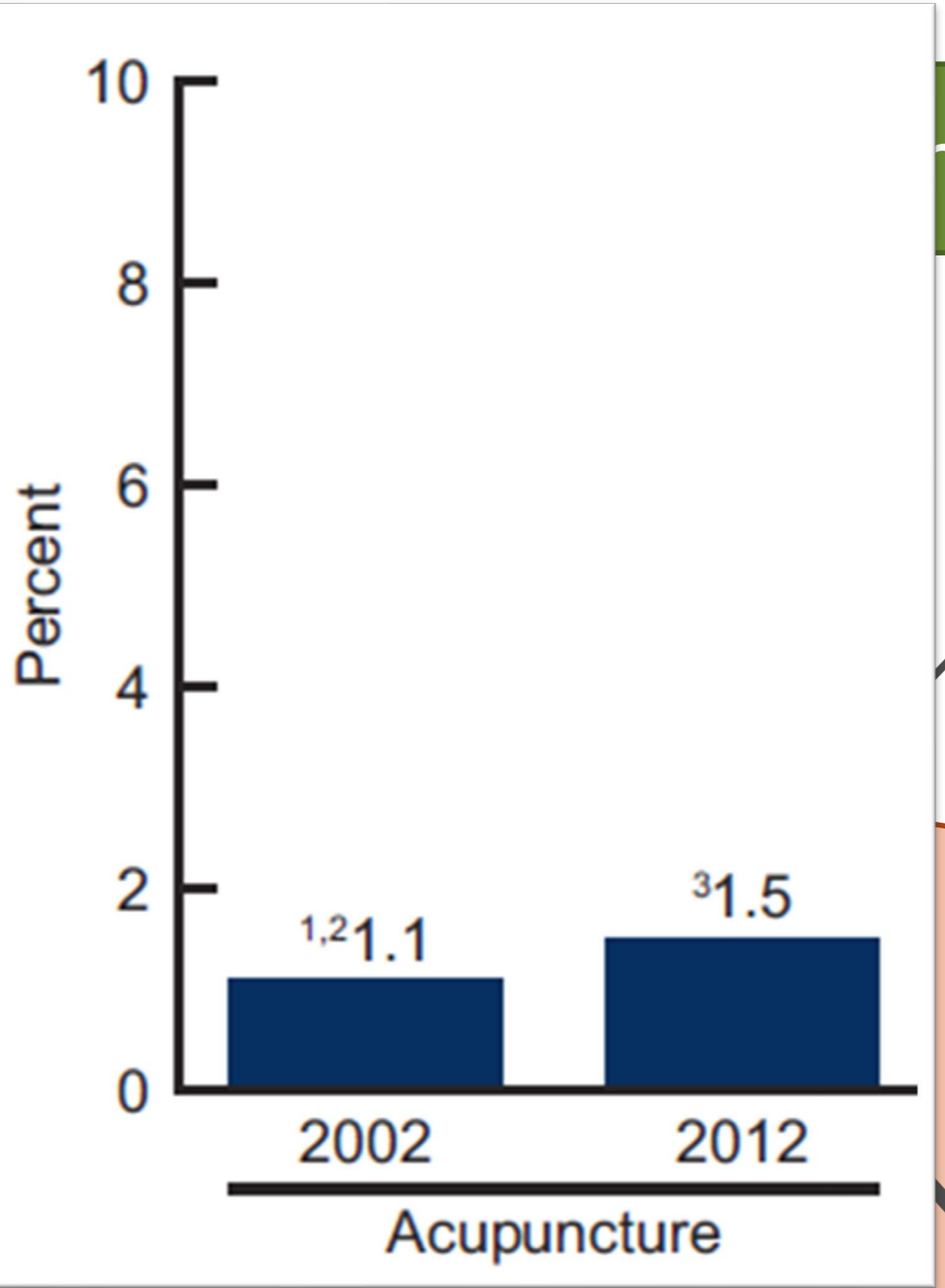


Birch et al, 2018



Social Insurance

Family

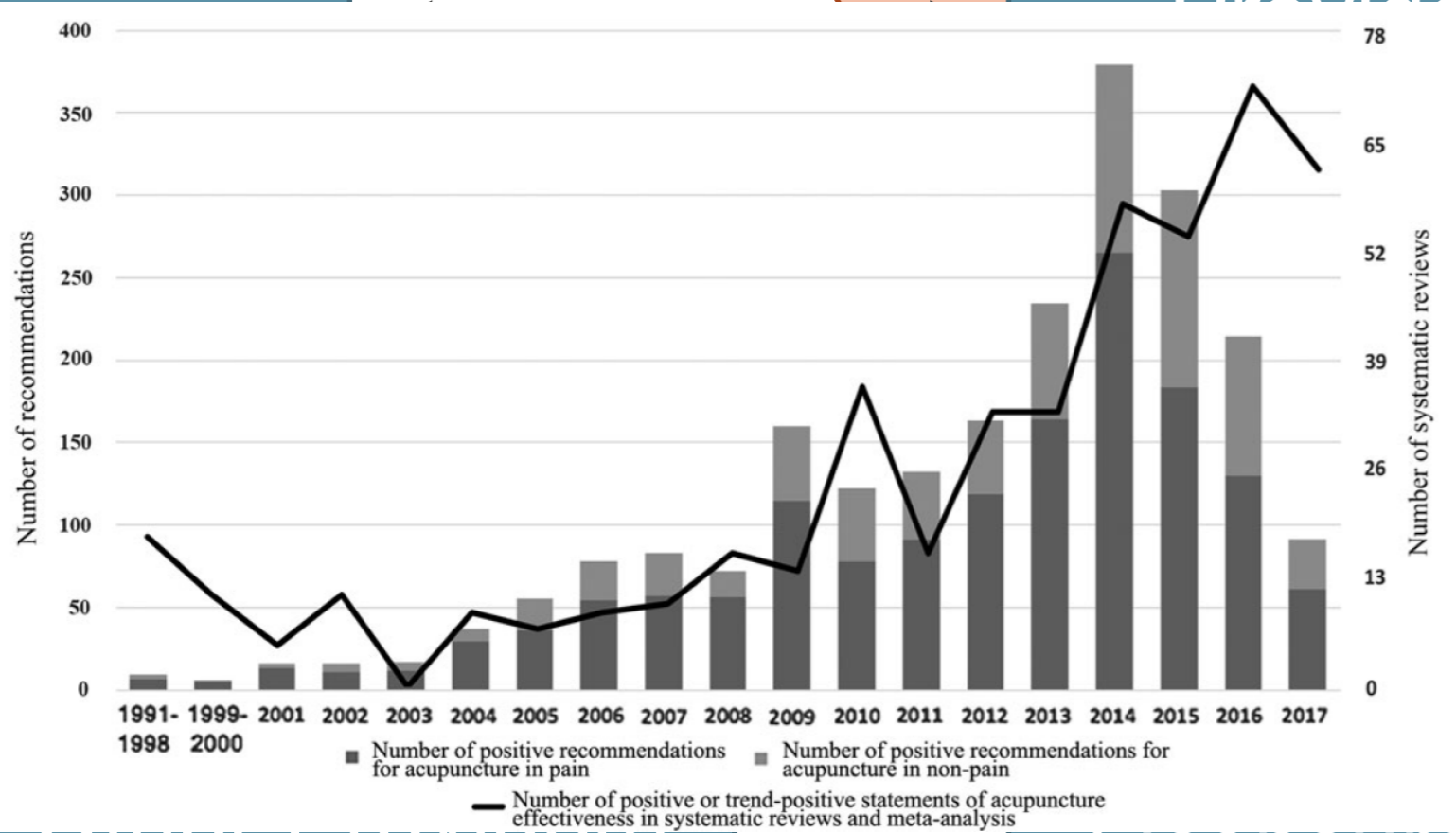


SES

Nahin et al, 2016

Clinical Guidelines

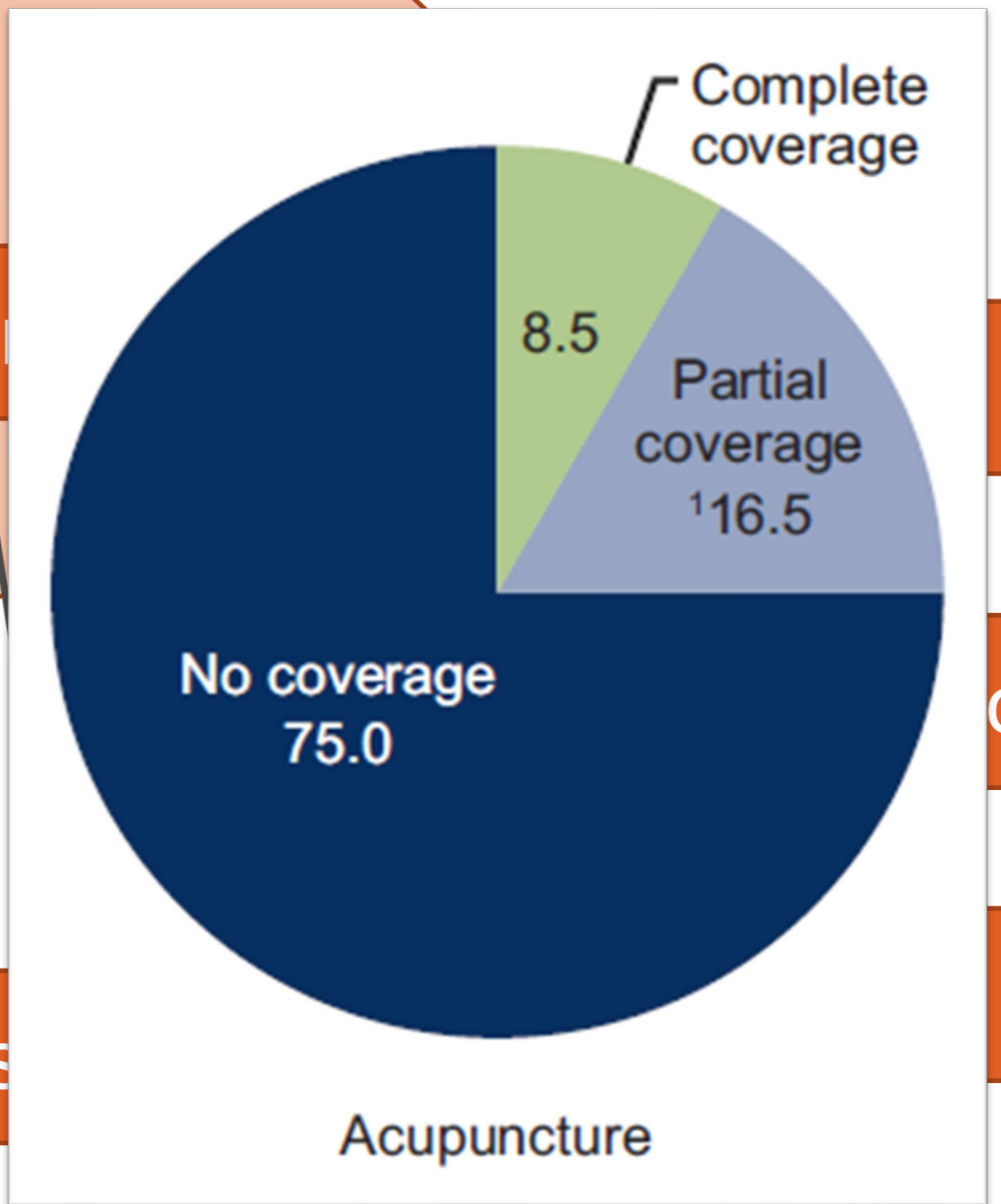
Health Organizations



Licensure

Insurance

Legislation



Nahin et al, 2016

Profits

Competition



D&I Research Questions for Multiple Levels

Ecological Level	Examples
Provider Level	What strategies are used to engage individual healthcare practitioners? What strategies are used to engage professional societies?
Patient Level	How can patient populations be targeted to create 'pull' strategies to adopt the novel intervention?
Community Level	How can community leaders be engaged? What resources do advocacy groups have that can be leveraged to increase supply and demand for the novel intervention?
Healthcare System Level	What are the systemic barriers and facilitators within the healthcare system to uptake and adoption of the novel intervention?
Payer Level	How does the intervention align with the interests of third-party payers that might promote reimbursement? How much do out of pocket costs influence a decision to begin or continue using a novel intervention?
Legislative Level	Are there legal barriers or facilitators to implementing a novel intervention?

Clark D, Edwards E, Murray P, and Langevin H (2021). Implementation Science Methodologies for Complementary and Integrative Health Research, J Altern Complement Med. 27(S1):S7-S13. doi: 10.1089/acm.2020.0446



GETTING A GOOD SCORE IN REVIEW

The foolproof method to getting a good score in review every time.



The brief version:

- **Your job is to convince reviewers:**
 - 1) That your question is important
 - 2) That your question can be answered in a rigorous and scientific manner
 - 3) That you are the best person/best team to answer that question



What doesn't work

- **The fact that you have data isn't enough**
- **The fact that you have access to a unique population isn't enough**
- **“It hasn't been done before” isn't enough**
- **Your mother and boyfriend thinks it's interesting isn't enough**
- **“I've done this kind of work before...” isn't enough**
 - **And you're doing it again because?...**



Grant writing tips

- **Know your research question(s)**
- **Read the FOA**
- **Think like a reviewer**
 - **Scoreable criteria:**
 - ‘Specific to this FOA...’
 - **Talk to people who have reviewed NIH grant applications**
- **Include a cover letter**
 - **Request specific expertise**
 - **Request a specific study section [for CSR reviews]**
 - **Request institute assignment**
- **Grant complexity**
- **Team composition**
- **MPI vs solo PI**
 - **‘Name Brand’ co-investigators**



Current NIH Funding Opportunities

- Implementation Science applicants should consider:
 - PAR-19-274 “Dissemination and Implementation Research in Health (R01 Clinical Trial Optional)”
 - PAR-19-275 “Dissemination and Implementation Research in Health (R21 Clinical Trial Optional)”

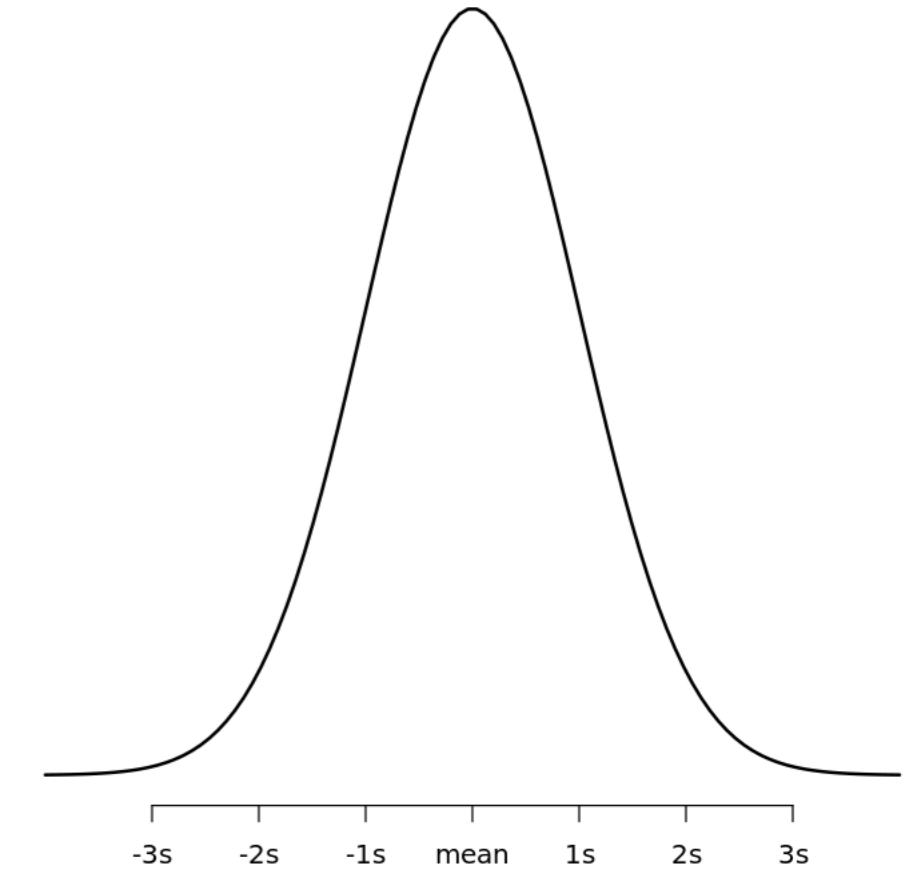


Current NIH Funding Opportunities

- Data Science applicants could consider:
 - RFA-AI-21-035 “Exploratory Data Science Methods and Algorithm Development in Infectious and Immune-mediated Diseases (R21 Clinical Trial Not Allowed)”
 - PAR-20-304 “Computational Approaches to Curation at Scale for Biomedical Research Assets (R01 Clinical Trial Not Allowed)”



Talk to a program officer



- What can a PO do for you?
 - Guide your science to the appropriate: FOA, IC, PO
 - May provide feedback on your ideas
- How do you find the correct program officer?
 - If you are responding to a Funding Opportunity Announcement: scientific contacts
 - Institute/Center/Office websites
- Tips for making the best use of your conversation(s) with a PO
 - Email first, know your questions
 - One-pager
 - Don't send a full application
 - Don't send it the night before you're scheduled to talk





Center for Translational Research and Implementation Science

<https://www.nhlbi.nih.gov/about/divisions/center-translation-research-and-implementation-science>

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