



# The Next Big Thing

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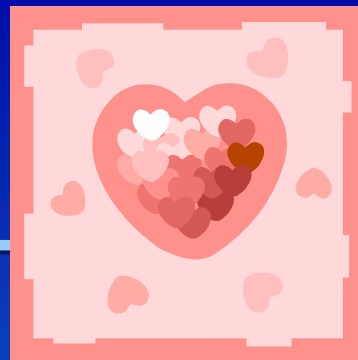
Jean Slutsky

Director, Center for Outcomes and  
Evidence





ISO



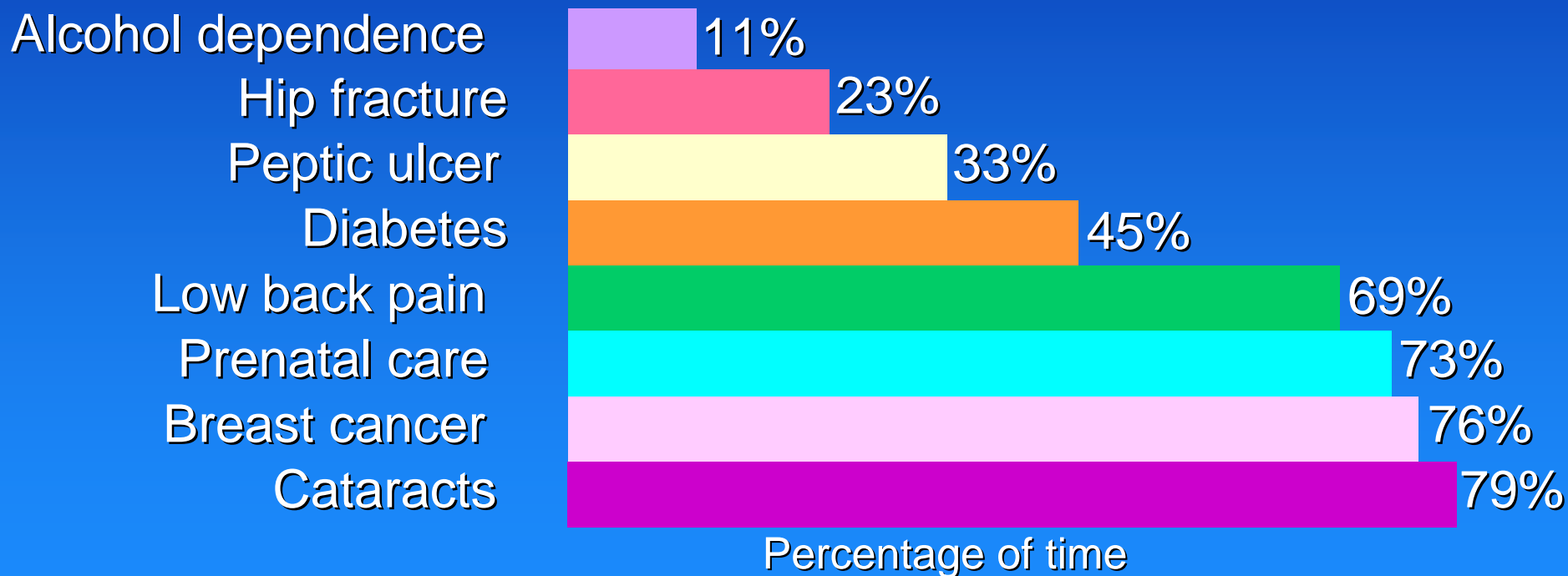
Well developed clinical practice guideline, enjoys good health and doing the right thing, in search of perfect partner to make things happen and enjoy life.





# RAND Study: Quality of Health Care Often Not Optimal

- Doctors provide appropriate health care only about half the time





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“The one question I still can’t answer is:  
WHY the gap between evidence-based  
and actual practice?”

*Earl Steinberg, M.D., M.P.P., 2003*





# What We Have Learned 2004

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- Knowing the right thing to do is **NOT** = doing it!
- Improvement must be based on science
- Patients as participants are far more effective than patients as 'recipients'
- **Researchers may not be the best implementers**



# If Researchers Ruled the World

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- Food in grocery stores would be alphabetized
- Holiday sales would be advertised in peer reviewed journals
- School room size would be directly related to sample size needed for NNL (numbers needed to learn)



# Sagan Effect

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One of the most frequently cited reasons for scientists' reluctance to talk to the press is the so-called Carl Sagan effect, that is, renowned scientist Carl Sagan was criticized by his fellow scientists who assumed that because Sagan was spending so much time communicating with the public, he must not have been devoting enough time to his research.

J. Hartz and R. Chappel, *Worlds Apart: How the Distance Between Science and Journalism Threatens America's Future*. Nashville, TN: Freedom Forum First Amendment Center, 1997.





# Fact or Fiction

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Throughout his career, Sagan averaged a scientific peer-reviewed paper per month.

Michael B. Shermer (August 2002). *Social Studies of Science* 32/4:489-525.







# It is Hard to Change Beliefs

Popularization...is traditionally seen as a low status activity, unrelated to research work, which scientists are often unwilling to do and for which they are ill-equipped...Essentially, popularization is not viewed as part of the knowledge production and validation process but as something external to research which can be left to non-scientists, failed scientists or ex-scientists ...

Richard Whitley (1995), 'Knowledge producers and knowledge acquirers: popularizations as a relation between scientific fields and their publics,' in Terry Shinn and Richard Whitley (eds.), *Expository Science: Forms and Functions of Popularization*. Dordrecht/Boston, MA: D. Reidel Publishing





# The Challenge

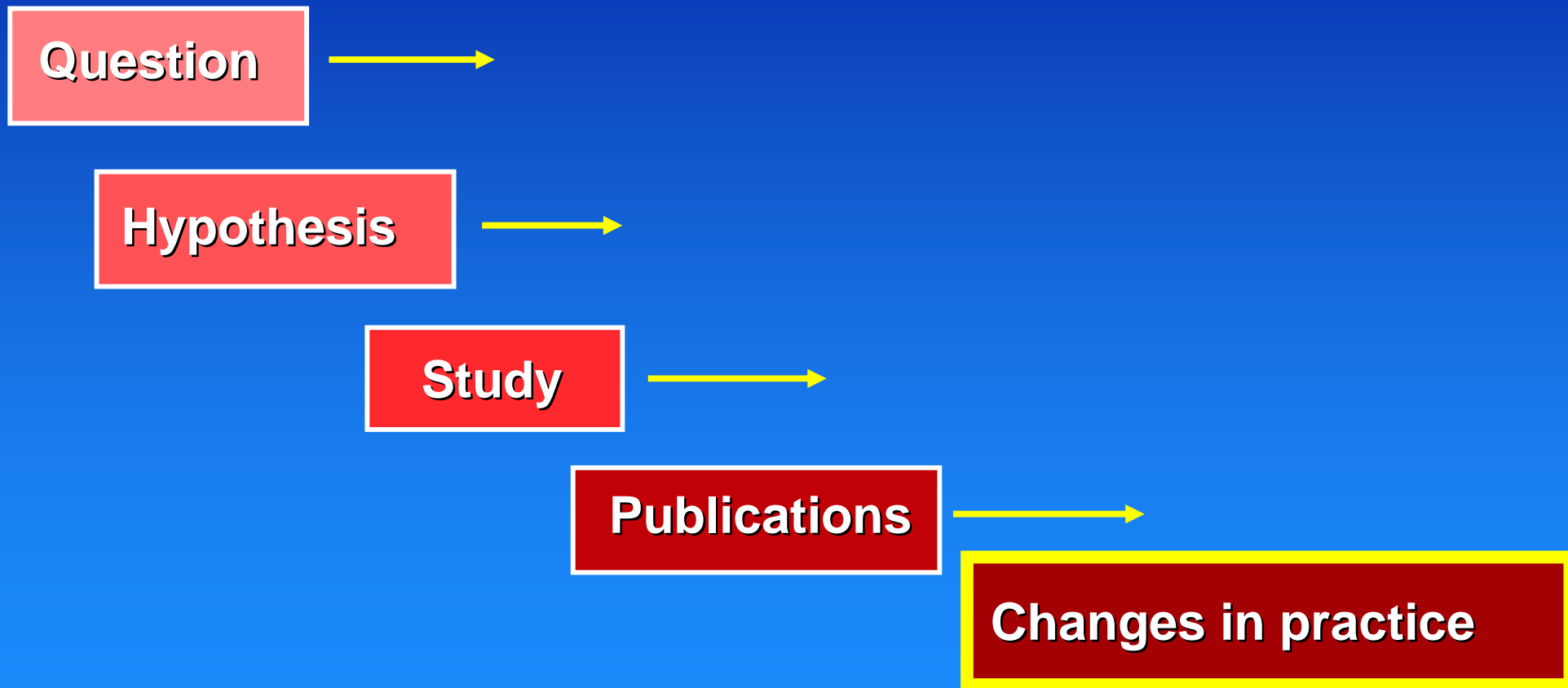
*“What we really want to get at is not how many reports have been done, but how many people's lives are being bettered by what has been accomplished. In other words, is it being used, is it being followed, is it actually being given to patients?...[W]hat effect is it having on people?”*

Congressman John Porter, 1998  
Chairman, House Appropriations Subcommittee on  
Labor, HHS, and Education





# Debunked Assumption I: Supply Side Research





# Debunked Assumption II: Improved Packaging

Publications (multiple)



Evidence synthesis



Guidelines, Performance Measures

???



Changes in Practice





# A Flawed Model

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- Receptor sites are “assumed”
- Decisionmaking is not-linear: evidence is only part of the “solution”
- Broad dissemination → modest effects



# Where We Are - 1

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- Infomedicine now understood as essential complement to biomedicine
- Boundaries between “QI” and “research” have disappeared
- Data collection is purposeful, strategic and *oriented to patients’ and clinicians’ needs for information*
- NO research is initiated without a clear plan for sustained implementation





# Challenges 1

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- Evaluation of translation research
- Career paths for individuals focused on improvement: metrics for success?
- “Alignment of incentives” for researchers and funders
- “Research findings are ‘not ready to use’”

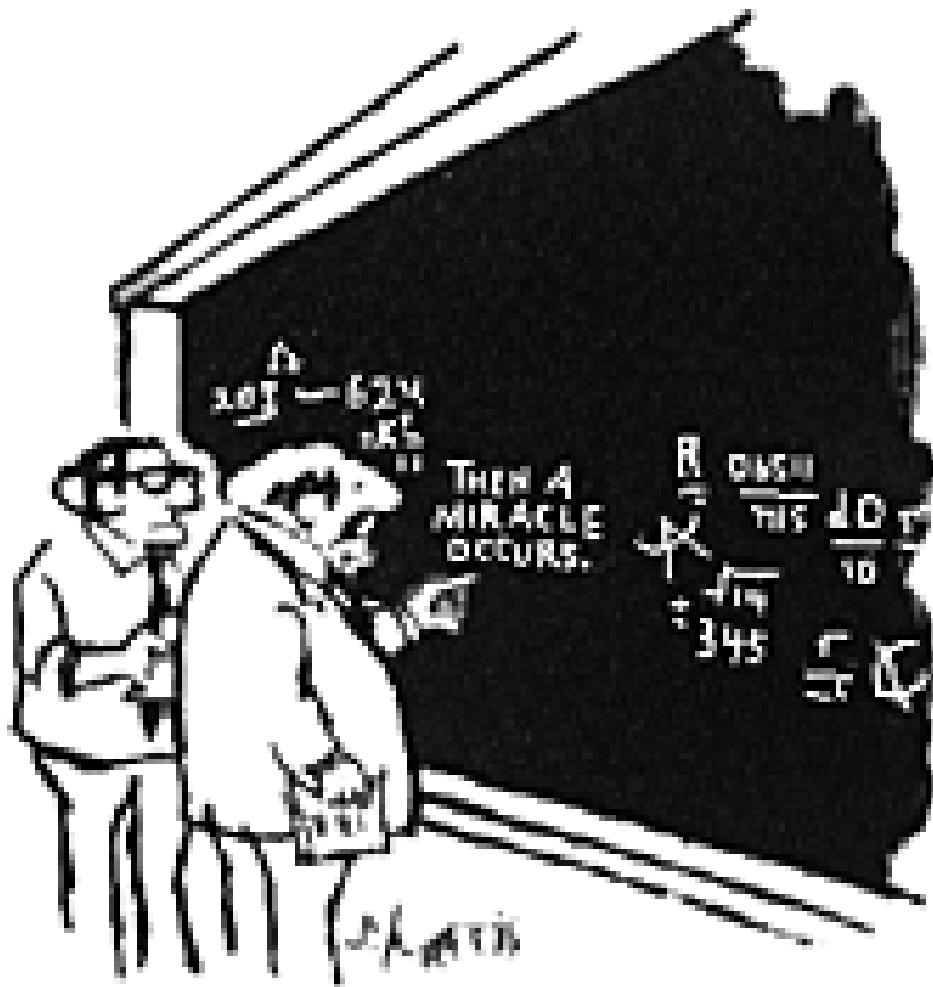


# Challenges 2

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- Taking promising findings “to scale”: metrics for ‘promising’ and ‘readiness to implement’?
- Science of change: validation before and/or during implementation?
- Moving beyond “1000 flowers blooming”
- Involving users throughout the research cycle
- Redefining “core focus” of HSR





"I think you should be more explicit here in step two."



# Confounders ...

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- Precision and consensus regarding management of ('X') greatly exceeds translation into practice
- Most clear successes of translating research into practice have focused on underuse of effective treatments; less focus on misuse and overuse

