Designing for dissemination

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Objectives

1. Describe core principles of D4D.
2. Learn about progress in conducting D4D.
3. Describe D4D methods.
4. Learn how to incorporate D4D principles in your work to make it more pragmatic.

"My question is: Are we making an impact?"

Questions to ponder

- What are some impacts that your work is having or impacts hoped for in the future?

- What makes D4D impactful, pragmatic and action-oriented?

Caveats and considerations

- This is a <u>brief</u> introduction to D4D
- Oriented primarily to practice audiences (practices, organizations)
- "Big P" policy D4D has some important differences
  - The definition of "evidence" & outcomes
  - Laws, health care reimbursement policies
  - Kingdon's politics stream & policy windows
- In the context of this meeting, what makes D4D "<u>pragmatic</u>"?

Definitions

- **Dissemination**
  - An active approach of spreading evidence-based interventions to the target audience via determined channels using planned strategies.
  - Differs from more passive diffusion.

- **Designing for dissemination (D4D)**
  - The process of ensuring that evidence-based interventions are developed in ways that match well with adopters' needs, assets, and time frames.
    - Might apply to any actionable finding or packaging/deigning interventions
    - Working with end-users, early and often

Covered in: Brownson RC, et al. *Dissemination and Implementation Research in Health: Translating Science to Practice*. 2nd Edition. New York: Oxford University Press; 2018.

Why has progress been limited?

Lack of intentionality

- Passive dissemination (sometimes called diffusion) largely ineffective
  - Influences
    - Framing/audience segmentation
    - Social influences (including opinion leaders)
    - Incentives and reinforcement

"If you build it…(we have evidence)"

The push/pull dilemma…

Science Push
Documenting, improving, and communicating the intervention for wide population use

Delivery Capacity
Building the capacity of relevant systems to deliver the intervention

Market Pull/ Demand
Building a market and demand for the intervention

# Preferred methods for disseminating or learning about the latest research-based evidence

Method	Researchers % (rank)	Local practitioners % (rank)	State practitioners % (rank)
Academic journals	100 (1)	33 (4)	50 (2)
Academic conferences	92.5 (2)	22 (5)	17.5 (6)
Reports to funders	68 (3)	--	--
Press releases	62 (4)	12.5 (7)	--
Seminars or workshops	61 (5)	53 (1)	59 (1)
Face-to-face meetings with stakeholders	53 (6)	11 (6)	15 (7)
Media interviews	51 (7)	1 (9)	--
Policy briefs	26 (8)	17 (6)	30 (4)
Email alerts	22 (9)	34 (3)	40 (3)
Professional associations	--	48 (2)	24.5 (5)

Impact by dissemination method

Method	Typically used, %	Most impact on career, %	Most impact on practice/policy, %
Academic journals	88	94	16
Reports to funders	74	0	6
Face-to-face meetings with stakeholders	55	0	40
Seminars or workshops	51	1	9
Social media	42	0	3
Press releases	33	0	4

The metrics of impact in academia

- What providers of evidence value differs than what users of evidence need
- We privilege innovation, and de-value replication, dissemination, and implementation
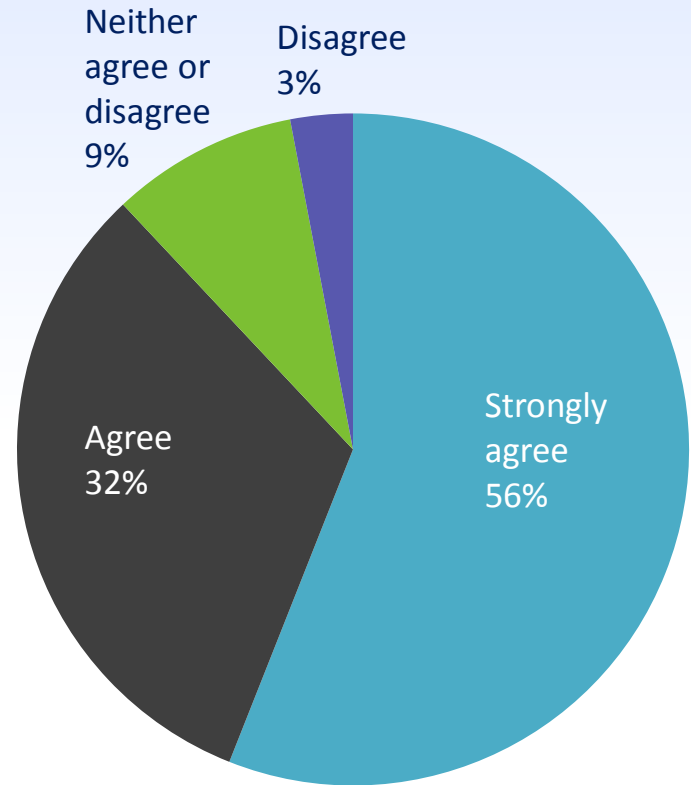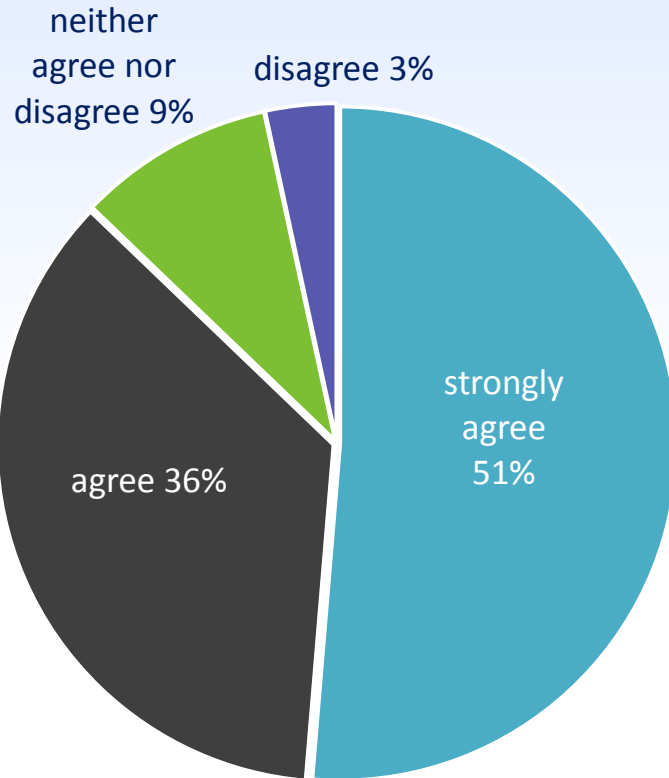- Except in pragmatic research, external validity often secondary
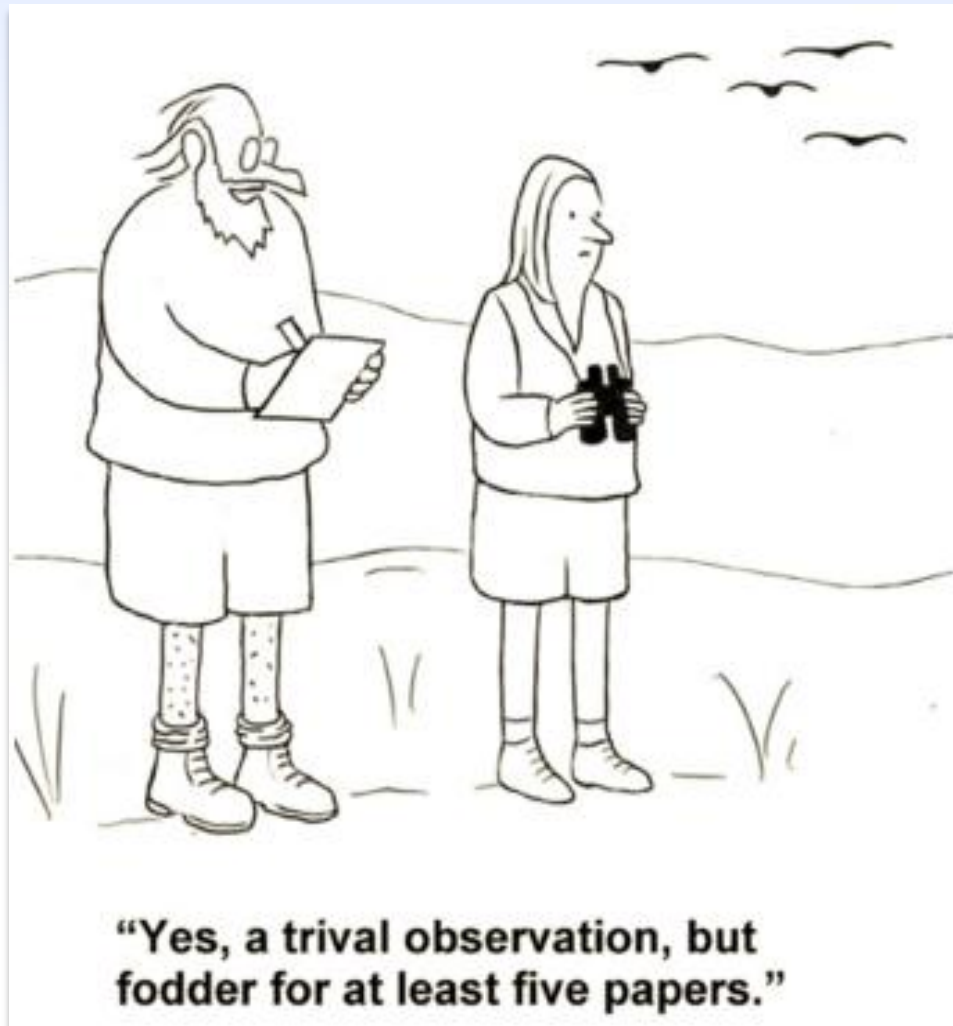
"Yes, a trival observation, but fodder for at least five papers."

"It's not my job" (or, "I don't know how")

- NCI D4D work in 2002
  - Researchers and practitioners from Canada and the United States
  - All audiences viewed active dissemination of critical importance
    - None thought it was their job!!

https://cancercontrol.cancer.gov/IS/pdfs/d4d_conf_sum_report.pdf

What do we know about D4D?

Researcher obligation

neither agree nor disagree 9%

disagree 3%

strongly agree 51%

agree 36%

Brownson et al, 2013 (n = 266)

Neither agree or disagree 9%

Disagree 3%

Strongly agree 56%

Agree 32%

Knoepke al, 2019 (n = 210)

Involving stakeholders

Survey question:

- As a part of your research process, how often do you involve stakeholders?

Never
17%

Always/
Usually
34%

Sometimes/
Rarely
49%
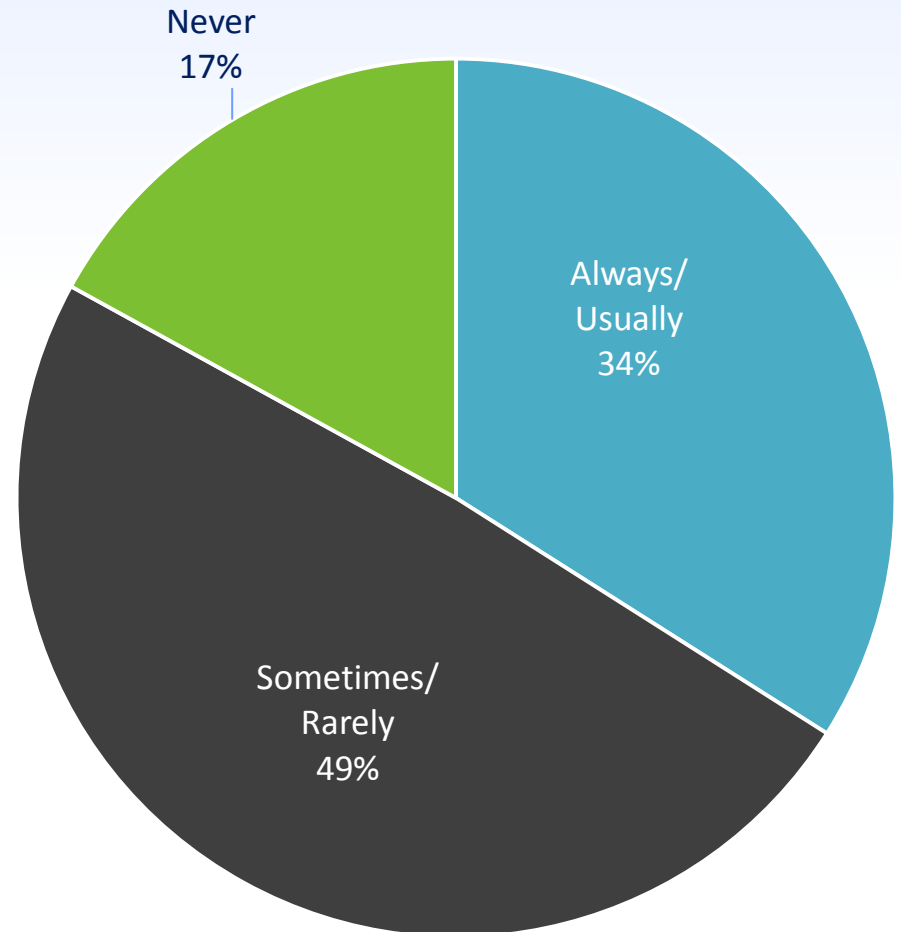
How are stakeholders involved (D4D methods)

Stakeholder type/ Method	Venue (%)		Nationality (%)	
	Clinical	**Community**	**United States**	**Canada**
Organizational decision makers				
Focus Groups	32	37	35	50
Advisory Committees	63	51	54	71
User Panels	17	12	14	21
Team Members	25	32	26	39
Interpret data	25	31	29	43
Disseminate	51	59	55	75
Total $\geq$ 2	56	58	57	79

Knoepke et al, PLoS ONE 2019:14(11).

Self-rating of efforts

Survey question:

- Overall, how do you rate your efforts to disseminate your research findings to non-research audiences?

Tabak RG, et al. *Public Health Rep.* Jul 2014;129(4):361-368.
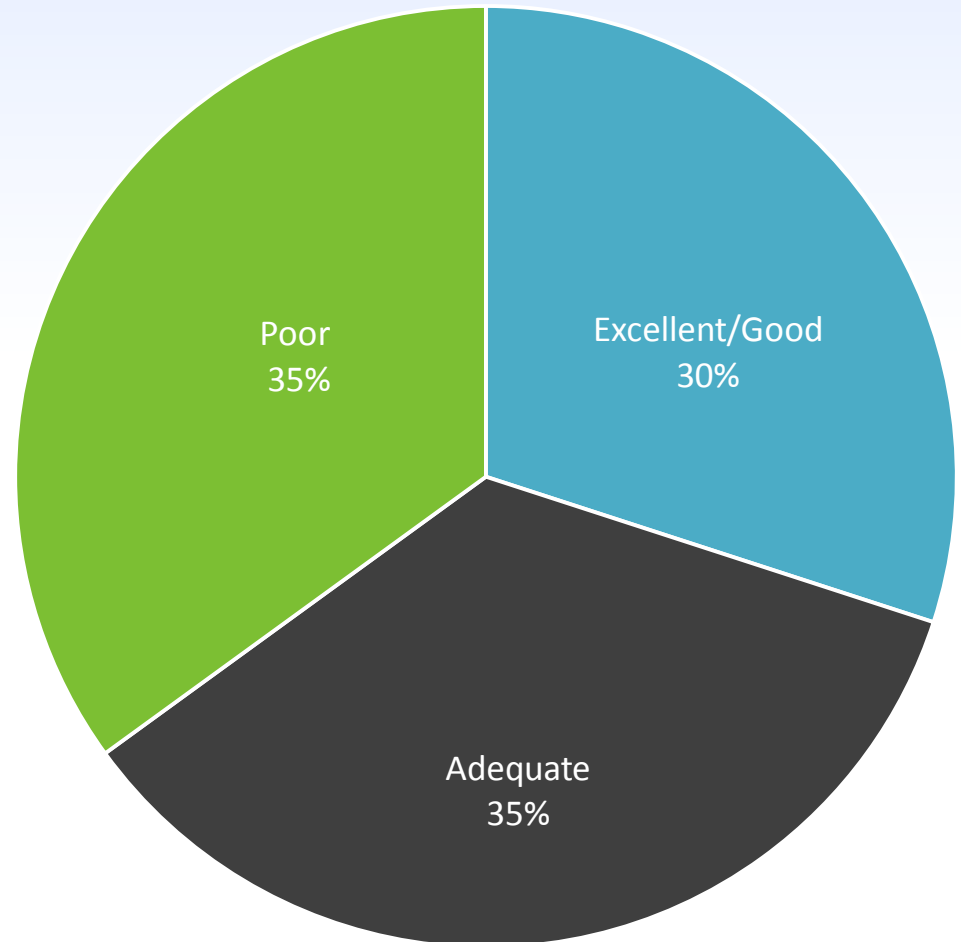
Multivariate predictors of excellent dissemination

- Important for their department
    - **OR=2.3**; 95% CI=1.2-4.5
- Expected by funder
    - **OR=2.1**; 95% CI=1.3-3.2
- Worked in policy/practice setting
    - **OR=4.4**; 95% CI=2.1-9.3
- Those employed at NIH least effective among settings

Remember…

"The definition of insanity is doing the same thing over and over and expecting different results."

(also credited to Ben Franklin, Mark Twain)
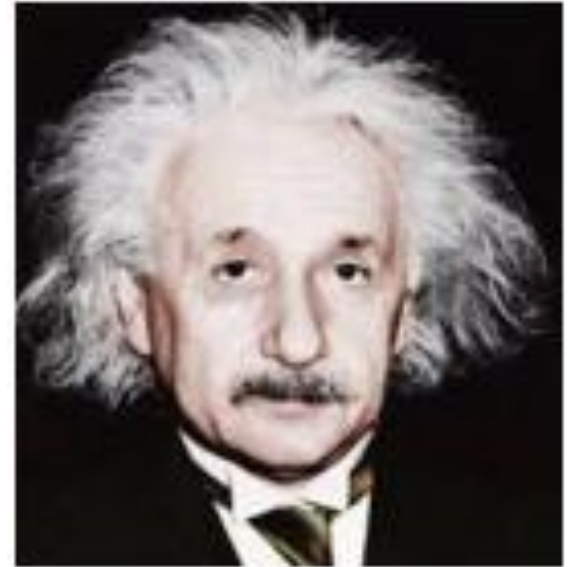
What might speed up the process of D4D and enhance your impact?

How might we improve D4D?

1. Dissemination does not occur spontaneously

   – Make it purposive and active

   – Make it someone's job, beyond doing press releases (most common dissemination in universities)

2. D4D may fit in several places in a project or grant application

   – Determine the scope of D4D activities, space, expertise

   – Some sources rate dissemination capability (e.g., NCI's RTIPs [https://rtips.cancer.gov/rtips/index.do])

In your project, take a systems approach

Processes

1. Engage stakeholders
2. Use feedback loops and processes

Products

1. User friendly summaries
2. Step by step dissemination guides
3. Business models

Outcomes

1. Indicators of successful D4D
2. Use data to segment the audience

A new approach to the process

Steensma, Kreuter et al (ch 12) In: Brownson RC, et al. *Dissemination and Implementation Research in Health: Translating Science to Practice*. 2ⁿᵈ Edition. New York: Oxford University Press;
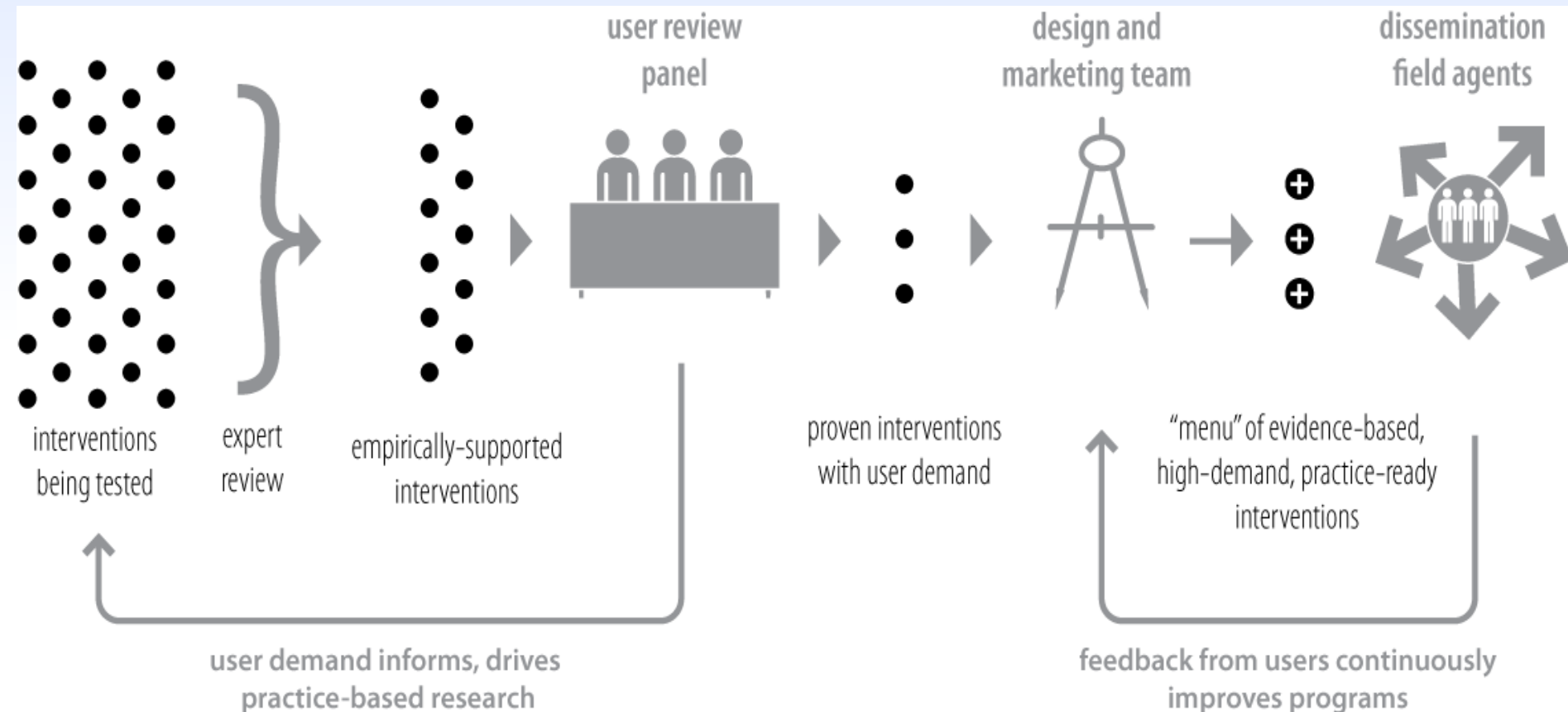
Intentionally, make it <u>pragmatic</u>

- Planning and conducting your research with pragmatic frameworks
    - Use PRECIS to adapt to context
- Avoid the trap of focusing solely on biomedical outcomes
- Engage stakeholders in meaningful ways and respect their contributions
- Design messages, package, distribute via channels most relevant to your audience(s)
- For researchers, make is a significant part of your proposals

How might we improve D4D?

3. Stakeholder involvement in the research or evaluation process is likely to enhance dissemination

   - Operationalize with the right co-investigator(s) (or an advisory group) from the right contexts at the right time

   - "Nothing about us, without us"

   - Engage across the participatory research continuum

Nexus of stage of research and stakeholder engagement

Source: McKay et al., 2007
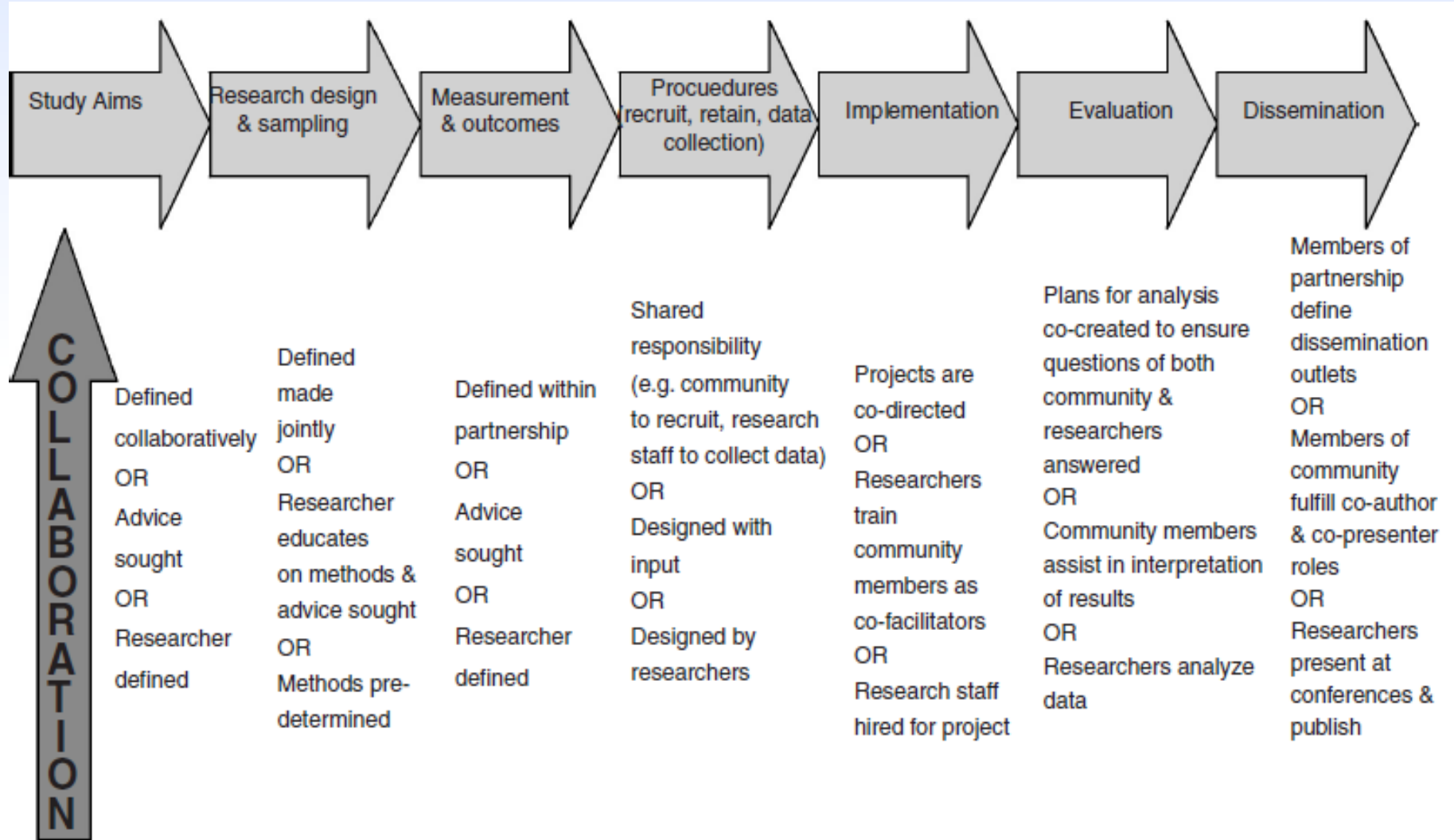
How might we improve D4D?

4. The process of dissemination should be targeted/tailored to various audiences

    – Identify your key audiences

    – Understand how those audiences receive, process, and use research evidence

    – Often the opposite of a journal article

D4D planning matrix

Segment	Relevant characteristics	Messages	Channels
Public health practitioners	• High commitment • Wide range of professional backgrounds • Access to summaries of evidence but often not the original research • Time urgency	• Make a difference in society • Improve health equity • Enhance resources	• Leadership meetings • Professional associations • Brief summaries of evidence

Slater MD, et all. Segmentation on a shoestring: health audience segmentation in limited-budget and local social marketing interventions. *Health Promot Pract*. Apr 2006;7(2):170-173.

The message
(think like a journalist or web designer)

The 3 – 30 – 3 rule

Children's Life Expectancy Being Cut Short by Obesity

BOSTON, March 16 - For the first time in two centuries, the current generation of children in America may have shorter life expectancies than their parents, according to a new report, which contends that the rapid rise in childhood obesity, if left unchecked, could shorten life spans by as much as five years.

How might we improve D4D?

5. At an agency/clinic level, approaches need to be time efficient, consistent with organizational climate/ culture and skills of staff members
    - Build in principles from *Diffusion of Innovations* (Rogers)

6. Think of D4D and impact relevant to academia
    - Tell your story, weave into academic accountability
    - Make it a bigger part of training and mentoring
    - Keep an eye out for the bright shiny object trap of discovery research
    - Look for faculty with practice/policy experience

Translational Science Benefits Model Domains and Indicators

Source: Luke *et al*. The Translational Science Benefits Model: A New Framework for Assessing the Health and Societal Benefits of Clinical and Translational Sciences. *Clin Transl Sci*.

TSBM portal
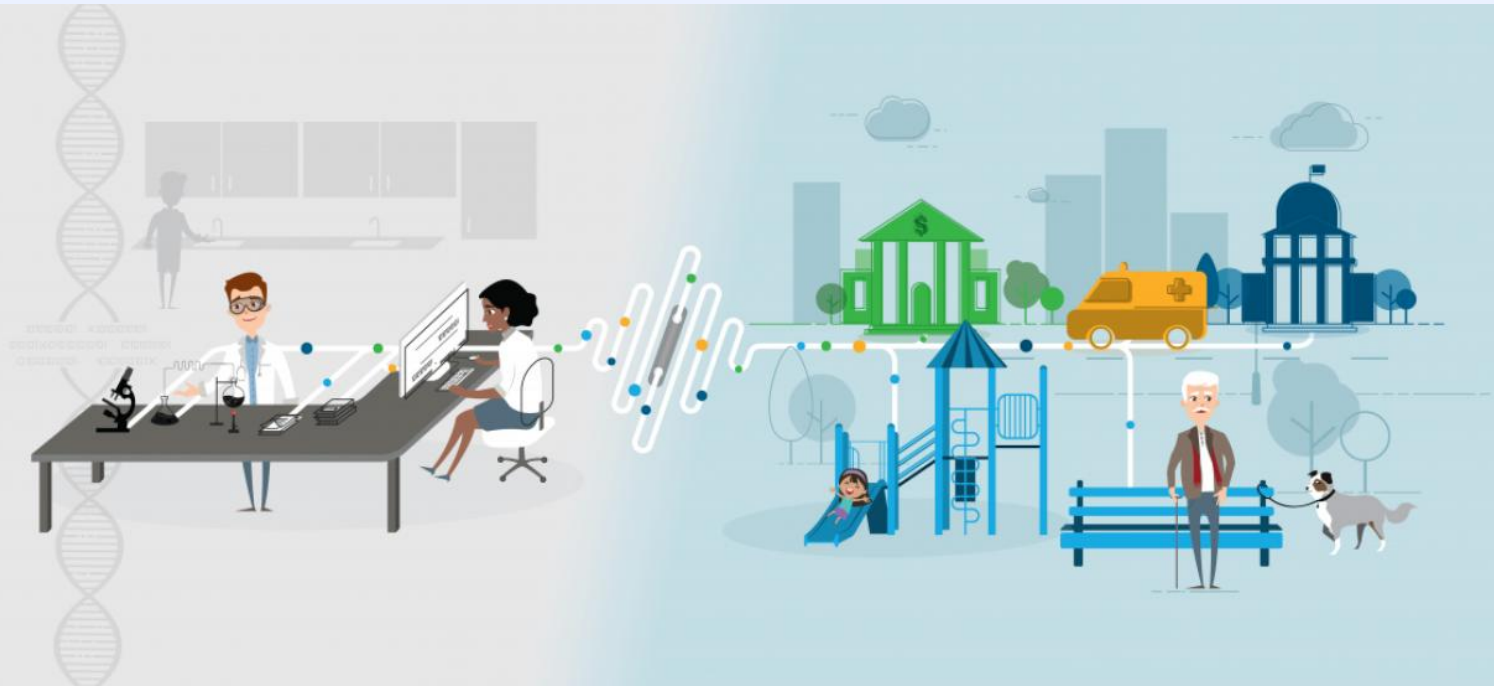
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