Designing for dissemination and impact: In search of the Holy Grail

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June 18, 2018

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Promoting Healthy Communities

Washington University in St. Louis

Objectives

1. Describe principles of D4D and impact.
2. Learn how to incorporate D4D principles in your work.
3. Increase the impact of your work.

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

Why did you enter your chosen profession?

Other questions to ponder

- What are some impacts that your work is having or impacts hoped for in the future?
- How will you measure these impacts?

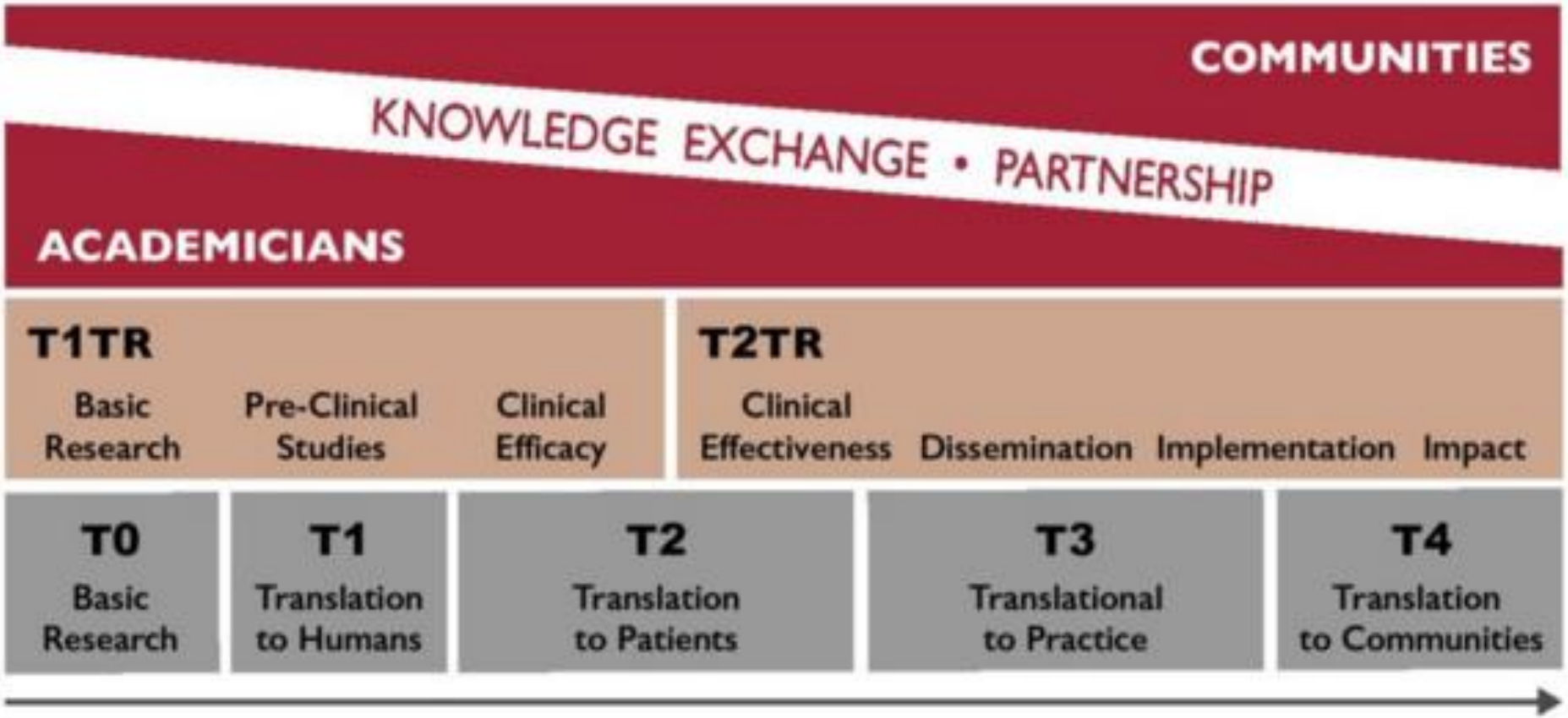
Definitions

- **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

Covered in chapter 2 (Rabin) in Dissemination and Implementation Research in Health

Remember the phases…



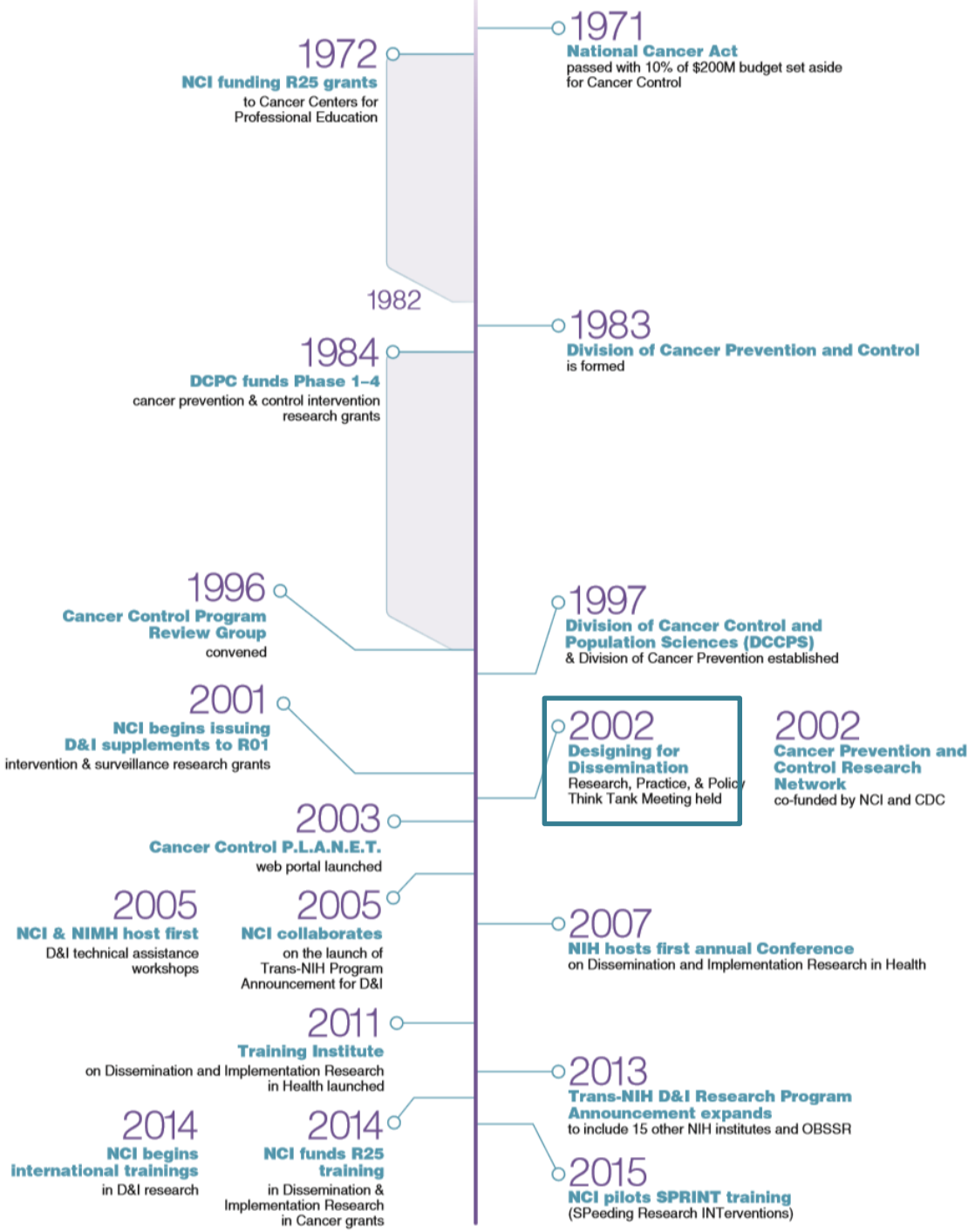
https://ictr.wisc.edu/what-are-the-t0-to-t4-research-classifications/

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)

Timeline

NCI's Cancer Control Investments in Disseminating the Lessons from Science into Practice & Policy*



*A History of the National Cancer Institute's Support for Implementation Science Across the Cancer Control Continuum: Context Counts. Kerner, J, Glasgow RE, Vinson CA.

A brief review on this topic

The first NIH (NCI) focused effort on this issue was a think tank in 2002 supported in part by a:

- Systematic review of the literature specific to the dissemination of EBIs in five areas of cancer control:
  - Tobacco control
  - Dietary change
  - Mammography screening for breast cancer
  - Pap smear testing for cervical cancer
  - Cancer pain management
- Concept mapping exercise asking researchers, practitioners, and funding agency intermediaries what they saw as their role in the dissemination of EBIs

Key Recommendations

(Acted Upon By NCI)

1. Increase funding for dissemination components in grants.
2. Build dissemination requirements into requests for research grant applications.
3. Require and fund the dissemination of effective interventions in existing intervention studies.
4. Require research dissemination and diffusion in all applicable requests for proposals, and allocate resources for this component.
5. **Issue requests for applications on dissemination research**, but also provide funds for the actual dissemination of research findings.
6. NCI-funded comprehensive cancer centers should build in dissemination cores as a shared resource in future cancer center support grant applications.
7. **Ensure that study review groups will better understand and appreciate this much-needed field of study.**

Key Recommendations

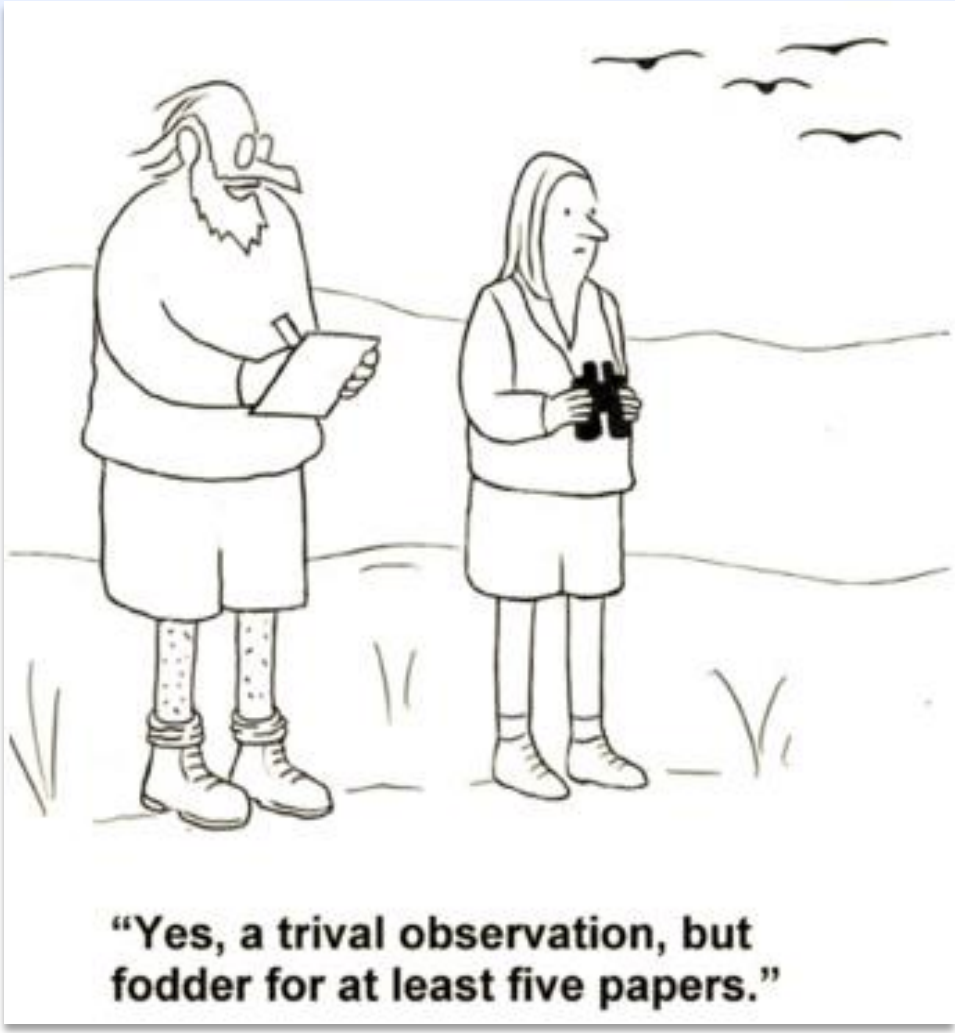
(Acted Upon By NCI)

8. **Train/educate NCI/National Institutes of Health (NIH) study sections regarding how to evaluate dissemination research using criteria other than those used for randomized controlled trials.**
9. Training and support should be provided to researchers and practitioners regarding how to disseminate and evaluate the impact of their research.
10. **NCI should provide more opportunities to develop a broader group of practitioners, researchers, and intermediaries exposed to this dissemination research and practice information.**
11. Involve practitioners and community partners in the research design stage, and promote research/practice partnerships.
12. **Develop systems for the dissemination of effective ideas, programs, and interventions by acting as a clearinghouse for state-of-the art dissemination methods and best practices.**
13. **Promote online dissemination of knowledge and process assistance by developing a dissemination.gov website.**

Why has progress been limited?

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 and dissemination



The push/pull dilemma…

“It’s not my job” (or, “I don’t know how”)

- NCI D4D work
  - All audiences viewed active dissemination of critical importance
    - None thought it was their job!!

Too often overlooked

- Passive dissemination (sometimes called diffusion) does not work
  - Influences
    - Framing/audience segmentation
    - Social influences (including opinion leaders)
    - Incentives and reinforcement

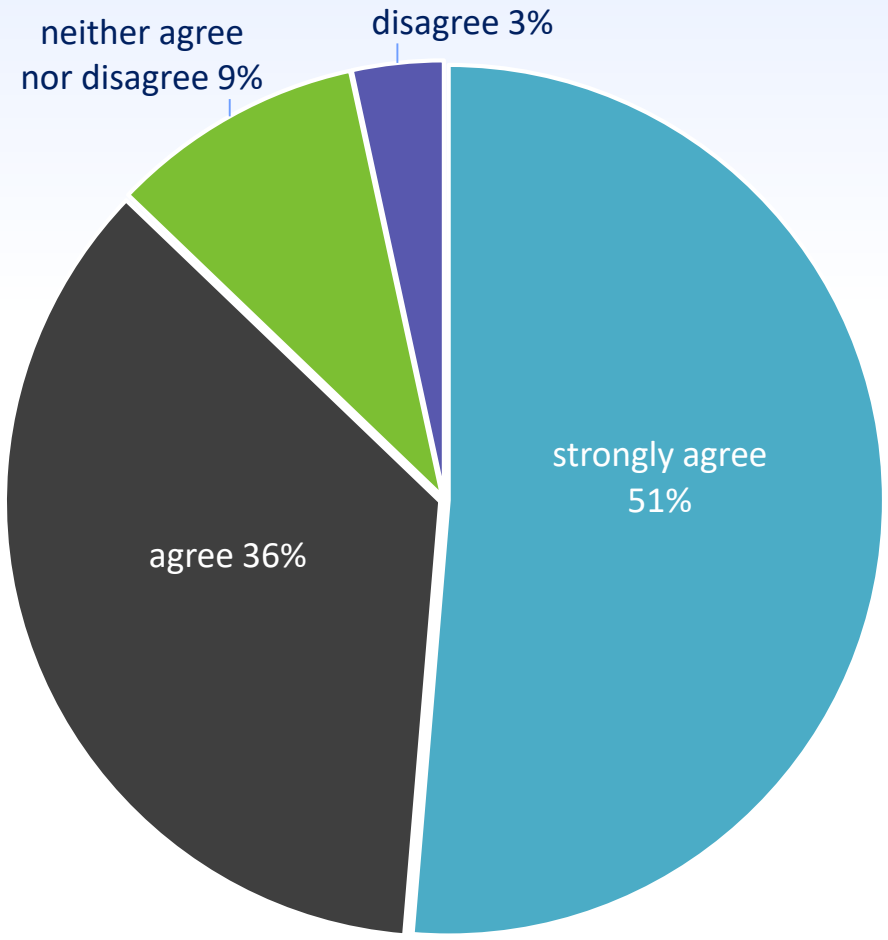
“If you build it…(we have evidence)”

What do we know about D4D?

Researcher Obligation (n = 266)

Survey question:

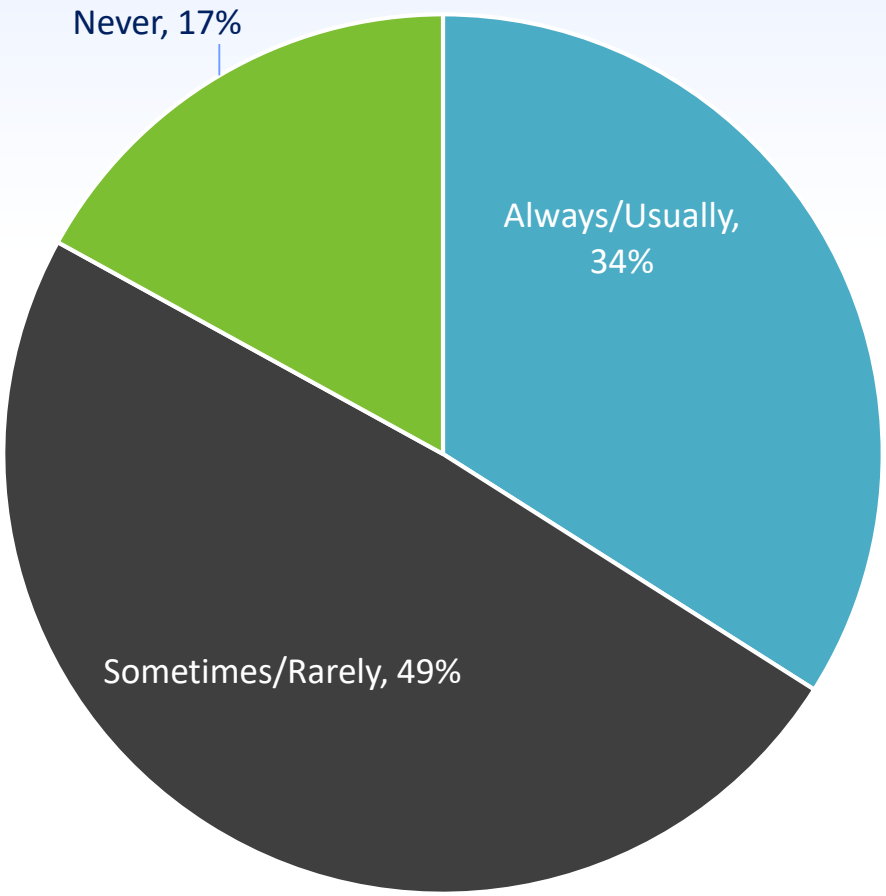
- It is an obligation of researchers to disseminate their research to those who need to learn about it and make use of the findings.



Involving Stakeholders

<u>Survey question:</u>

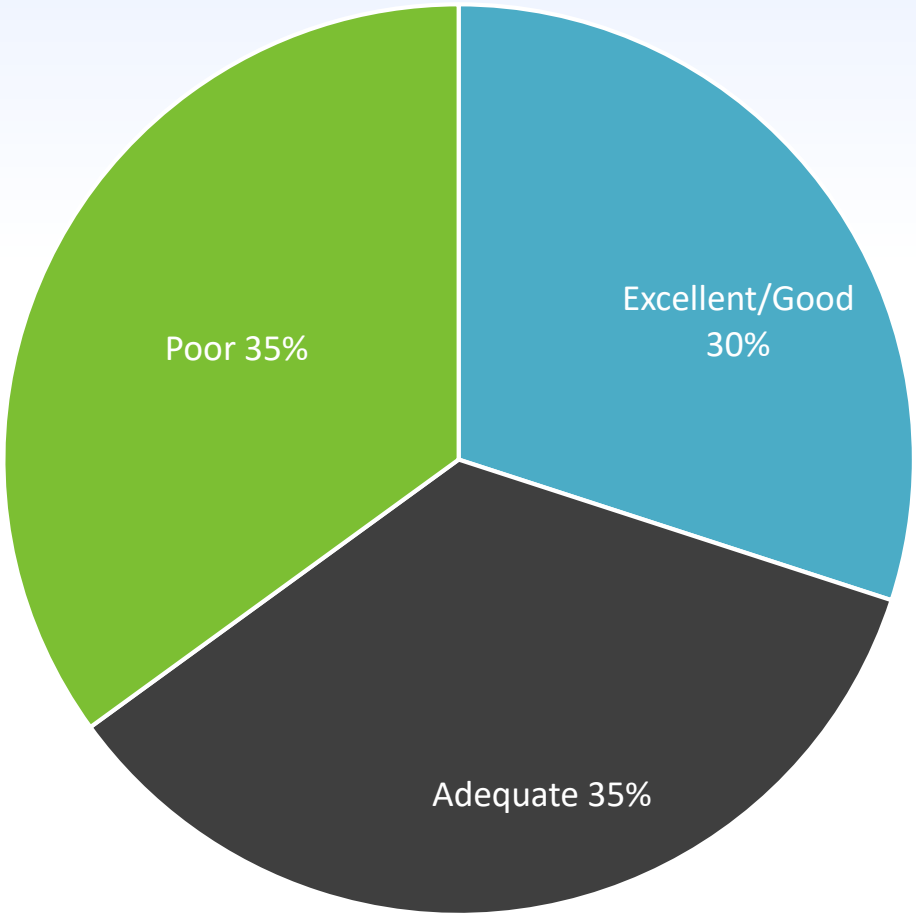
- As a part of your research process, how often do you involve stakeholders?



Rate Efforts

Survey question:

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

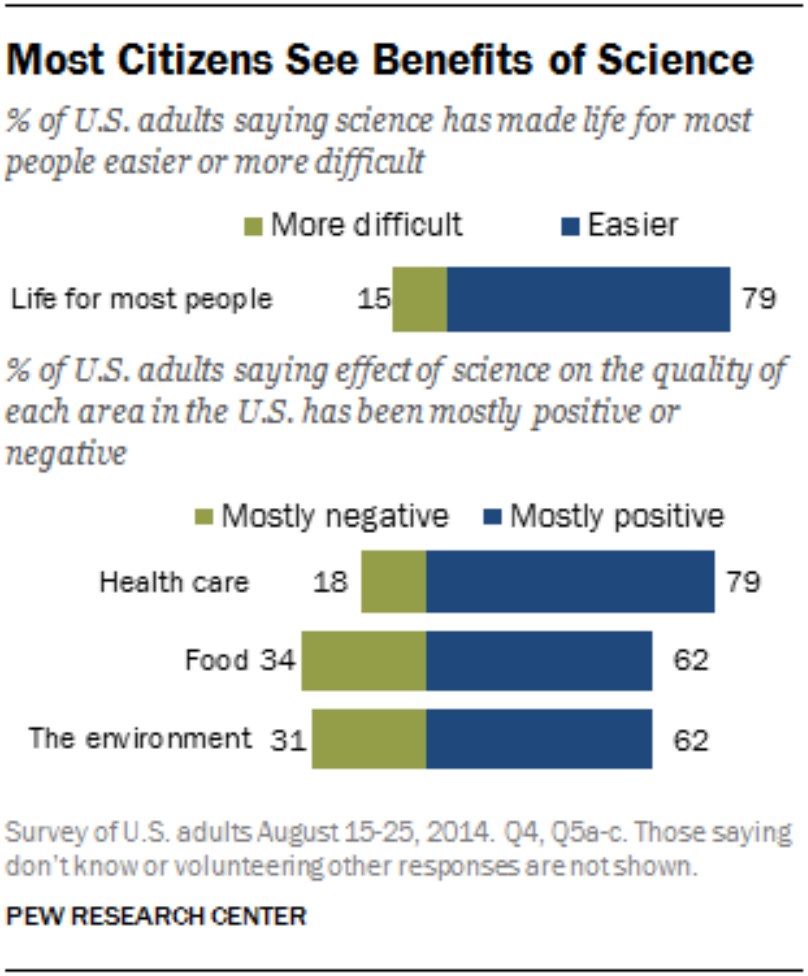


Multivariate predictors of excellent dissemination

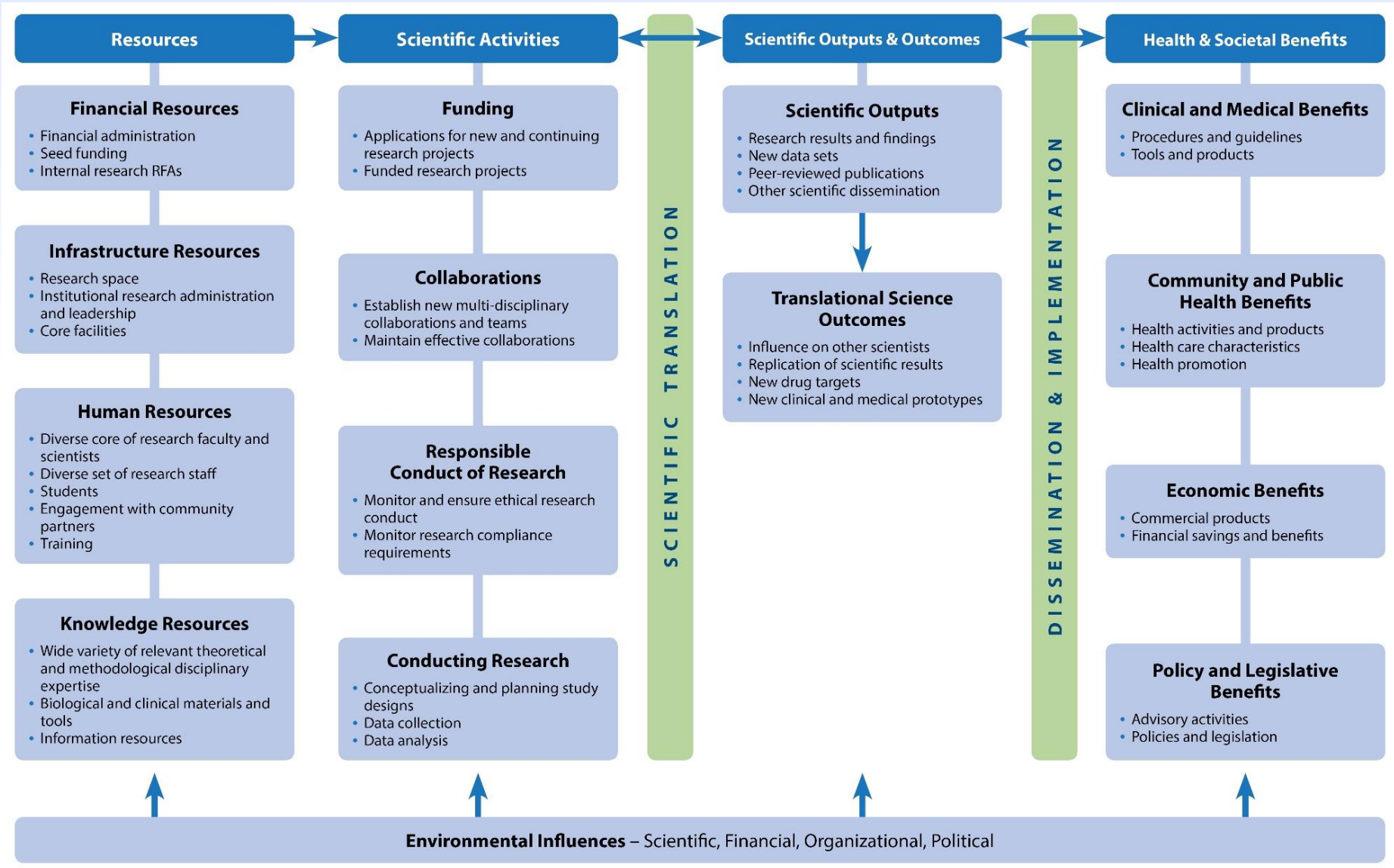
- Important for their department
  - **OR=2.3**; 95% CI=1.2-4.5
- Expected by funder
  - **OR=2.1**; 95% CI=1.3-3.2
- Worked in policy/practice setting
  - **OR=4.4**; 95% CI=2.1-9.3
- NIH least effective among settings

Thinking about benefits of science

- Not just academic!
- New public health programs and interventions need to be sustained over time for society to benefit.
- Moving from widget counting to documenting scientific benefits.



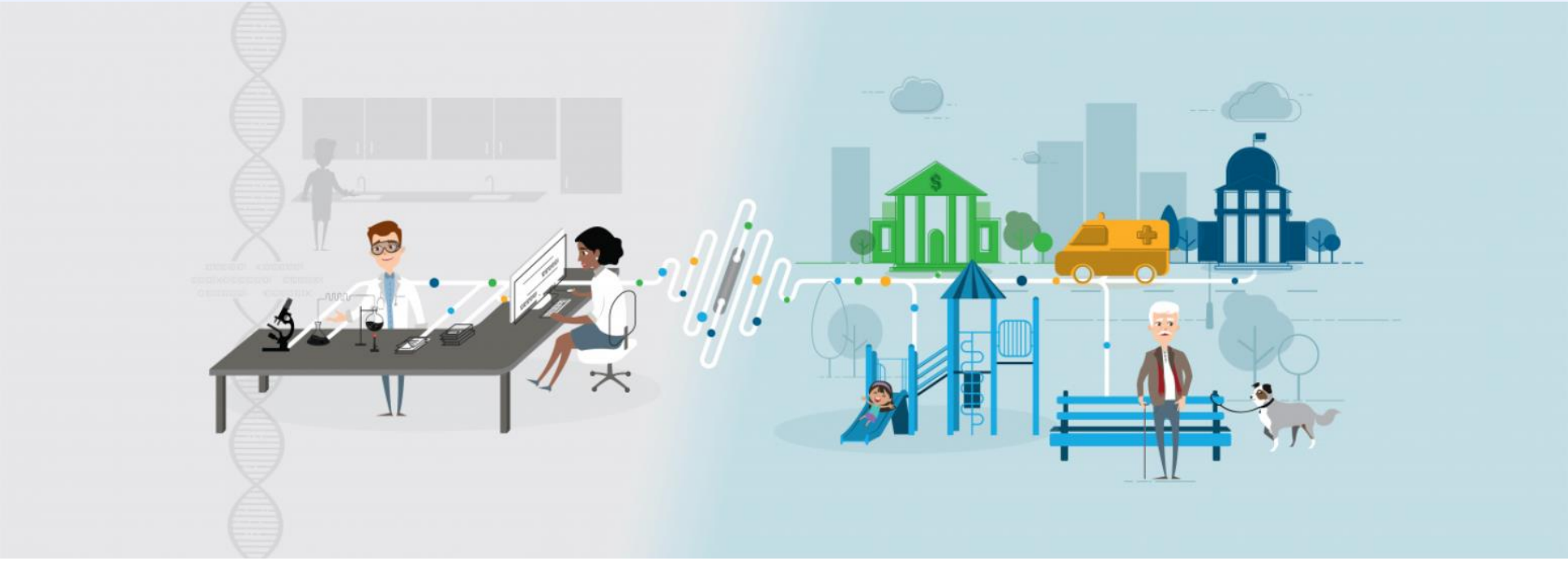
Translational Science Benefits Model



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



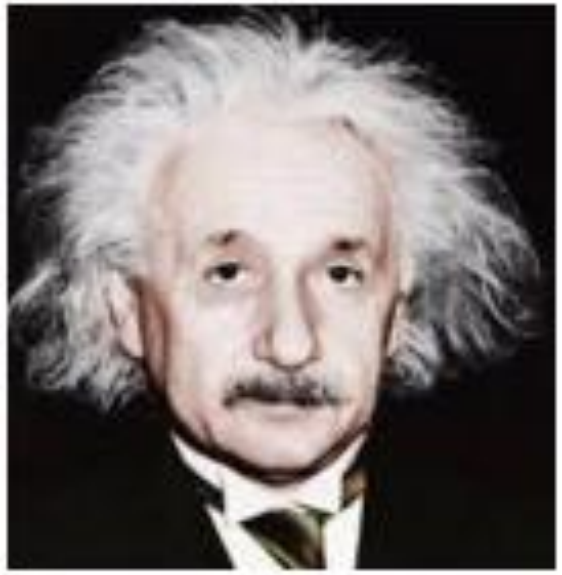
https://translationalsciencebenefits.wustl.edu/

Developed with support from WU Institute of Clinical and Translational Sciences (ICTS; CTSA grant UL1 TR002345)

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 achieving impact?

How might we improve D4D?

1. Dissemination does not occur spontaneously
   - Make it purposive and active

2. D4D may fit in several places in a project or grant application
   - Determine the scope of D4D activities, space, expertise

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 a stakeholder advisory group) from the right contexts at the right time
   - "Nothing about us, without us"

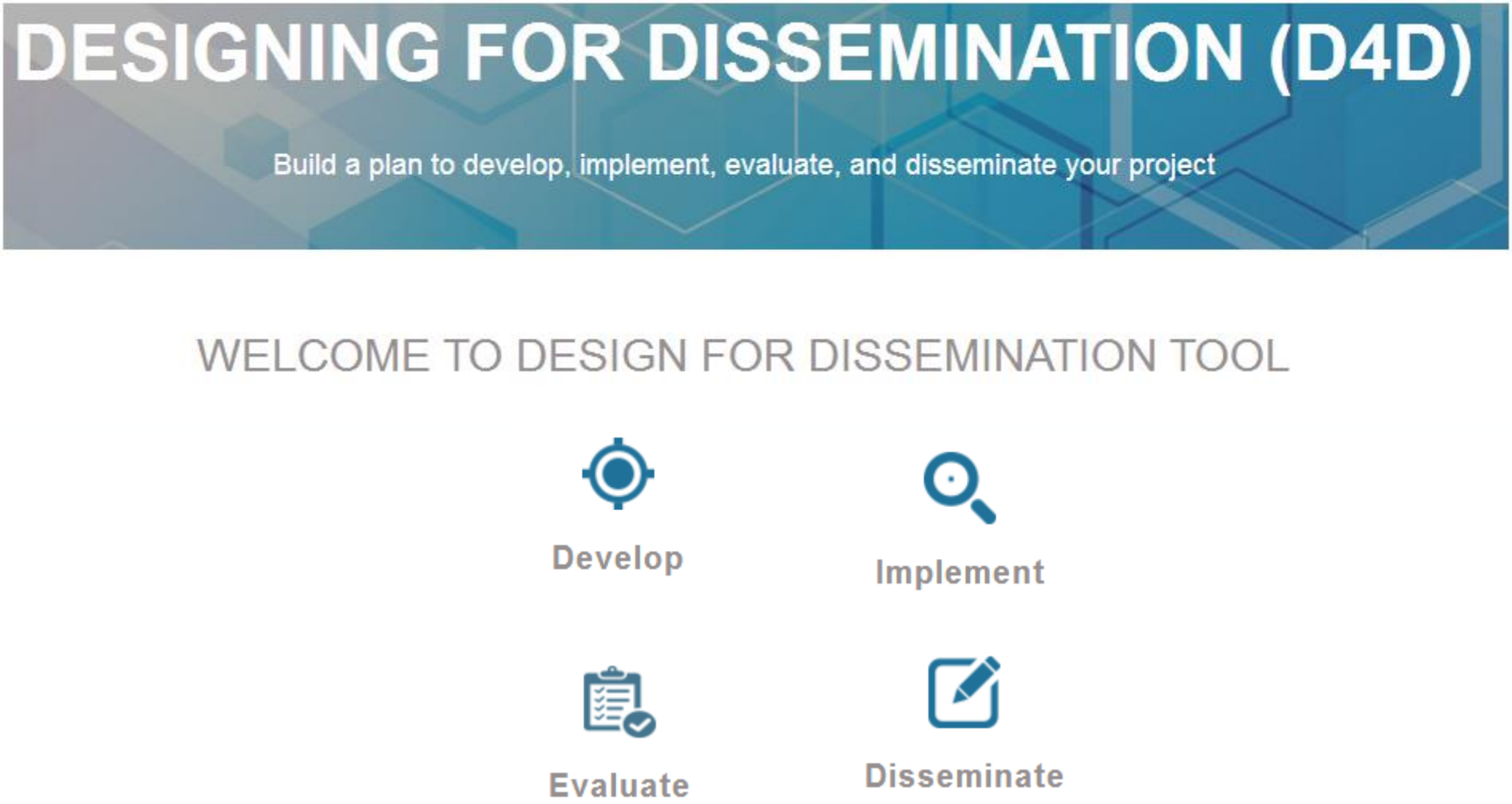
4. The process of dissemination should be targeted to specific audiences
   - Identify your key audiences
   - Understand how those audiences receive, process, and use research evidence

How might we improve D4D?

5. At an agency 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

A useful tool



http://design4dissemination.com/home

ACCORDS
ADULT AND CHILD CONSORTIUM FOR HEALTH OUTCOMES RESEARCH AND DELIVERY SCIENCE
UNIVERSITY OF COLORADO | CHILDREN'S HOSPITAL COLORADO


*Not only do you build the field, but you have to build the **road** to it!*

Readings

- Brownson RC, Colditz GA, Proctor EK (Eds). ***Dissemination and Implementation Research in Health: Translating Science to Practice***. 2nd Edition. New York: Oxford University Press; 2018
- Brownson RC, Fielding JE, Green LW. **Building Capacity for Evidence-Based Public Health: Reconciling the Pulls of Practice and the Push of Research**. *Annu Rev Public Health*. 2018 Apr 1;39:27-53
- Brownson RC, Jacobs JA, Tabak RG, Hoehner CM, Stamatakis KA. **Designing for dissemination among public health researchers: findings from a national survey in the United States.** *Am J Public Health*. Jul 18 2013;103(9):1693-1699.
- Brownson RC, Eyler AA, Harris JK, Moore JB, Tabak RG. **Getting the Word Out: New Approaches for Disseminating Public Health Science.** *J Public Health Manag Pract*. Sep 06 2017.

Readings

- Kerner J. **Integrating research, practice and policy: What we see depends on where we stand.** Journal of Public Health Management and Policy. 2008; 14(2): 193-98.
- Luke DA, Sarli CC, Suiter AM, 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.* Jan 2017;11(1):77-84.
- Manafò E, Petermann L, Lobb R, Keen D, Kerner J. **Research, practice, and policy partnerships in pan-Canadian coalitions for cancer and chronic disease prevention.** *J Public Health Manag Pract*. 2011 Nov-Dec;17(6):E1-E11
- Moore JB, Maddock JE, Brownson RC. **The Role of Dissemination in Promotion and Tenure for Public Health.** *J Public Health Manag Pract.* Jan/Feb 2017;24(1):1-3.
- Tabak RG, Stamatakis KA, Jacobs JA, Brownson RC. **What predicts dissemination efforts among public health researchers in the United States?** *Public Health Rep.* Jul 2014;129(4):361-368.

Selected Resources

Washington University in St. Louis

Dissemination and Implementation at Washington University in St. Louis

HOME | D&I TOOLKITS | CONSULTATION | TRAINING IN D&I AT WU | RESEARCH CENTERS

D&I Toolkits

Hello!

We are glad that you are interested in our toolkits. These toolkits have been developed by the Dissemination and Implementation Research Core (DIRC), a methods core aimed to support investigators interested in D&I. More information about DIRC, including who we are and how to get services, can be found here.

We are working to improve our materials, and would appreciate if you answer our survey once you have taken a look at our resources. We appreciate your feedback! We hope you enjoy our toolkits:

- DIRC Intro to D&I Toolkit
- DIRC Aims Toolkit
- DIRC Barriers & Facilitators Toolkit
- DIRC Implementation Outcomes Toolkit
- DIRC Designs Toolkit
- DIRC Implementation Organizational Measures Toolkit
- DIRC Implementation Strategies Toolkit
- DIRC Guidelines Toolkit
- DIRC Checklist for writing IR proposals

Home
What's New
What We Do
Who We Are
Request Consultations
Resources
FAQ's
Getting Funded
Goals and Related Activities
IMPACT K12 Training Program

Resources

Online and published resources for Funding, Study Planning and Evaluation in Dissemination and Implementation

Highlighted Resources include:

Online Resources | **Key General References** | **Internal Resources** | **Measures, Design & Evaluation**
Other References | **D&I Training** | **Presentations** | **Guides & Tools**

< CONSORTIUM FOR IMPLEMENTATION SCIENCE

IMPLEMENTATION SCIENCE NEWS

BY CATEGORY | BY MONTH | ABSTRACT SEARCH | NEWSLETTER

POST CATEGORIES: ANNOUNCEMENTS | BEHIND THE SCENES | CALL FOR PAPERS | COMMENTARY | EVENTS / CONFERENCES | FEATURED ARTICLES | FELLOWSHIPS | FUNDING OPPORTUNITIES | JOB OPPORTUNITIES | RESOURCE OF THE MONTH | TRAINING OPPORTUNITIES | WEBINARS

get informed get funded get published get connected get resources about

Implementation Science Exchange

a one-stop resource for implementation science researchers

Websites with live/archived webinars

Archived webinars

Webinars and training

Learning modules

THANKS to Russ Glasgow, Jon Kerner, Doug Luke (and many others)!!

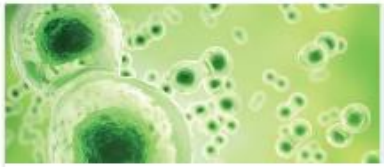
Questions/Discussion

Extra, back-up slides

ABOUT THE MODEL | INDICATORS | CASE STUDIES | USE THE MODEL

Indicators

ALL | CLINICAL & MEDICAL | COMMUNITY & PUBLIC HEALTH | ECONOMIC | POLICY & LEGISLATIVE

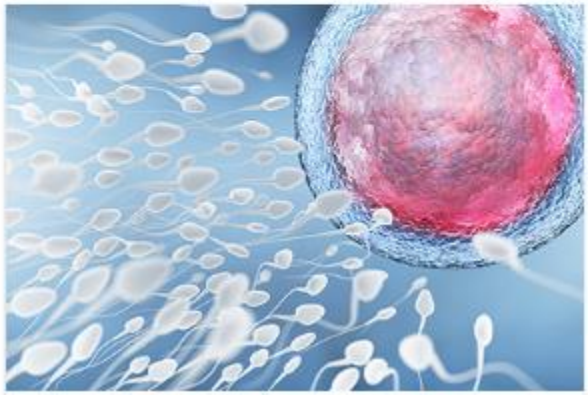


Biological Factors & Products

Biomedical Technology

Committee Participation

Case Studies



The Contraceptive CHOICE Project

Increasing accessibility and uptake of long-term, reversible contraception for almost 10,000 women, reducing teen pregnancy and abortion rates in the St. Louis Missouri area.

Specific Non-Invasive Diagnosis of Kidney Cancer

Exploring promising, noninvasive screening methods for the early detection of kidney cancer, including urine biomarkers.

Use the Model

Here you are some ways you can use the model to explore and demonstrate the impacts of your own work.

Write your own case study

Start by reviewing the case studies on this website, using them as models for the story of your own work. Then complete the **Case Study Submission Form** to submit your information for consideration as a feature on the site.

Track your work using our checklist

Download a PDF of the **Domains & Indicators Checklist** and use it to track your own work.

Download the Checklist

Coming soon…

Watch for an interactive tool that will allow you to create your own personalized **Translational Science Benefits Profile**.