

EVANS CENTER FOR
IMPLEMENTATION
AND
IMPROVEMENT
SCIENCES

BOSTON
UNIVERSITY

Bringing Science
to Quality

Transforming Implementation & Improvement Into Science: *A skills building series*

May 10, 2018

Engage with CIIS

Guide & Innovate

- Provide guidance, support & innovation to design projects that rigorously evaluate the effectiveness of efforts to implement change

Accelerate & Promote Sustainability

- Identify strategies that accelerate the adoption & promote sustainability of effective healthcare interventions

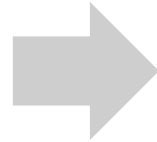
Educate

- Provide implementation & improvement sciences education to faculty, trainees, students

Overview: Implementation & Improvement Sciences

Implementation Science

Focuses on optimal strategies to promote evidence uptake in real-world settings



Addresses

Did stakeholders perform the desired endeavor?
Why or why not?
How well?



Aims

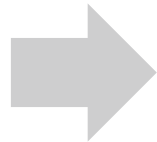
Translate research into practice

Systematically implement evidence-based practices

Improve the quality of healthcare

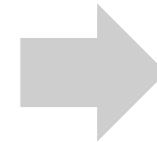
Improvement Science

Focuses on rigorously measuring outcomes associated with efforts to improve care delivery



Addresses


Did the new endeavor measurably improve desired outcomes?





Previous Sessions & Resources

Tentative Date	Session Title	Proposal Areas Addressed
10/25/2017	Identifying Your Implementation & Improvement Sciences Research Question	Quality/Care Gap, Evidence-Based Practice
12/6/2017	Using & Discussing Implementation Science Models	Conceptual Model
1/25/2018	Implementation Strategies Versus Study Interventions	Implementation Strategy
2/28/2018	Designing an Implementation & Improvement Sciences Study	Study Design, Measurement, Analytic Methods
3/22/2018	Designing Your Implementation & Improvement Sciences Study	Measurement, Analytic Methods
4/18/2018	Measuring Implementation & Improvement Outcomes	Measurement, Analytic Methods
5/10/2018	Engaging with Stakeholders to Conduct Feasible & Meaningful Research	Stakeholder Engagement, Feasibility, Team, Policy Environment

Key Take Away Points from the Series


- 
- Think of implementation science as the science of making the right thing to do, the easy thing to do


- 
- Implementation strategies \neq interventions
 - Implementation strategies are the methods used to adopt, integrate evidence into practice

- 
- Important to study both improvement and implementation
 - If we successfully implement but fail to improve care, does it matter?
 - If we improve care but we have no idea how it was done, is it sustainable?

Key Take Away Points from the Series

- 
- Conceptual models serve as roadmaps for your study design and outcome measures, promote generalizable knowledge for replication, sustainability

- 
- Not all study designs are equal – assess their strengths and weaknesses
 - Study designs should match your question

- 
- Implementation outcomes \neq effectiveness outcomes
 - Acceptability, adoption, appropriateness, cost, feasibility, fidelity, penetration, sustainability

Engaging with Stakeholders to Conduct Feasible & Meaningful Research

Madeleine LK Scammell, DSc

Associate Professor, Environmental Health, BUSPH

JPB Environmental Health Fellow, Harvard T.H. Chan SPH

Stakeholder

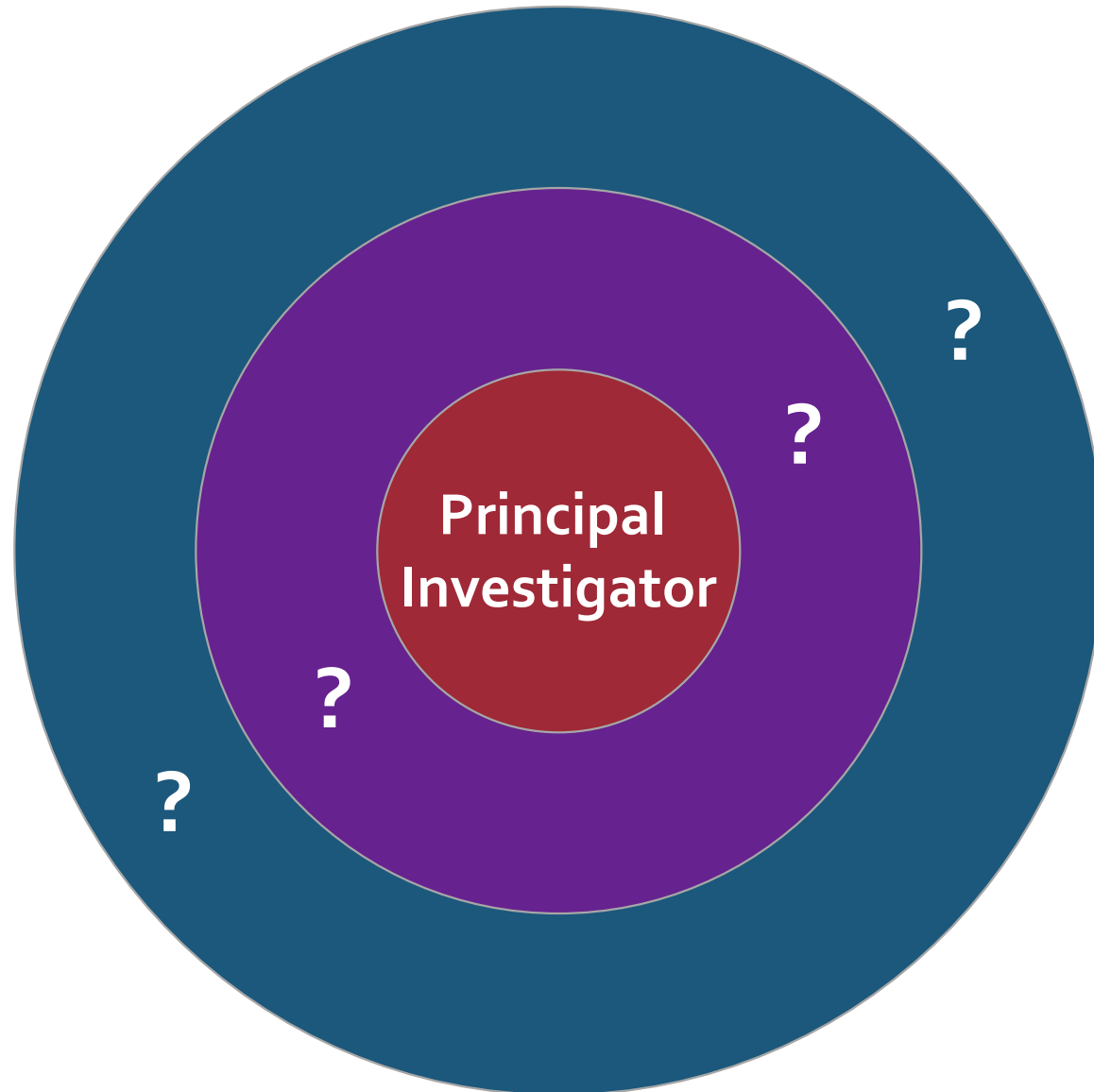
Definition of stakeholder

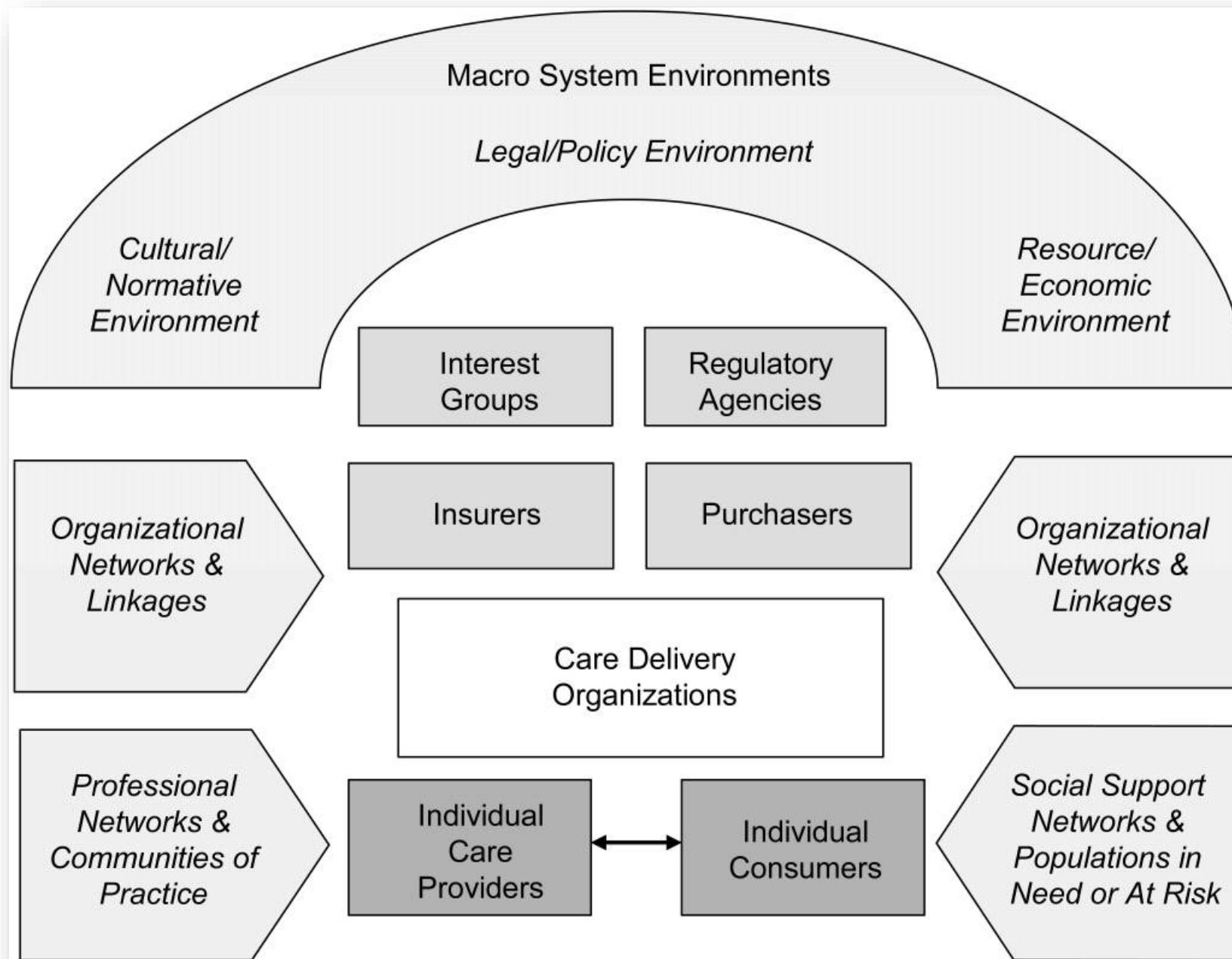
1. A person entrusted with the stakes of bettors
2. One that has a stake in an enterprise
3. One who is involved in or affected by a course of action

“Bannon, who returned to the company last year, stepped down in January—a move reportedly forced by billionaire financier and Breitbart *stakeholder* Rebekah Mercer.”

Jeet Heer, *The New Republic*, "The Breitbartization of Fox News," 22 Mar. 2018

Who Are Your Stakeholders?





Source: Mendel P, et al. Interventions in organizational and community context: A framework for building evidence on dissemination and implementation research. *Adm Policy Ment Health*. 2008;35:21-37.

7Ps of Stakeholder Engagement

1. Patients and the public
2. Providers
3. Purchasers
4. Payers
5. Policy-makers
6. Product-makers
7. Principal investigators

Source: Concannon TW, Meissner P, Grunbaum JA, McElwee N, Guise JM...Leslie JK. A new taxonomy for stakeholder engagement in patient-centered outcomes research. J Gen Intern Med. 2012;27(8):985-991.

Stakeholder Analysis Matrix

Name	Contact Person <i>Phone, Email, Website, Address</i>	Impact <i>How much does the project impact them? (Low, Medium, High)</i>	Influence <i>How much influence do they have over the project? (Low, Medium, High)</i>	What is important to the stakeholder?	How could stakeholder contribute to the project?	How could stakeholder block the project?	Strategy for engaging stakeholder
<i>EXAMPLE</i> Nurses & Midwives Union	<i>Carlos Davida cdavida@nu.org 998 765 287</i>	<i>High</i>	<i>High</i>	<i>Maintaining working conditions for nurses</i>	<i>Agree for union members to implement the new reforms</i>	<i>Going on strike</i>	<i>Monthly round-table discussions</i>
Patient Advocacy Group	<i>Viki Chan vchan@pag.org 888 587 101</i>	<i>High</i>	<i>Medium</i>	<i>Maximising quality of care for patients</i>	<i>Communicate with other stakeholders to express their support for reforms</i>	<i>Making complaints about quality of service after the reports</i>	<i>Information and feedback meetings every 6 months</i>
Sunday Times Newspaper	<i>Jane Smith jsmith@stn.com 888 587 101</i>	<i>Low</i>	<i>High</i>	<i>Getting a good story</i>	<i>Print stories that support the new reforms</i>	<i>Printing stories that oppose the new reforms</i>	<i>Quarterly press meetings</i>

Why Engage with Stakeholders

To conduct feasible and meaningful research

- **Feasible:** Actual fit or utility of the implementation strategy/innovation, suitability for everyday use
- **Meaningful:** Efforts that are valued, perceived as worth the resources, expected to result in desired outcomes

Why Engage with Stakeholders?

- Stakeholders vary in their
 - Knowledge
 - Perceptions
 - Preferences
- Stakeholders represent the context when you are aiming to effect change
- Successful implementation depends on **fit** of implementation strategies and intervention **with stakeholder preferences/priorities**

Stakeholder-Related Implementation Challenges



Stakeholder Analysis Matrix

Name	Contact Person <i>Phone, Email, Website, Address</i>	Impact <i>How much does the project impact them? (Low, Medium, High)</i>	Influence <i>How much influence do they have over the project? (Low, Medium, High)</i>	What is important to the stakeholder?	How could stakeholder contribute to the project?	How could stakeholder block the project?	Strategy for engaging stakeholder
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Engaging Stakeholders

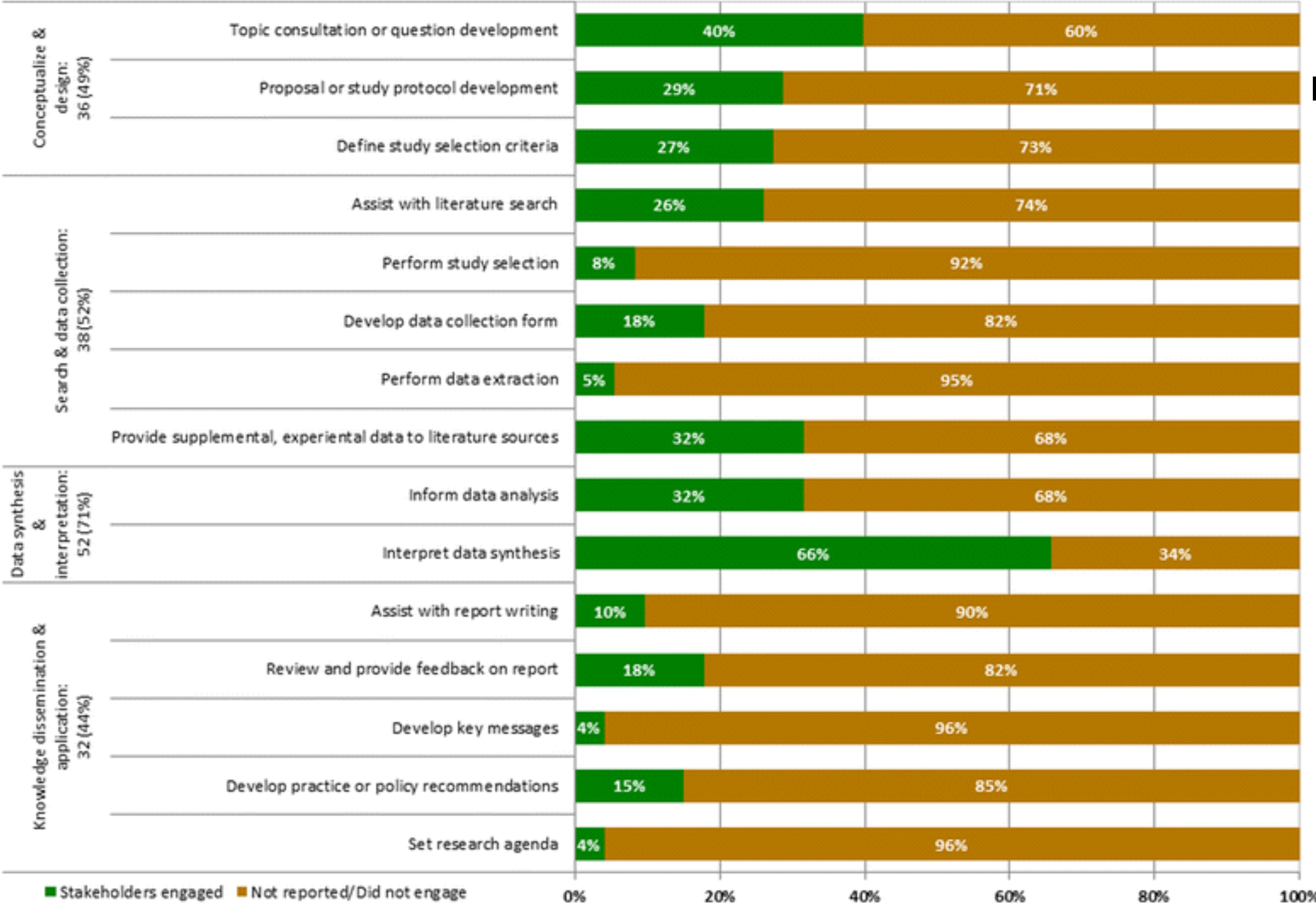
- Need to engage with stakeholders when
 - Designing
 - Implementing
 - Evaluating
 - Scaling
- Degree of stakeholder engagement will influence implementation outcomes

For each project, ask:

What are processes for engaging stakeholders in pre-, mid- and post-implementation activities?

Outcome Measure	Definition	Role of Stakeholders
Acceptability	Individuals satisfaction with multiple aspects of the innovation	Consider how these outcomes may be impacted if stakeholders are not engaged when planning study design, implementation strategies, etc.
Adoption	Individual/organizational/setting's use of the innovation	
Appropriateness	Compatibility of the innovation with target population, setting	
Feasibility	Individual's/setting's ability to do/use the innovation	
Fidelity	Delivering the innovation as intended	
Implementation Cost	Amount of resources required	
Penetration	Reach of the innovation within target population/setting	
Sustainability	Maintenance of innovation	

Adapted from: Proctor E, Silmere H, Raghavan R, Hovmand P, Aarons G, Griffey R, Hensley M. Outcomes for implementation research: Conceptual distinctions, measurement challenges, and research agenda. *Adm Policy Ment Health.* 2011; 38(2): 65-76.



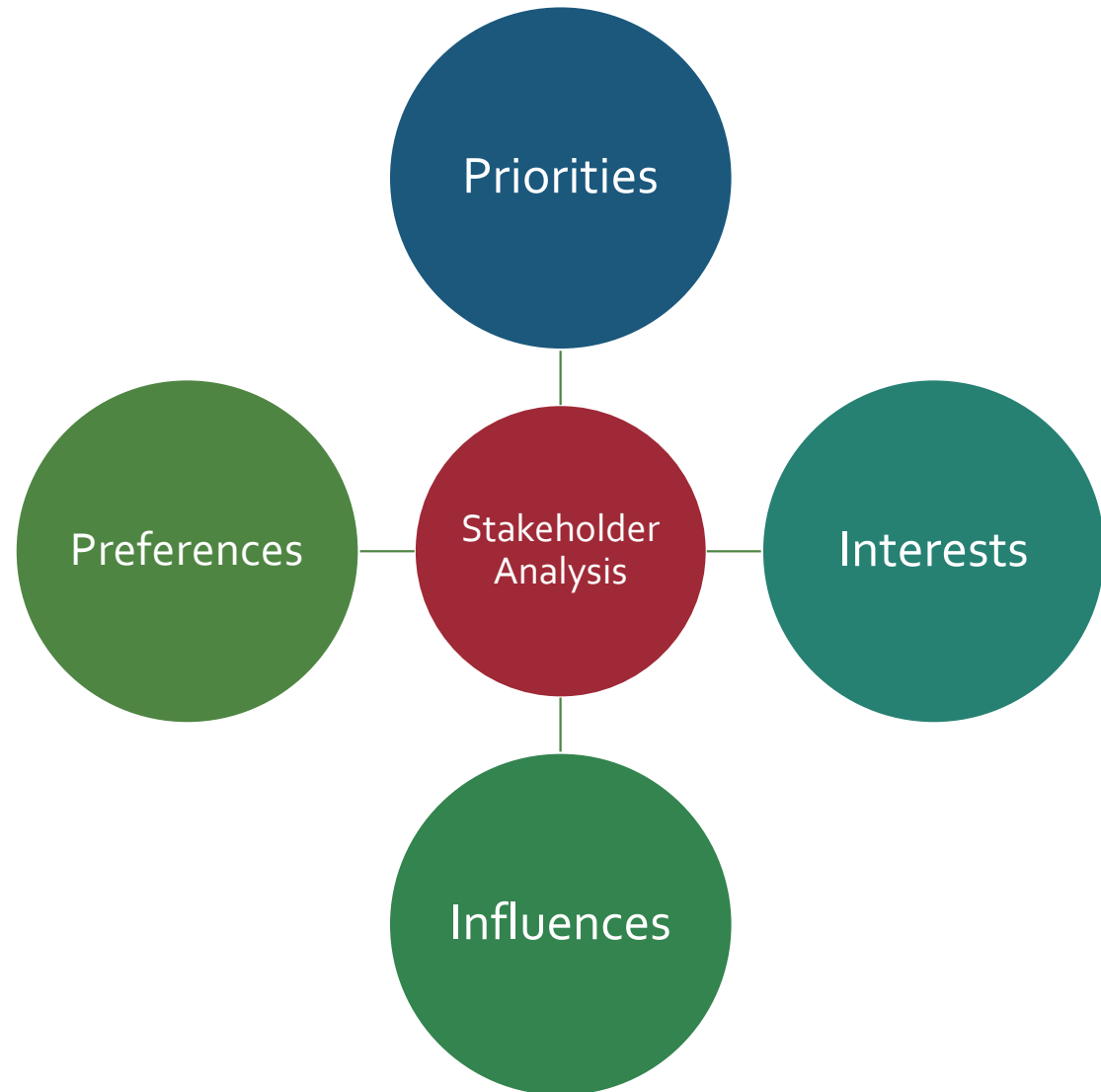
Most of the time, stakeholders are not engaged

 Stakeholders engaged

 Stakeholders not engaged or not reported

Source: Tricco AC, Zarin W, Rios P, Nincic V, Khan PA, Ghassemi M, Diaz S, Pham B, Straus S, Langlois. Engaging policy-makers, health system managers, and policy analysts in the knowledge synthesis process: a scoping review. *Implementation Science*. 2018;13:31.

Pre-Implementation Efforts: Stakeholder Analysis



Results of stakeholder analysis should inform implementation strategies
– how you promote uptake of the evidence-based practice

Establishing Relationships: Memorandum of Understanding

- Background
- Purpose
- Reporting
- Funding
- Duration
- Milestones
- Deliverables

Sample Memorandum of Understanding Template

Memorandum of Understanding

Between

(Partner)

and

(Partner)

This Memorandum of Understanding (MOU) sets for the terms and understanding between the (partner) and the (partner) to (insert activity).

Background

(Why partnership important)

Purpose

This MOU will (purpose/goals of partnership)

The above goals will be accomplished by undertaking the following activities:

(List and describe the activities that are planned for the partnership and who will do what)

Reporting

(Record who will evaluate effectiveness and adherence to the agreement and when evaluation will happen)

Funding

(Specify that this MOU is not a commitment of funds)

Duration

This MOU is at-will and may be modified by mutual consent of authorized officials from (list partners). This MOU shall become effective upon signature by the authorized officials from the (list partners) and will remain in effect until modified or terminated by any one of the partners by

Pre/Mid/Post Implementation

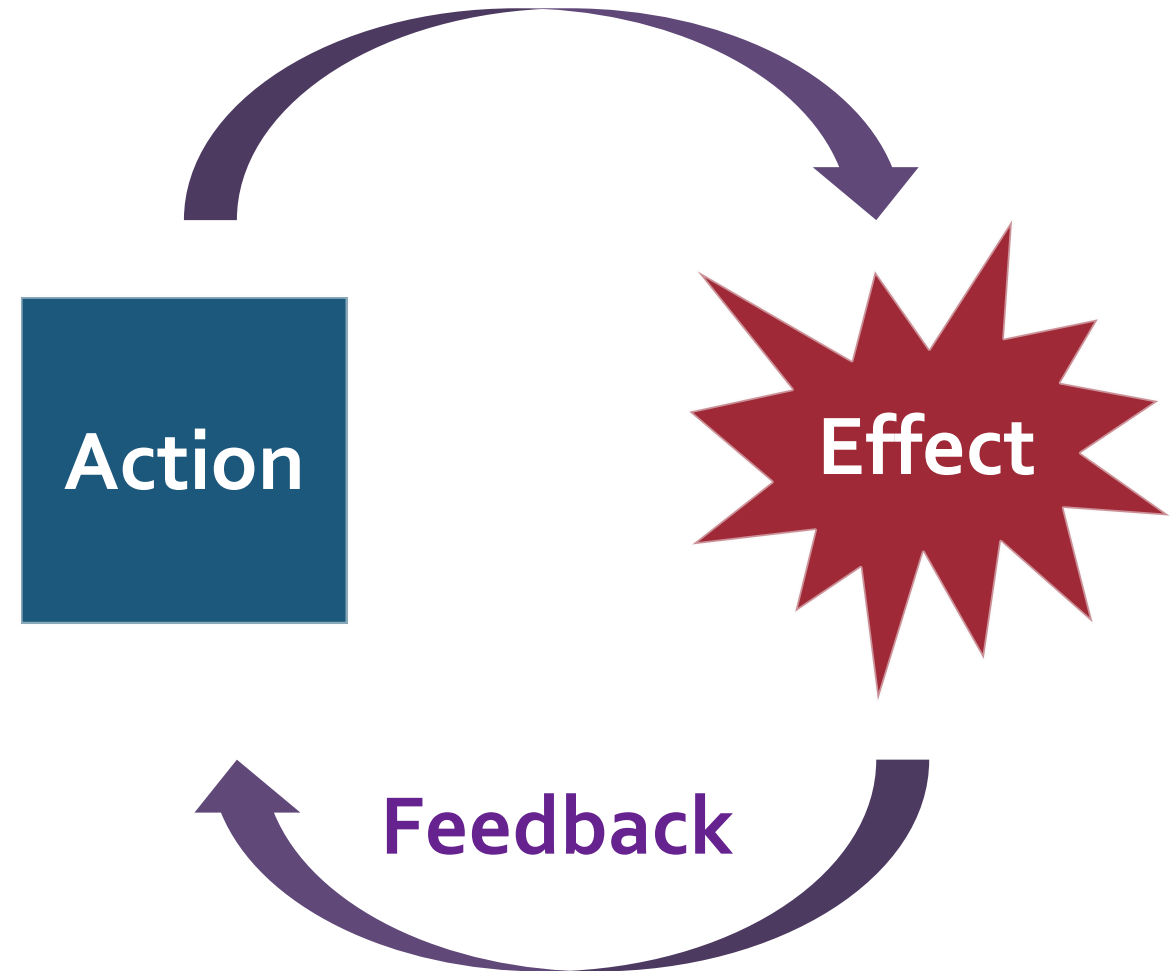
- Key informant interviews
 - + Good for taking a deep dive into specific aspects of implementation
 - + Can conduct with leadership, mid-level managers, frontline staff
 - + Can identify unexpected barriers/facilitators
 - Time-consuming to conduct, identify themes
- Focus groups
 - + Good for soliciting information about group dynamics, team preferences
 - + Can use natural groups, cross-section of staff
 - + Can identify unexpected barriers/facilitators
 - Time-consuming to conduct, identify themes
- Surveys
 - + Good for obtaining a lot of information in a short-time
 - + Can reach larger sample
 - + Easy to analyze
 - ± Only learn what you ask

Delphi Methods

- Survey method that is useful for identifying priorities, achieving consensus
- Process
 - Review materials
 - Rank preferences/priorities
 - Materials are modified
 - Second ranking
- Enables large group of stakeholders to participate
- Not time intensive
- Enables identification of key issues, prioritization of issues by those most impacted
- Flexible – can create your own criteria
 - E.g. rank on feasibility, appropriateness, potential impact or write in priority tasks

Opportunities for Engagement

- Regular progress updates
 - Know your audience – will they want data or a briefing?
- Opportunities for feedback
 - Encourage feedback loops



Types of Stakeholders: Knowledge Users

- Stakeholder: those affected by, who have an interest in research
- Knowledge User: subgroup of stakeholders who will use research findings to make informed decisions about health systems
 - Patients
 - Caregivers
 - Providers
 - Policymakers
 - Health system managers
- Goal of addressing knowledge users: to co-produce relevant knowledge that aids in decision-making

Types of Stakeholders: Partners

Partner
pärtnər

- A person who takes part in an undertaking with another or others, especially in a business or company with *shared risks and profits*
- Either of two people dancing together or playing a game or sport *on the same side*
- Either member of a married couple or of an established unmarried couple

Spectrum of Stakeholder Engagement

Community-
Based

**Community
Driven**

Community-Based
Participatory
Research

Partnership

Community
-Targeted

**Professionally
Driven**

Bottom-Up

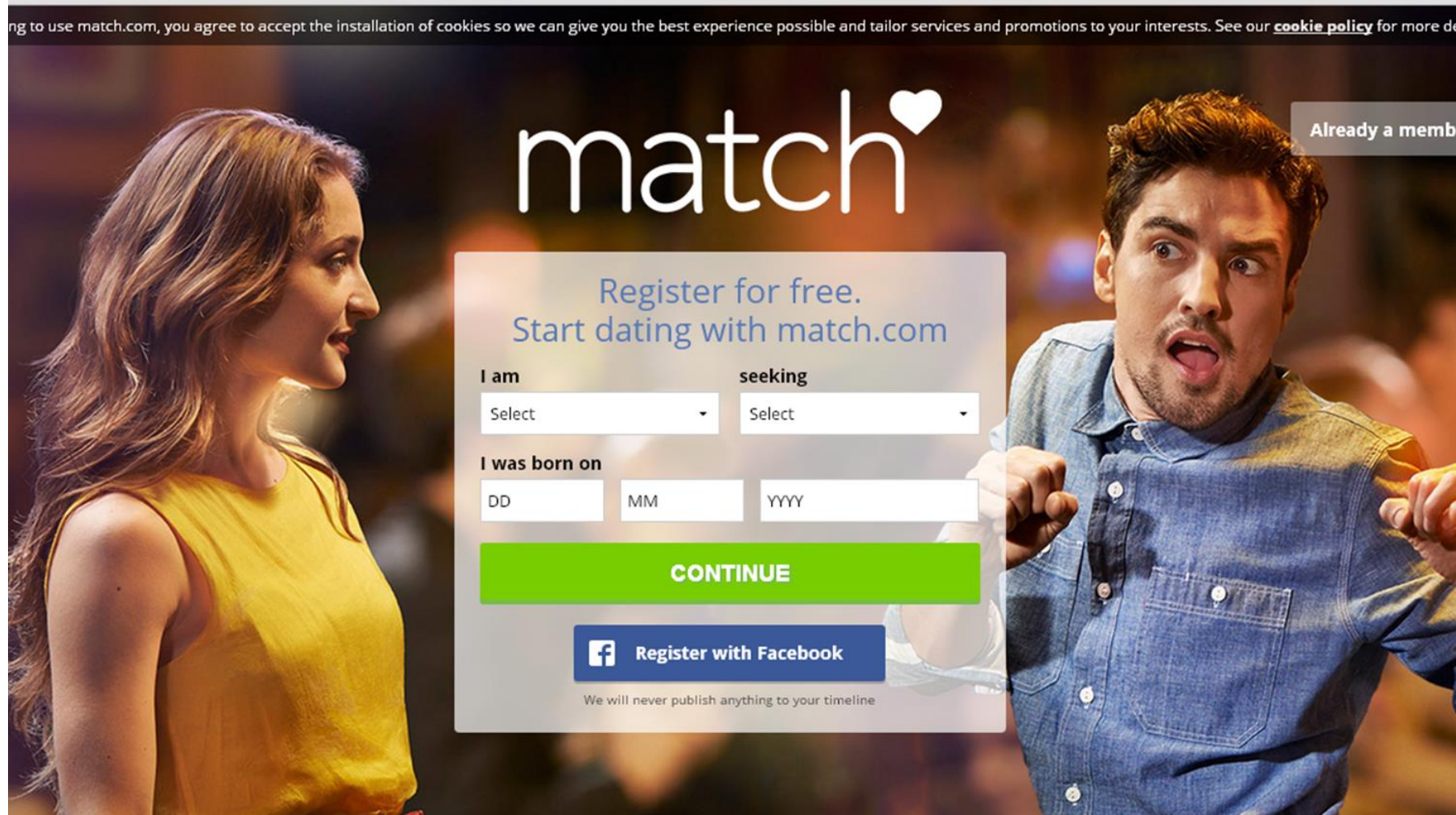
Shared Ownership

Top-Down



Levels of Engagement

ng to use match.com, you agree to accept the installation of cookies so we can give you the best experience possible and tailor services and promotions to your interests. See our [cookie policy](#) for more de



The background of the slide features a romantic scene with a woman in a yellow dress looking at a man in a blue shirt who has a surprised expression. The Match.com logo is centered at the top of the registration form.

match[♥]


Already a member

Register for free.
Start dating with match.com

I am seeking

I was born on

CONTINUE

 Register with Facebook

We will never publish anything to your timeline

Levels of Engagement

Have an account? [Sign in](#)

okcupid

Join the best free dating site on Earth.

I am a

Levels of Engagement

About how long do you want your next relationship to last?

- One night
- A few months to a year
- Several years
- The rest of my life

Levels of Engagement

okcupid

- I am looking for...
 - New friends
 - Short-term dating
 - Long-term dating
 - Causal sex

Research partner

- I am looking for...

The HEAR database aims to increase and diversify the legal, scientific, medical and technical expertise available to community groups with environmental and public health concerns.

The HEAR database is a collaborative project of Alternatives for Community & Environment (ACE), Boston University School of Public Health (BUSPH) and Toxics Action Center. Every day, members of community groups across New England call our organizations seeking advice on their work confronting environmental hazards. Sometimes we can handle the questions ourselves, but often we have to look outside our own networks for help. When groups need a lawyer to review siting documents or a doctor to weigh in on the effects of air pollution on health, we turn to the network of HEAR experts to match communities with volunteers. This kind of assistance, and in some cases partnership, is absolutely essential to our work and the services we provide community groups.

Do you have expertise you can share? Sign up today and join a network of scientists, lawyers and other environmental experts committed to assisting residents in building a cleaner, healthier environment.

Become a HEAR expert

How are communities helped by this database?

Degree(s) or professional license(s):

Year of primary degree or license:

Affiliations:

For example, organizations with which you work on a professional or volunteer basis.

Level of engagement

- ☐ Come to a community meeting to translate or present scientific information
- ☐ Develop a long-term collaborative program
- ☐ Fact-check document (e.g., fact sheets and reports)
- ☐ Give expert testimony
- ☐ Provide legal advice via phone or meeting
- ☐ Provide legal representation
- ☐ Respond to brief questions or quick advice via phone or e-mail
- ☐ Review a plan / a risk assessment / an EIS / etc
- ☐ Sign letters / editorials

If students are available for project work, please detail course, experience level, and time available:

Non-English language proficiency:

- ☐ American Sign Language
- ☐ Arabic
- ☐ Cape Verdean Creole
- ☐ French

- ☐ Engineering
- ☐ Environmental sciences
- ☐ Epidemiology
- ☐ Geology/hydrogeology
- ☐ GIS
- ☐ Immunology
- ☐ Neurology
- ☐ Psychology
- ☐ Public Health (other)
- ☐ Remote sensing
- ☐ Sociology
- ☐ Toxicology

Medicine

- ☐ Dental/oral
- ☐ Endocrinology
- ☐ Family practice
- ☐ Geriatrics
- ☐ Internal medicine
- ☐ Mental health
- ☐ Neurology
- ☐ Nursing
- ☐ Nutrition
- ☐ Obstetrics/gynecology
- ☐ Oncology
- ☐ Pediatrics
- ☐ Psychiatry
- ☐ Pulmonology

Professional

- ☐ Architecture/landscape architecture
- ☐ Civil Engineer
- ☐ Economist
- ☐ Industrial Hygiene
- ☐ Licensed Site Professional
- ☐ Mechanical Engineer
- ☐ Organizer

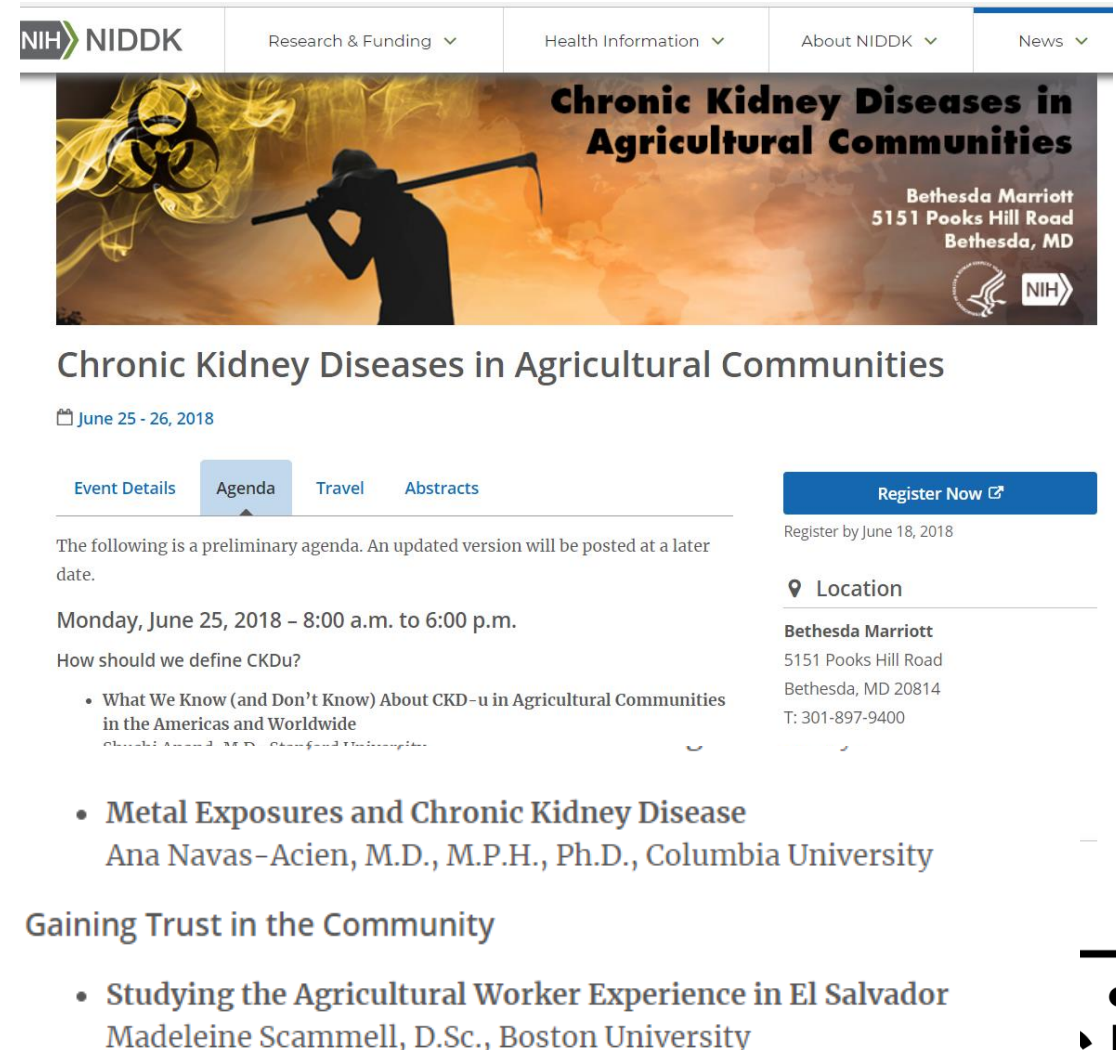
How to Document Stakeholder Engagement

- Letters of support = the minimum
- Real partnership or collaborative efforts in
 - Identifying the problem
 - Selecting, developing a solution
 - Planning implementation

Examples From My Own Work...

Longitudinal study of workers in El Salvador and Nicaragua:

- Scientific community
- Industry association of sugar producers
- Individual industries
- Unions
- Workers (and families)
- Study participants
- Study teams (nurses, doctors, scientists, students)
- Providers (clinics, hospitals)
- National committees, labs, etc.



The screenshot shows the NIDDK website for an event titled "Chronic Kidney Diseases in Agricultural Communities". The header includes the NIDDK logo and navigation links for Research & Funding, Health Information, About NIDDK, and News. The main banner features a silhouette of a person holding a hoe against a background of smoke and a biohazard symbol, with the event title and location (Bethesda Marriott, 5151 Pooks Hill Road, Bethesda, MD) displayed. Below the banner, the event dates (June 25 - 26, 2018) and a "Register Now" button are visible. The "Agenda" tab is selected, showing a preliminary agenda for Monday, June 25, 2018, from 8:00 a.m. to 6:00 p.m. The agenda includes topics such as "What We Know (and Don't Know) About CKD-u in Agricultural Communities in the Americas and Worldwide" and "Metal Exposures and Chronic Kidney Disease". The location is listed as Bethesda Marriott, 5151 Pooks Hill Road, Bethesda, MD 20814, with a phone number of 301-897-9400. The footer mentions "Gaining Trust in the Community" and lists speakers like Madeleine Scammell from Boston University.

NIH NIDDK Research & Funding Health Information About NIDDK News

Chronic Kidney Diseases in Agricultural Communities

Bethesda Marriott
5151 Pooks Hill Road
Bethesda, MD

Chronic Kidney Diseases in Agricultural Communities

June 25 - 26, 2018

Event Details Agenda Travel Abstracts

The following is a preliminary agenda. An updated version will be posted at a later date.

Monday, June 25, 2018 – 8:00 a.m. to 6:00 p.m.

How should we define CKDu?

- What We Know (and Don't Know) About CKD-u in Agricultural Communities in the Americas and Worldwide
- Metal Exposures and Chronic Kidney Disease
Ana Navas-Acien, M.D., M.P.H., Ph.D., Columbia University

Gaining Trust in the Community

- Studying the Agricultural Worker Experience in El Salvador
Madeleine Scammell, D.Sc., Boston University

Register Now

Register by June 18, 2018


Location

Bethesda Marriott
5151 Pooks Hill Road
Bethesda, MD 20814
T: 301-897-9400

Recommendations for Successful Engagement

- Engage with stakeholders early in the process
 - Build in time to identify and reach out to stakeholders
- Promote feedback processes as a way to ensure transparency, accountability, credibility
- Detail expectations (e.g. timeline, tasks, roles) of stakeholders
- Manage stakeholder expectations
- Provide regular updates/preliminary results

Key Take Away Points

- 
- Successful implementation depends on fit of implementation strategies and intervention with stakeholder preferences/priorities
 - Effective engagement of stakeholders can results in successful implementation
 - Stakeholders are people too, be intentional about the nature of your relationship

Your Experiences?

- Challenges engaging stakeholders?
- Times when they needed to be involved, but weren't?
- Where have your experiences been relative to the spectrum of engagement?

**Community
Driven**

Partnership

**Professionally
Driven**

Bottom-Up

Shared Ownership

Top-Down

Thank You!

Contact CIIS

Website: <http://sites.bu.edu/ciis/>

Email: ciisinfo@bu.edu