Your intervention is ready … now what?

Dr. Ana Baumann & Dr. Rebecca Lengnick-Hall
Goals for our presentation
Opening remarks and acknowledgement of current events
Implementation science is an inherently community-based and action-oriented field.

We must reflect, respect, and serve the communities within which evidence-based interventions are designed and delivered.

We believe that it is our job to not just account for, but to actually intervene and correct structural inequity and injustice through implementation research and practice.

Today we explicitly selected some examples from our Black peer scientists to highlight in our slides. This is not enough. We recognize that we need to do more. We need to listen more. The problems are deeply rooted and complex.

We hope that, as a field, we are able to have these difficult conversations and act faster to address issues of racism and discrimination.

Ana Baumann & Rebecca Lengnick-Hall 6-4-20
Why Implementation Science?


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THE CHILDREN OF TODAY ARE NOT NECESSARILY RECEIVING THE BEST QUALITY OF CARE
Implementation science

Implementation science = study of the methods and procedures aimed to support the uptake of evidence-based interventions, protocols, guidelines, in usual care

What is an evidence-based intervention or program?

Evidence-Based Intervention

- Research
- Clinical experience
- Local context
- Stakeholders


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WHAT/ THE THING
Intervention Practice Innovation

HOW DO WE DO THE THING?
Implementation strategies

PATIENT OUTCOMES (does the thing work?)
Clinical/health status
Symptoms
Function
Satisfaction

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IMPLEMENTATION OUTCOMES
(how much/how well do you do the thing?)
- Feasibility
- Fidelity
- Penetration
- Acceptability
- Sustainability
- Uptake
- Costs

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SERVICE OUTCOMES (how does the thing fit in the context of service?)
- Efficiency
- Safety
- Effectiveness
- Equity
- Patient-centeredness
- Timeliness

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WHAT/THE THING

Intervention
Practice
Innovation

HOW DO WE DO THE THING?

Implementation strategies

IMPLEMENTATION OUTCOMES

(how much/how well)

SERVICE OUTCOMES

(how does the thing work?)

PATIENT OUTCOMES

(does the thing work?)

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WHAT/THE THING

Intervention
Practice
Innovation

IMPLEMENTATION SCIENCE

Costs
Timeliness


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Examples of implementation studies: Example 1

RICH Life: Reducing Inequities in Care of Hypertension: Lifestyle Improvement for Everyone

**IT:** blood pressure care

**Multilevel barriers to hypertension care**

**HOW TO DO IT:**

- **Standard of Care Plus:** standardized BP training; race/ethnicity-specific audit and feedback of BP control rates; quarterly webinars in management practices, quality improvement and disparities reduction

- **Collaborative Care/Stepped Care:** SCP + collaborative care model with stepped-care components (community health worker referrals and virtual specialists-panel consults)

Examples of implementation studies: Example 2

HIV testing in African American churches

**IT:** HIV testing

**Barriers to “it”:**
- unaware of having HIV
- low perceived risk,
- mistrust of the medical system,
- HIV stigma

**HOW TO DO IT:**
- Engagement of church leaders
- Having a person or committee designated to champion programs that address health concerns


So what do implementation science studies do in a nutshell?

- Study the best ways to implement the “IT” (*Intervention, Practice, Innovation*)
- Focusing on the “how” (*implementation strategies*)
- Examining the “how well” (*implementation outcomes*)
- So we can best achieve the client outcomes in usual care
BUT that has some assumptions…

- Study the best ways to implement the “IT” (Intervention, Practice, Innovation)
- Focusing on the “how” (implementation strategies)
- Examining the “how well” (implementation outcomes)
- So we can best achieve the client outcomes in usual care
Four tricky (dangerous?) assumptions about implementation science

Assumption 1
One size fits all.

Assumption 2
Context? No biggie!

Assumption 3
Adaptation and fidelity are at odds with each other.

Assumption 4
Yay! It worked!

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Assumption 1

One size fits all.
Assumption 1

One size fits all.

Heck no!
Implementation Science through an Equity Lens: 3 Issues
Implementation Science through an Equity Lens: 3 Issues

- Vulnerable populations are underrepresented in clinical trials
- Implementation studies often overlook the unique factors that perpetuate inequities
- Insufficient financial and human resources when scaling-up interventions developed in high-income countries to low-income countries
Challenging Assumption 1

- Who is designing evidence-based interventions ("the thing")?
- How was the evidence for "the thing" built?
  - Where was it tested?
  - With whom?
- Effective and efficacious...for whom?

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Whose voices are we missing?

- Who is designing evidence-based interventions (“the thing”)?
- How was the evidence for “the thing” built?
  - Where was it tested?
  - With whom?
- Effective and efficacious…for whom?
What can we do about it as implementation researchers?

One solution: Focus on reach from the very beginning.
Other examples of health equity + implementation science

An Extension of RE-AIM to Enhance Sustainability: Addressing Dynamic Context and Promoting Health Equity Over Time
Rachel C. Shelton, David A. Chambers, and Russell E. Glasgow

Data and Policy Solutions to Address Racial and Ethnic Disparities in the COVID-19 Pandemic
Ushma R. Desai, MD, MPH1,2; Alheendar Venkataramani, MD, PhD1,2

The health equity implementation framework: proposal and preliminary study of hepatitis C virus treatment
Eva N. Woodward, Monica M. Matthew, Uchenna S. Uchendu, Shari Rogal, and John E. Kirchner
Assumption 2

Context? No biggie!
Context REALLY matters.
Assumption 2

Context? No biggie!
Assumption 2
Context? No biggie!

Organizations are really unique.
Assumption 2
Context? No biggie!
Organizations are really unique.
Leadership
Relationships in the broader network
Infrastructure
Readiness
Practice-organization fit
Organizational climate
Organization culture
Treatment philosophy
Service systems are really unique.
Assumption 2
Context? No biggie!

Contract structures

Who is in power
(and what do they value)

Political environment

Local and federal policy

Service systems are really unique.

History with the community

Funding priorities

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- 17 community-based organizations in 8 diverse child welfare systems
- How do organizations and systems interacted around contracting arrangements?
- Contracting arrangements affect implementation and sustainment!
Other examples of org/system context + implementation science
Assumption 3

Adaptation and fidelity are at odds with each other.
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Adaptation and fidelity are at odds with each other.

Not true!
Assumption 3

Adaptation and fidelity are at odds with each other.
Adaptation is not only an expected response, but it facilitates adoption and prevents drift.
Assumption 3

Adaptation and fidelity are at odds with each other.

- To the intervention, organization, and system
- Not separate from the implementation process
- Should be planned and considered early
- Adaptation
  - As an outcome
  - As a strategy

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Dynamic Adaptation Process (DAP)

- Adaptation as a strategy
- Make sure that adaptations (to intervention, organization, and system) are done in a planned and considered way
When do you adapt?

How do you track adaptations?
Assumption 4

Yay! It worked!
Assumption 4

Yay! It worked!

Let’s pause and think about that...
Assumption 4

Yay! It worked!

• For the people who receive the intervention?
• For the people who deliver the intervention?
• For organizations?
• For the system?
• For the people who receive the intervention?

• For the people who deliver the intervention?

• For organizations?

• For the system?

Whose voices are we missing?

Assumption 4

Yay! It worked!
• For the people who receive the intervention?
• For the people who deliver the intervention?
• For organizations?
• For the system?
Cost-effectiveness implementation research

Is it working for the system?
Human and user-centered design implementation research

Is it working for those who are receiving the intervention?
Four tricky (dangerous?) assumptions about implementation science

Assumption 1: One size fits all.

Assumption 2: Context? No biggie!

Assumption 3: Adaptation and fidelity are at odds with each other.

Assumption 4: Yay! It worked!
Additional References


Additional References

Check this out if you want to learn more about topics like…

- Organizational context
- Systems thinking in implementation research
- Participatory approaches
- Adaptation
- D&I in community or social service settings
- D&I research among vulnerable populations

Twitter: #impsci
Thank you and Questions

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Questions for the audience

• How could you use implementation science in your own work?