

NIH Dissemination and Implementation Research ... at the Crossroads...

David Chambers, DPhil
Associate Director, Dissemination and
Implementation Research, NIMH
5th NIH Conference on the Science of Dissemination and
Implementation, Bethesda, MD
March 19 , 2012



Annual D and I Meetings

“State of the Science” Venue

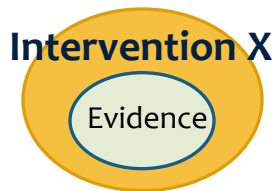
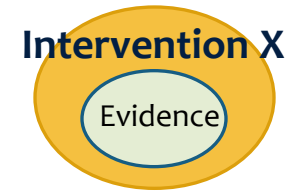
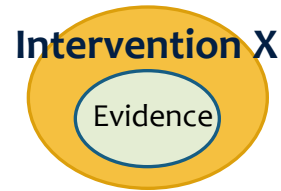
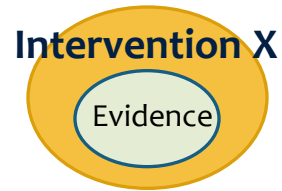
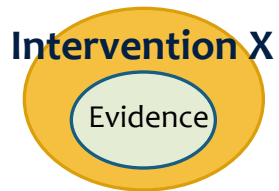
- * First meeting: September 2007: “Showcase”, ~350 participants
- * Second meeting: “Building Capacity”, January 2009, 500 registrants
- * Third meeting: “Methods and measures,” March 2010, 900 registrants
- * Fourth meeting: “Policy and Practice,” March 2011, 1200 registrants
- * Fifth meeting: “D and I at the crossroads,” March 2012, 1200 registrants

Challenging Assumptions

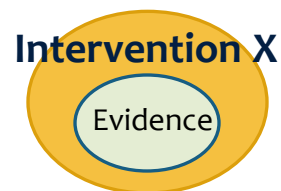
The background is a solid blue color. At the bottom, there is a white wavy line that separates the blue area from a white area below it. The wavy line has several peaks and valleys, creating a sense of movement or a horizon line.

Valuing Consistency

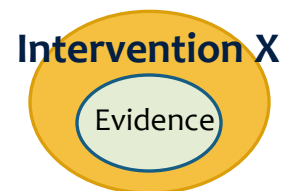
ITV Development → Efficacy → Effectiveness → Implementation



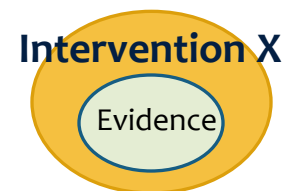
Site 1



Site 2



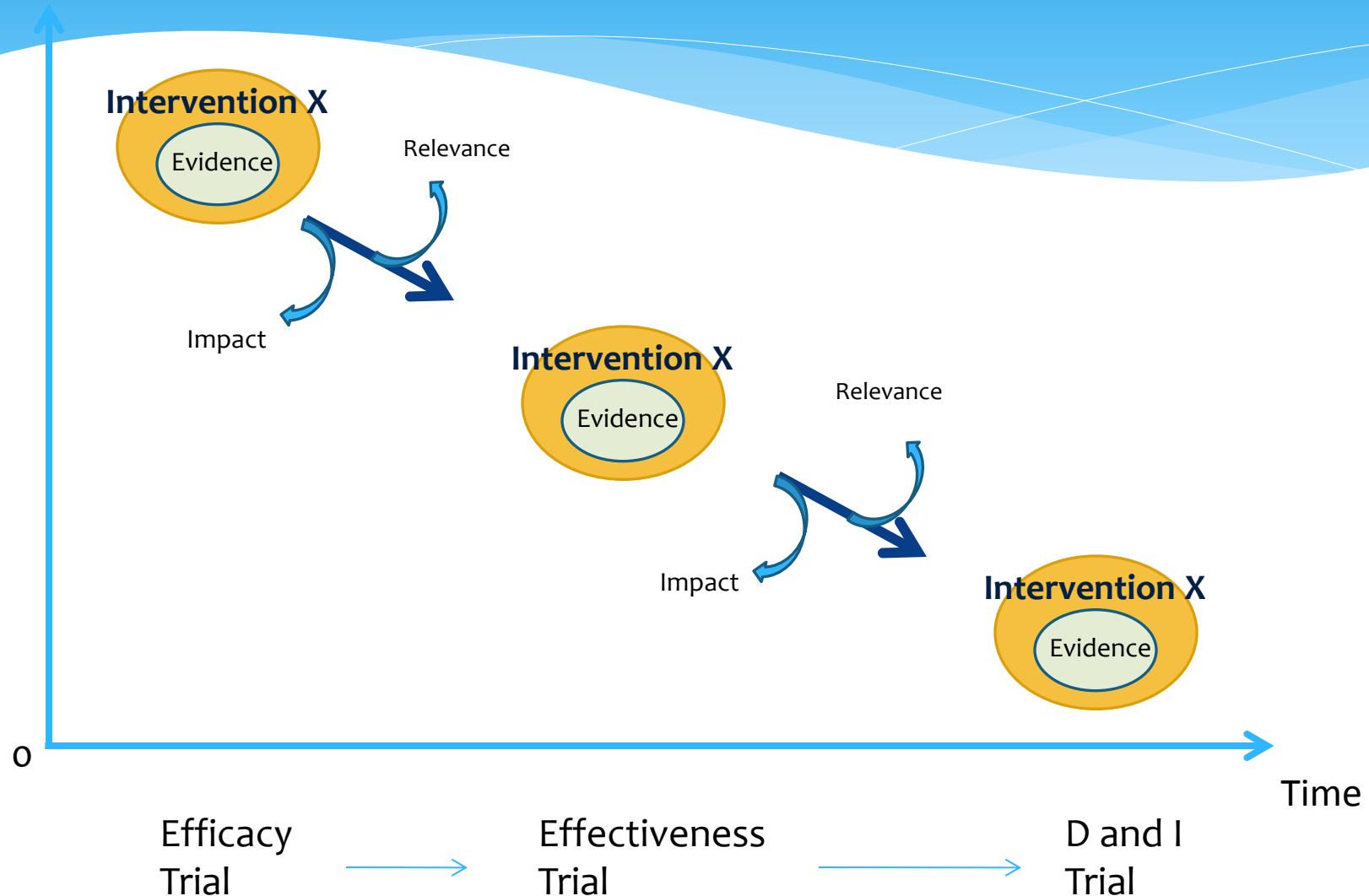
Site 3



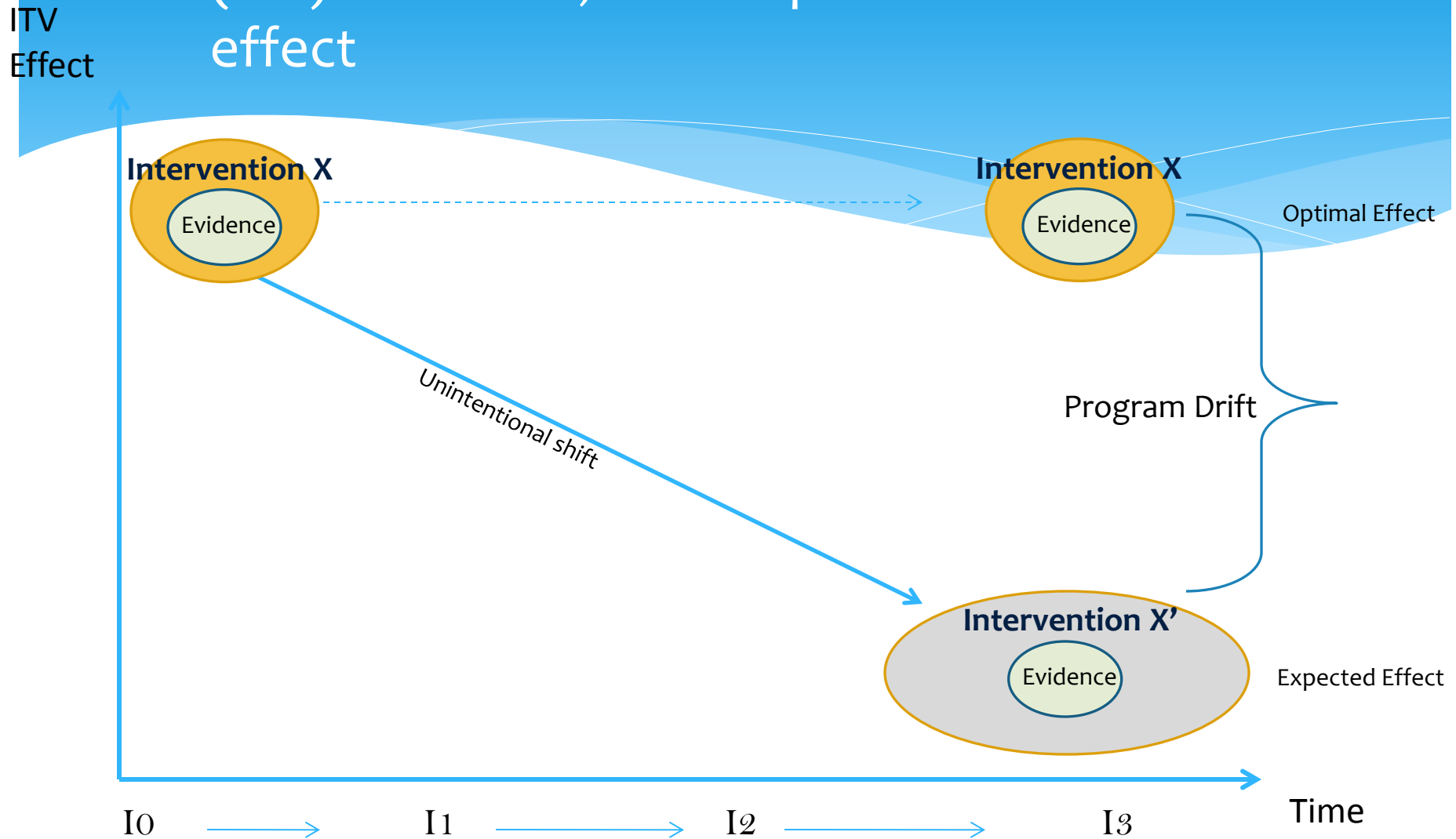
Site 4

“Voltage Drop” of an intervention as it moves through stages of development

Expected Effect

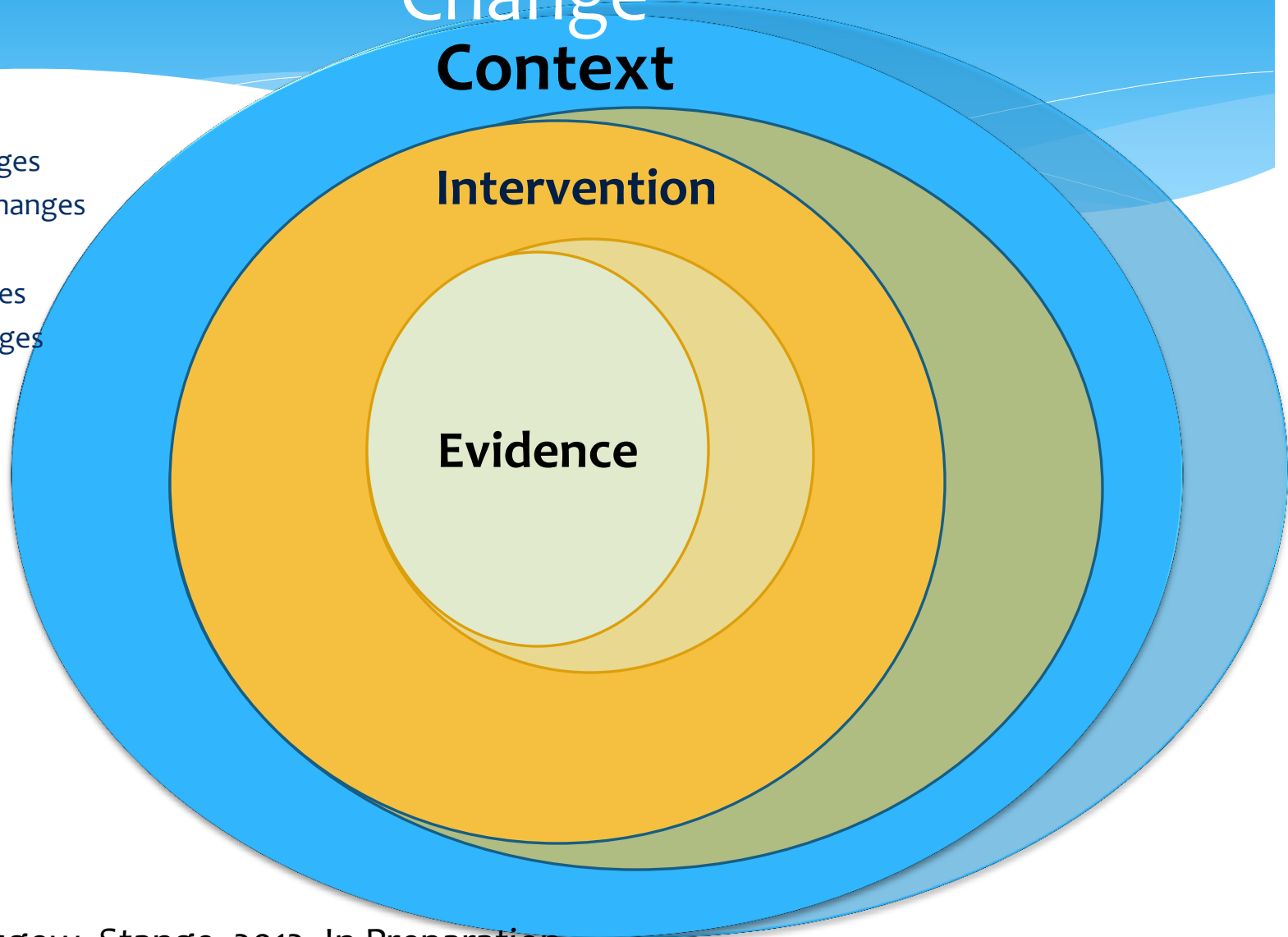


“Program Drift” of a fielded intervention (ITV) over time, with expected decrease of effect



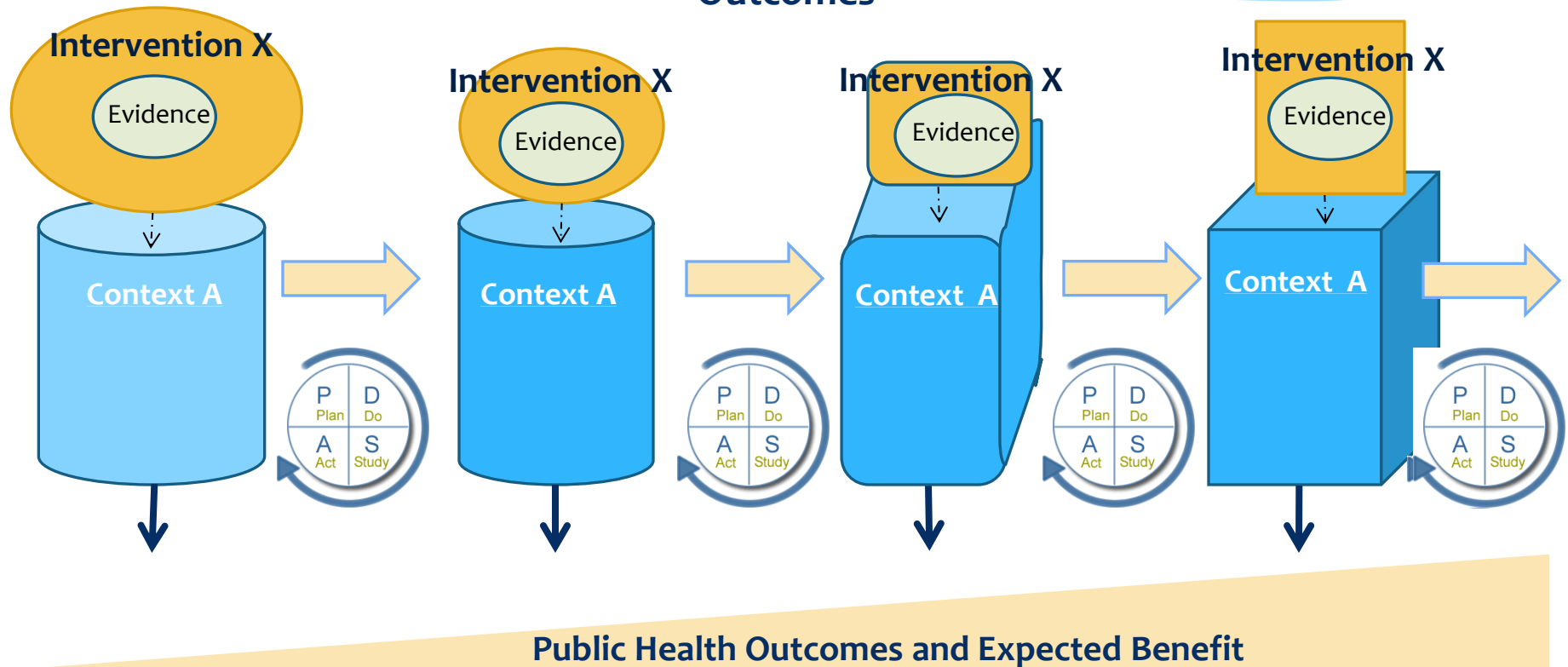
Emphasizing Multi-level, Multi-Domain Change **Context**

- Evidentiary Changes
- Environmental Changes
- Practice Changes
- Personnel Changes
- Knowledge Changes
- System Changes
- Policy Changes



Sustainability in a Dynamic Context

Intervention Adapted Over Time To Improve and Sustain
Outcomes



Internal and External Context

- Environmental Changes
- Practice Changes
- Personnel Changes
- Knowledge Changes
- System Changes
- Policy Changes

Funding Opportunities

The Current Trans-NIH PARs

- * PAR-10-038; 10-039;10-040
- * NIMH, NCI, NIDA, NIAAA, NIAID, NHLBI, NINR, NIDDK, NINDS, NIDCD, NIDCR, NCCAM, FIC, OBSSR
- * 2010 CSR standing review committee
- * Every round Submission (typically 50-60 apps/round)

The DIRH Standing Review Committee

- * “The (DIRH) Study Section reviews applications intending to bridge gaps between public health, clinical research, and everyday practice. The focus of the studies reviewed is on the transmission and implementation of knowledge from scientific discovery to transform healthcare delivery, improve health outcomes, and manage acute and chronic illness.
- * **SRO: Jacinta Bronte-Tinkew, Ph.D.**
- * http://www.csr.nih.gov/Roster_proto/sectionI_list_detail.asp?NEWSRG=DIRH&SRG=DIRH&SRGDISPLAY=DIRH
(ROSTER)
- * Any reviewers in the audience?

Key D&I Research opportunities

- * Strategies to improve sustainability
- * Studies of mature implementation sites to look at sustainability/evolution
- * Implementation in the context of a learning HC organization
- * Implementation as an ongoing process (is it ever complete?)
- * When is de-implementation warranted? How can ineffective practices be stopped?

Additional FOAs

- * NHLBI: PAR-12-063: Research Dissemination and Implementation Grants (R18)
 - * NIMH: RFAs-MH-13-060, 061: Harnessing Advanced Health Technologies to Drive Mental Health Improvement
 - * AHRQ/PCORI: RFA-HS-12-006: Patient Centered Outcomes Research-Dissemination by Health Professionals Associations (R18)
 - * NIH(Common Fund): RFAs-RM-12-002: Health Care Systems Research Collaboratory-Pragmatic Clinical Trials Demonstration Projects (UH2/UH3)
 - * OBSSR-led: PA-12-024: Behavioral Interventions to Address Multiple Chronic Health Conditions in Primary Care (R01)
-
- * NIDDK: RFA-DK-10-009: NIDDK Centers for Diabetes Translation Research (P30) (expired)

Other D&I Opportunities

- * PCORI (www.pcori.org/funding-opportunities)
- * NIH NCATSL: RFI: Enhancing the CTSA Program
(<http://grants1.nih.gov/grants/guide/notice-files/NOT-TR-12-003.html>)
- * VA HSR&D (<http://www.hsrd.research.va.gov/funding/>)
- * AHRQ (<http://www.ahrq.gov/fund/>)
- * Foundation Initiatives (e.g. WT Grant, RWJ)
- * International Efforts (e.g. FIC, NIAID, CIHR, WHO, PEPFAR, USAID)
- * CMS: Center for Medicare & Medicaid Innovation Program (CMMI)
- * NIMHD Summit on Health Disparities Conference: Integrating Science, Practice, and Policy, Oct 31-Nov 3, 2012

Thanks!

dchamber@mail.nih.gov
301-443-3747

And now over to Russ...

Crossroads: Looking Back, Projecting Ahead



Russ Glasgow, Deputy Director, Implementation Science,
Division of Cancer Control and Population Sciences
5th Annual NIH Annual Conference on the Science of
Dissemination and Implementation Research

March 19, 2012

Top 10 Key D & I Research Accomplishments

10. NIH Annual D & I Research Conference, permanent DIHR study section, and emerging training options
9. eHealth, mHealth applications: enhancing reach to those in need
8. Diabetes Prevention Program—YMCA community translation
7. International models—KT and importance of context and policy
6. WHO, CONSORT (pragmatic trials), and IOM (childhood obesity) adoption

Top 10 Key D & I Accomplishments (cont.)

5. **Chronic Care Model and Chronic Disease Self-Management programs**
4. **CBPR demonstrations and acceptance**
3. **HIV AIDS interventions—especially in low/moderate income countries**
2. **VA QUERI and rapid learning system changes**
1. **Lessons from the tobacco wars—natural experiments and policy, brief interventions**

Proliferation of D&I Models— 61 and Counting?

Key Common Points:

- **Context is critical**
- **Begin with stakeholders—take their perspective**
- **Design for dissemination—from beginning**
- **Need balance between fidelity to EB program and adaptation to local setting**

Key Common Points (cont.)

- There is more than evidence needed for successful adoption, implementation, and sustainability
- Implementation science is a multi-level, multi-component, and multi-stakeholder affair
- D & I science is complex—and about “fit” and interaction effects
- Select the DESIGN and the MODEL that best fits your question—less important WHICH model than that you use it well

The Road Ahead



Challenges on the Road Ahead

- **Rapid and practical results**
- **Culture change: impacting basic science industrial complex, review system**
- **Making “best bets” on emerging approaches and technologies—e.g., big data; modeling; mHealth**
- **Demonstrating value—e.g., cost; cost-effectiveness; ROI**
- **Reducing impact of health inequities, including low literacy/numeracy**

Implementation Science Opportunities

- **Pragmatic Trials***
- **Simulation Modeling**
- **Economic Analyses**
- **Scale-up and Sustainability**
- **Global health**
- **Public Health Genomics**
- **CTSAs**
- **Comparative Effectiveness Research- Translation(CER-T) and PCORI**
- **Harmonization of Measures**

*Thorpe et al. A pragmatic-explanatory continuum indicator summary (PRECIS): a tool to help trial designers. CMAJ 2009;180(10):E47-#57.

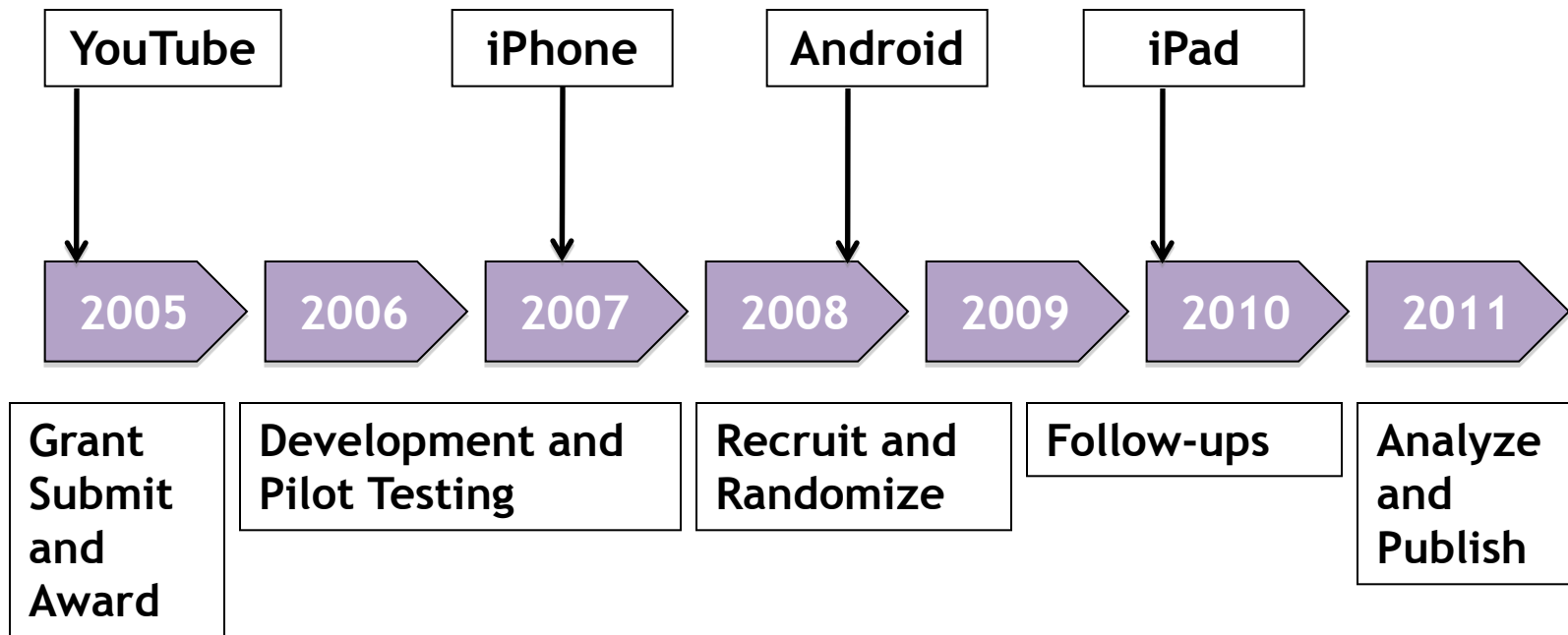
Types of D & I Evidence Needed: 2R's and "RCCT"

- **Relevant**
- **Rigorous and**
- **Rapid***
- **Cost**
- **Convergent***
- **Transparent**

Glasgow R, *Annals of Behavioral Medicine*, 2008, 35: 19-25.

Glasgow R, Chambers D. *Clinical and Translational Science*, 2012 Feb. 5: 48-55

<http://cancercontrol.cancer.gov/IS/>



Convergent Evidence

- Much to learn from well-conducted *observational studies*
- Great potential for *simulation modeling*—especially regarding interactions and unintended consequences^{1,2}
- *Evaluability*³—aka initial “sniff test”
- *Qualitative* and mixed methods⁴
- Practice-based evidence on *efficiency and feasibility*
- Combine with *experimental* data
- Emphasis on *replication and consistency*

¹ Stern M, Williams K, Eddy D, Kahn R. Diabetes Care. 2008 Aug;31(8):1670-1.

² Mabry P. Am J Prev Med. 2011 May; 40 (5 Suppl 2):S159-61

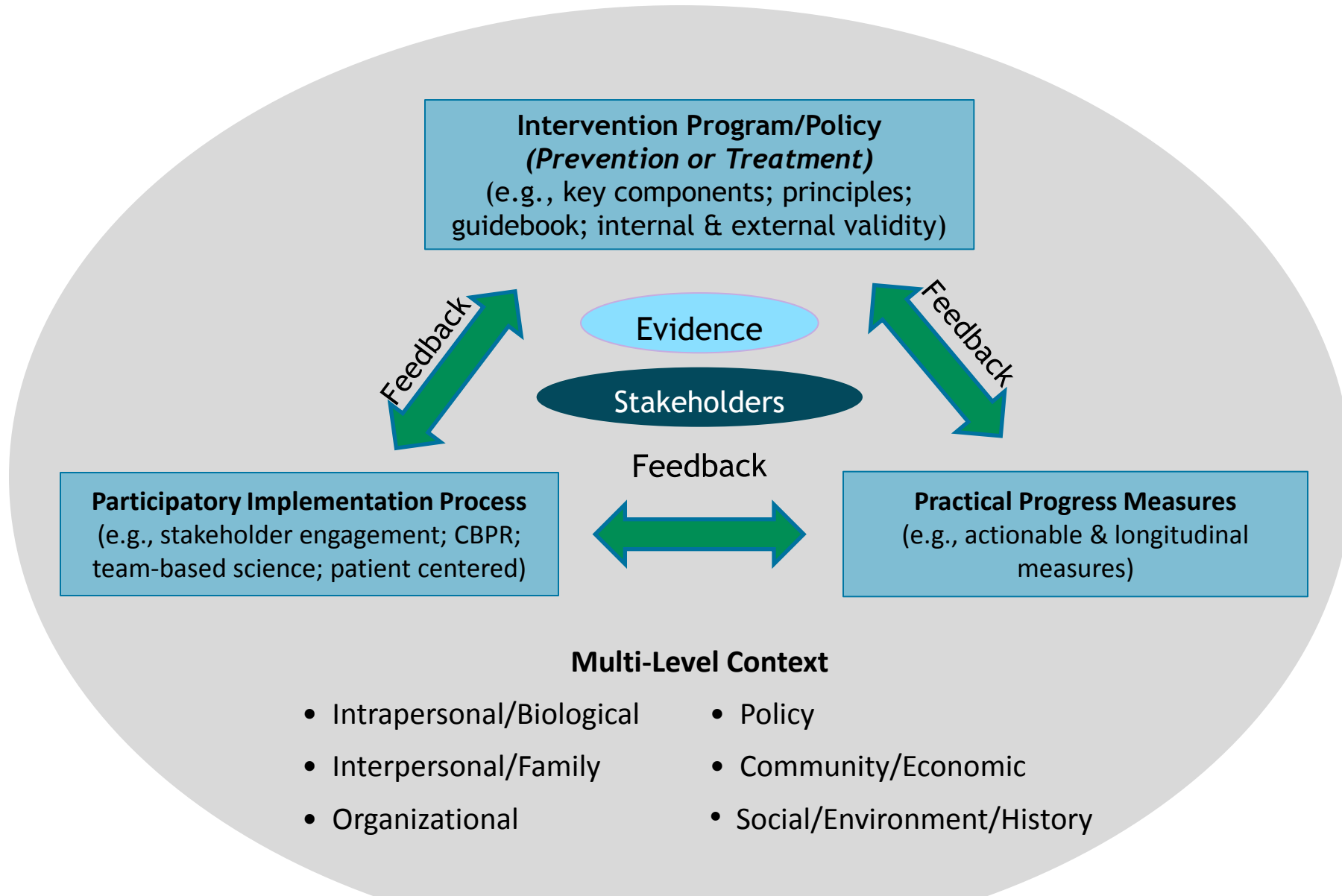
³ Leviton L. Ann Rev Public Health, 2010; 3:213-233.

⁴ Creswell J, Klassen A, Plano-Clark V, Smith, LC. 2011, NIH-OBSSR. Mixed Methods: http://obssr.od.nih.gov/scientific_areas/methodology/mixed_methods_research/pdf/Best_Practices_for_Mixed_Methods_Research.pdf

A photograph of a paved road with a yellow dashed center line, winding through a dry, hilly landscape. The hills are covered in yellowish-brown grass. The sky is blue with scattered white clouds. The road curves to the right in the distance.

Resources for the Road Ahead

Evidence Integration Triangle (EIT)



EIT Conclusions


- The evidence-based movement is a good start, but only gets us so far
- To make greater progress, two other elements also need attention:
 - Practical MEASURES to track progress, and
 - Implementation PROCESSES that use partnership principles.
 - These 3 legs of the “EIT” are each necessary but not sufficient by themselves.

D & I Science Resources

- New Compendium of D & I Research—
D & I Health Research. R. Brownson, G. Colditz, E. Proctor (Eds). Oxford University Press, 2012
- *Websites* and other virtual resources supporting D & I, including:
 - Cancer Control P.L.A.N.E.T. (ccplanet.cancer.gov),
 - Research to Reality (R2R) (researchtoreality.cancer.gov)
 - AHRQ
 - VA QUERI and CIPRS
 - KT Canada (ktclearinghouse.ca/ktcanada)
- *D & I Health* e-newsletter - contact wynne.norton@gmail.com

Dissemination and Implementation Measures and Methods Initiative

You are not logged in. [Login](#) [Register](#) [Why register?](#)

 **GEM** Grid-Enabled Measures Database Beta

[Constructs](#) | [Measures](#) | [Datasets](#) | [News](#) | [About](#) | [Workspaces](#)

Welcome to **GEM Workspaces!** Discussion, debate, collaboration and mentoring are the heart of behavioral research community. The following workspaces were created so you and other researchers can continue the conversation about specific aspects/areas of the behavioral research. To enter a workspace simply click on the name!

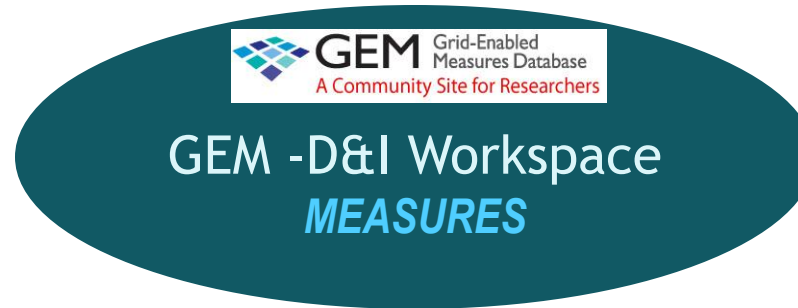
Name	Organization	Description	Date Active
Electronic Health Record (EHR) Campaign	NCI/SBM	Several institutes within the National Institutes of Health in collaboration with the Society of Behavioral Medicine are coordinating an effort to identify a core set of brief, practical measures to be recommended for use in electronic health records (EHRs).	2/2/2011
Center of Excellence in Cancer Communication (CECCR) II Workspace	NCI	Researchers from the Centers of Excellence in Cancer Communication (CECCR) II, part of NCI's Extraordinary Opportunity in Cancer Communication initiative, will collaborate to vet and share measures and facilitate analyses using harmonized data.	10/7/2011

[Questions or feedback?](#)

- <https://www.gem-beta.org/> (GEM Homepage)
- <http://cancercontrol.cancer.gov/IS/resources.html> (IS Team Website)



Join the Initiative! Where and How



<https://www.gem-beta.org/>



<https://researchtoreality.cancer.gov>



<http://cancercontrol.cancer.gov/IS/resources.html>

- ❖ Visit the D&I GEM Workspace <https://www.gem-beta.org/> and review, comment on, and rate existing D&I measures and constructs, and add additional ones.
- ❖ Review the D&I methods tables (<http://cancercontrol.cancer.gov/IS/resources.html>) and join the discussion on the Research to Reality (<http://researchtoreality.cancer.gov>) community of practice on these approaches to provide feedback and share your experiences.



Start today!

Watch a Prezi Presentation on how to engage and become a D&I Champion on the workspace

<https://www.gem-beta.org/public/wsoverview.aspx?wid=11&cat=8>

Questions? We're all ears....

