

## Implementation Science Resources

Funding Announcements, Websites, Trainings, Articles, and Books

*Below is a collection of select resources in implementation science. These resources have been curated from various sources, including course syllabi, training workshops, online compendiums, conferences, databases, and input from experts in the field. Contents included are solely for informational purposes and are not endorsements.*

### **Trans-NIH Funding Opportunities**

Dissemination and Implementation Research in Health

PAR-19-274 (R01): <https://grants.nih.gov/grants/guide/pa-files/PAR-19-274.html>

PAR-19-275 (R21): <https://grants.nih.gov/grants/guide/pa-files/PAR-19-275.html>

PAR-19-276 (R03): <https://grants.nih.gov/grants/guide/pa-files/PAR-19-276.html>

### **Websites**

Implementation Science Resource Hub, University of Washington: <https://impsciuw.org/>

Implementation Science Exchange, University of North Carolina at Chapel Hill:  
<https://impsci.tracs.unc.edu/>

### **NIH-Supported Trainings**

Implementation Research Institute (IRI), Washington University in St. Louis: <http://iristl.org/>

Institute for Implementation Science Scholars. Washington University in St. Louis.  
<https://is2.wustl.edu/apply/>

Training Institute in Dissemination and Implementation Research in Health (TIDIRH), NIH  
OBSSR: <https://obssr.od.nih.gov/training/training-supported-by-the-obssr/training-tidirh/>

Training Institute in Dissemination and Implementation Research in Cancer (TIDIRC), NIH  
NCI: <https://cancercontrol.cancer.gov/IS/training-education/tidirc/index.html>

### **Introduction to Implementation Science**

Bauer MS, Damschroder L, Hagedorn H, Smith J, Kilbourne AM. An introduction to implementation science for the non-specialist. BMC Psychol. 2015 Sep 16;3:32.

Koh S, Lee M, Brotzman LE, Shelton RC. An orientation for new researchers to key domains, processes, and resources in implementation science. Translational Behavioral Medicine 2018:  
<https://doi.org/10.1093/tbm/iby095>

Lane-Fall M, Curran G, Beidas, R. Scoping implementation science for the beginner: Locating yourself on the “subway line” of translational research. *BMC Medical Research Methodology*, 2019.

### **Theories, Frameworks, and Models**

Nilsen, P. (2015). Making sense of implementation theories, models, and frameworks. *Implementation Science*, 10(53). doi:[10.1186/s13012-015-0242-0](https://doi.org/10.1186/s13012-015-0242-0)

Tabak RG, Khoong EC, Chambers DA, Brownson RC. (2012). Bridging research and practice: models for dissemination and implementation research. *Am J Prev Med*, 43(3):337-50. doi: [10.1016/j.amepre.2012.05.024](https://doi.org/10.1016/j.amepre.2012.05.024).

Dissemination & Implementation Models in Health & Practice: <http://www.dissemination-implementation.org/>

Consolidated Framework for Implementation Research website: <http://www.cfirguide.org/>  
(Source article: Damschroder LJ, Aron DC, Keith RE, Kirsh SR, Alexander JA, Lowery JC: Fostering implementation of health services research findings into practice: a consolidated framework for advancing implementation science. *Implement Sci* 2009, 4:50.)

Reach Effectiveness Adoption Implementation Maintenance website: <https://www.re-aim.org/>  
(Source article: Glasgow RE, Harden SM, Gaglio B, Rabin B, Smith ML, Porter G, Ory MG, Estabrooks PA. RE-AIM planning and evaluation framework: adapting to new science and practice with a 20- year review. *Front Public Health*. 2019;7:64.)

Exploratory, Preparation, Implementation, Sustainment website: <https://episframework.com>

(Source article: Moullin, J., Dickson, K., Stadnick, N.A., Rabin, B. & Aarons, G.A. (2019). Systematic Review of the Exploration, Preparation, Implementation Sustainment Framework. *Implementation Science*.)

Presseau, J, McClearly, N, Lorencatto, F, Patey, AM, Grimshaw, JM, & Francis, JJ. (2019). Action, actor, context, target, time (AACTT): A framework for specifying behavior. *Implementation Science*, 14 (102).

### **Study Designs and Research Methods**

Brown CH, Curran G, Palinkas LA, Aarons GA, et al. (2017). [An Overview of Research and Evaluation Designs for Dissemination and Implementation](#). *Annual Review of Public Health* 38;1-22.

Curran GM, Bauer M, Mittman B, Pyne JM, Stetler C. Effectiveness-implementation hybrid designs: combining elements of clinical effectiveness and implementation research to enhance public health impact. *Med Care*. 2012 Mar;50(3):217-26.

Handley, Lyles, McCulloch, Cattamanchi 2018. Selecting and Improving Quasi-experimental designs in effectiveness and implementation research. *Annual Reviews of Public Health*. 39;5-25.

Hamilton AB, Finley EP. Qualitative methods in implementation research: An introduction. *Psychiatry research*. 2019 Oct 1;280:112516.

Hemming K, Haines, TP, Chilton, PF, Girling, AJ, & Lilford. (2015). The stepped wedge cluster randomized trial: rationale, design, analysis, and reporting. *BMJ*, 350.

Landes, S. J., McBain, S. A., & Curran, G. M. (2019). An introduction to effectiveness-implementation hybrid designs. *Psychiatry Research*, 280, 112513. doi: 10.1016/j.psychres.2019.112513.

Lewis CC, Klasnja P, Powell BJ, Lyon AR, Tuzzio L, Jones S, Walsh-Bailey C, Weiner B. From Classification to Causality: Advancing Understanding of Mechanisms of Change in Implementation Science. *Front Public Health*. 2018 May 7;6:136.

Palinkas LA, Mendon SJ, Hamilton AB. Innovations in Mixed Methods Evaluations. *Annu Rev Public Health*. 2019 Apr 1;40:423-442.

Qualitative Methods in Implementation Science: <https://cancercontrol.cancer.gov/IS/docs/NCI-DCCPS-ImplementationScience-WhitePaper.pdf>

Hemming K, Eldridge S, Forbes G, Weijer C, Taljaard M. [How to design efficient cluster randomised trials](#) *BMJ* 2017; 358 :j3064

### **Measures and Outcomes**

Lewis CC, Fischer S, Weiner BJ, Stanick C, Kim M, Martinez RG. Outcomes for implementation science: an enhanced systematic review of instruments using evidence-based rating criteria. *Implement Sci*. 2015;10:155.

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

Rabin BA, Lewis CC, Norton WE, Neta G, Chambers D, Tobin JN, Brownson RC, Glasgow RE. Measurement resources for dissemination and implementation research in health. *Implement Sci*. 2016 Mar 22;11:42.

### **Implementation Strategies**

Kirchner, J. E., Smith, J. L., Powell, B. J., Waltz, T. J., & Proctor, E. K. (2019). Getting a Clinical Innovation into Practice: An Introduction to Implementation Strategies. *Psychiatry Research*. doi: 10.1016/j.psychres.2019.06.042

Leeman J, Birken SA, Powell BJ, Rohweder C, Shea CM. Beyond "implementation strategies": classifying the full range of strategies used in implementation science and practice. *Implement Sci.* 2017 Nov 3;12(1):125.

Powell, B. J., Waltz, T. J., Chinman, M. J., Damschroder, L. J., Smith, J. L., Matthieu, M. M., et al. (2015). [A refined compilation of implementation strategies: results from the Expert Recommendations for Implementing Change \(ERIC\) project.](#) *Implementation Sci.* 10(1):21.

Powell BJ, Beidas RS, Lewis CC, Aarons GA, McMillen JC, Proctor EK, Mandell DS. Methods to improve the selection and tailoring of implementation strategies. *J Behav Health Serv Res.* 2017 Apr;44(2):177-194.

Powell BJ, Fernandez ME, Williams NJ, Aarons GA, Beidas RS, Lewis CC, McHugh SM, Weiner BJ. Enhancing the Impact of Implementation Strategies in Healthcare: A Research Agenda. *Front Public Health.* 2019 Jan 22;7:3.

### **Community Engaged Research and IS**

Blachman-Demner DR, Wiley TRA, Chambers DA. Fostering integrated approaches to dissemination and implementation and community engaged research. *Transl Behav Med.* 2017 Sep;7(3):543-546. doi: [10.1007/s13142-017-0527-8](https://doi.org/10.1007/s13142-017-0527-8).

### **De-implementation**

Niven DJ, Mrklas KJ, Holodinsky JK, et al. Towards understanding the de-adoption of low-value clinical practices: a scoping review. *BMC Med.* 2015;13:255.

Norton WE & Chambers DA (2020). Unpacking the complexities of de-implementing inappropriate health interventions. *Implementation Science.*

### **Sustainability**

Chambers, D.A., Glasgow, R. E., & Stange, K. C. (2013). The dynamic sustainability framework: Addressing the paradox of sustainment amid ongoing change. *Implementation Science*, 8, 117.

Shelton RC, Cooper BR, Stirman SW. The sustainability of evidence-based interventions and practices in public health and health care. *Annu Rev Public Health.* 2018 Jan 12.

### **Policy Implementation Science**

Purtle J, Nelson KL, Bruns EJ, Hoagwood KE. Dissemination Strategies to Accelerate the Policy Impact of Children's Mental Health Services Research. *Psychiatr Serv.* 2020 Nov 1;71(11):1170-1178. doi: [10.1176/appi.ps.201900527](https://doi.org/10.1176/appi.ps.201900527).

Allen, P., Pilar, M., Walsh-Bailey, C. et al. Quantitative measures of health policy implementation determinants and outcomes: a systematic review. *Implementation Sci* 15, 47 (2020). <https://doi.org/10.1186/s13012-020-01007-w>

## **Health Equity and Implementation Science**

Baumann, A.A., Cabassa, L.J. Reframing implementation science to address inequities in healthcare delivery. *BMC Health Serv Res* 20, 190 (2020). <https://doi.org/10.1186/s12913-020-4975-3>

Shelton, Rachel C., Chambers, David A., and Glasgow, Russell E. "An Extension of RE-AIM to Enhance Sustainability: Addressing Dynamic Context and Promoting Health Equity Over Time." *Frontiers in Public Health* 8 (2020): 134.

Woodward, Eva N., et al. "The health equity implementation framework: proposal and preliminary study of hepatitis C virus treatment." *Implementation Science* 14.1 (2019): 26.

## **Select Additional Articles**

Aarons GA, Sklar M, Mustanski B, Benbow N, Brown CH. "Scaling out" evidence-based interventions to new populations or new health care delivery systems. *Implement Sci.* 2017 Sep 6;12(1):111.

Campbell MK, Piaggio G, Elbourne DR, Altman DG; for the CONSORT Group. Consort 2010 statement: extension to cluster randomised trials. *BMJ.* 2012 Sep 4;345:e5661. PMID: 22951546

Chambers, DA & Norton, WE. (2016). The Adaptome: Advancing the science of intervention adaptation. *Am J Prev Med*, 51(4 Suppl 2), S124-131. doi: 10.1016/j.amepre.2016.05.011

Darnell, D., Dorsey, CN, Melvin, A., Chi, J., Lyon, AR, & Lewis, CC. (2017). A content analysis of dissemination and implementation science resource initiatives: What types of resources do they offer to advance the field? *Impl Sci*, 12, 137.

Pinnock, H., et al. (2017). Standards for Reporting Implementation Studies. *BMJ* **356**: i6795.  
Prasad V, Ioannidis JP. Evidence-based de-implementation for contradicted, unproven, and aspiring healthcare practices. *Implement Sci.* 2014;9:1.

Schulz KF, Altman DG, Moher D, for the CONSORT Group. CONSORT 2010 Statement: updated guidelines for reporting parallel group randomised trials. *BMJ* 2010;340:c332.

Vinson, CA, Clyne M, Cardoza N, & Emmons KM. (2019). Building capacity: A cross-sectional evaluation of the US Training Institute for Dissemination and Implementation Research in Health. *Implementation Science*, 14(1): 97. 10.1186/s13012-019-0947-6

Wilson PM, Sales A, Wensing M, Aarons GA, et al. (2017). Enhancing the reporting of implementation research. *Implementation Science*, 12.

Wiltsey-Stirman, S., Baumann, A. A., & Miller, C. J. (2019). The FRAME: an expanded framework for reporting adaptations and modifications to evidence-based interventions. *Implementation Science*, 14(1), 58. doi:10.1186/s13012-019-0898-y

## **Grant Writing and Funding**

Brownson RC, Colditz GA, Dobbins M, Emmons KM, Kerner JF, Padek M, Proctor EK, Stange KC. Concocting that magic elixir: successful grant application writing in dissemination and implementation research. *Clin Transl Sci.* 2015 Dec;8(6):710-6.

Proctor EK, Powell BJ, Baumann AA, Hamilton AM, Santens RL. Writing implementation research grant proposals: ten key ingredients. *Implement Sci.* 2012 Oct 12;7:96.

Implementation Science Exchange (Get Funded): <https://impsci.tracs.unc.edu/index.php/get-funded>

## **Books**

Brownson RC, Colditz GA, Proctor EK, eds. *Dissemination and Implementation Research in Health*. 2nd ed. New York, NY: Oxford University Press; 2017.

Chambers DA, Vinson CA, Norton WE, eds. *Advancing the Science of Implementation across the Cancer Continuum*. New York, NY: Oxford University Press; 2018.

Greenhalgh T. *How to Implement Evidence-based Healthcare*. Wiley Blackwell, 2019.

Nilsen P, Birken SA, eds. *Handbook on Implementation Science*. Edward Elgar publishing, May 2020.