UCLA
UCLA Previously Published Works

Title
Translating research into policy and action

Permalink
https://escholarship.org/uc/item/0wn480nh

Journal
Health Services Research, 57(Suppl 1)

ISSN
0017-9124

Authors
Kilbourne, Amy M
Garrido, Melissa M
Brown, Arleen F

Publication Date
2022-06-01

DOI
10.1111/1475-6773.13980

Peer reviewed

DEBATE-COMMENTARY

Translating research into policy and action

1 | INTRODUCTION

Financial and social returns on scientific investments have not been realized in the general population and especially among communities that have been economically and/or socially marginalized.[1] Science fails to make a real-world impact on health without adequate investment in implementation science and community-engaged research. Implementation science, or the study of strategies that promote uptake of research into the real world,[2] must be coupled with an active and ongoing partnership with communities affected by the studied issues, so that scientific results are meaningful and used by the broader population.[3]

Health care organizations, payers, policy makers, communities, and research funders need to embrace both implementation science and community-engaged research methods to identify, evaluate, and sustain the most impactful programs and policies that improve population health and reduce disparities rapidly and effectively. The passage of the Foundations for Evidence-Based Policymaking Act (Evidence Act; US PL 115-435)[4] provides an ideal opportunity to ensure programs and policies work for communities, by integrating implementation science and community-engaged research methods into evidence-building and evaluation initiatives.

2 | EVIDENCE-BASED POLICY MAKING: CLOSING THE GAP BETWEEN SCIENCE AND IMPACT

Implementation science and community-engaged research represent important scientific directions that are needed to promote the Federal Government's priorities around evidence-based policy. Mandated by the Evidence Act and emphasized in a recent Presidential Memorandum, evidence-based policy is the use of "the best available science and data" to guide policy, budget, and programmatic decisions.[5] Effective programs and policies need to be responsive to the lived experiences of the people, communities, and organizations[6] that are served, while also giving attention to multi-level factors at the service level that impact outcomes including quality, safety, equity, and efficiency.

Consistent with the recent Executive Order on Advancing Racial Equity and Support for Underserved Communities Through the Federal Government,[7] several agencies, notably the US Department of Veterans Affairs and the General Services Administration's Office of Evaluation Sciences, are leading efforts to curate, deploy, and sustain a process for embedding evidence-based policy making as part of their routine decision making and to foster a learning organization. In brief, learning organizations, sometimes referred to as learning health systems when applied to clinical care settings, continuously, rigorously, and systematically curate data at multiple levels to optimize and inform operations.[8]

To this end, rigorous evaluations to inform evidence-based health care policy in learning organizations can greatly benefit from both implementation science and community-engaged research methods. Both scientific fields strive for active participation and empowerment of policy and program end-users in all aspects of a study—from defining priorities to disseminating and applying study results. In this commentary, we highlight current examples of research that use implementation science and/or community-engaged research methods to inform evidence-based health care policy, and we suggest resources and strategies for evidence-based policy to reach its full potential.

3 | CUTTING-EDGE RESEARCH INFORMING EVIDENCE-BASED POLICY MAKING

This special issue features novel and cutting-edge research, focused on the intersection of evidence-based policy evaluation, implementation science, and community engagement, that can ultimately inform evidence-based practice, maximize policy impacts of research, and improve population outcomes. Our goal was to highlight emerging scientific work that utilizes these fields of research to bridge the gap between evidence generation and policy action, notably through greater community engagement and implementation science to inform policy and lead to meaningful change.

Reger et al.[9] and Bokhour et al.[10] in this issue present findings from a unique funding mechanism that establishes national partnered evaluation initiatives within the VA health care system. In these VA studies, investigators apply both implementation science and community engagement methods to work closely with clinical operations partners to deploy rigorous, peer-reviewed evaluations of the impacts of programs and policies on outcomes related to suicide prevention and person-centered care ("Whole Health") in veteran patient populations.

Purtle and Colleagues[11] in this issue apply emerging systems science, implementation, and policy analysis methods to inform uptake of programs and policies at the population level. Zivin et al.[12] in this issue present novel policy research focused on the health care workforce, especially when faced with potential provider burnout and labor shortages.

Studies by Alegria and Colleagues,[13] Chinchilla et al.,[14] and Albright et al.[15] in this issue present novel ways to engage community partners and at-risk populations in informing policies to enhance the full range of human services including employment and health care. Similarly, Pearson et al.[16] and Leykum et al.[17] in this issue actively involved interested communities and partners to inform policies that improve Veteran access to care and long-term care outcomes. Ngo and Colleagues[18] and Stadnick et al.[19] in this issue also present novel research directions that focus on community-informed evidence-based policy making and health equity research.

Finally, Braganza et al.,[20] as well as Daumit et al.[21] (all in this issue), present novel funding mechanisms from the VA Quality Enhancement Research Initiative (QUERI) and NIH Disparities Elimination through Coordinated Interventions to Prevent and Control Heart and Lung Disease Risk (DECIPHeR) programs that focus on using community input and the lived experiences of individuals to inform priorities for evidence generation and development of implementation methods to promote health equity and policy impact.

4 | IMPROVING TRANSLATIONAL SCIENCE THROUGH IMPLEMENTATION AND COMMUNITY ENGAGEMENT

Implementation and translation of research findings into real-world impact through evidence-based policy can be done more effectively if the needs of affected communities are considered. Hence, greater investments in both implementation science and community-engaged research can further support translation into sound policy and make scientific investments more impactful in the real world. Greater investments in these novel and impactful research areas may also mitigate disparities in funding, especially among Black and other underrepresented scientists.[22]

The National Institutes of Health (NIH), VA, and other federal funding agencies have increasingly recognized the need to promote the science of implementation and community engagement and have proposed enterprise-wide investments in translational science initiatives that more directly call out these scientific areas. Notably, the NIH Common Fund's proposed Community Partnerships to Advance Science for Society initiative is one example of a national effort to align community-driven priority goals with cross-disciplinary research teams to build research capacity and assess and implement disease-agnostic structural interventions (e.g., policies, population-based programs) with the goal of advancing health equity. VA (e.g., QUERI) is also rapidly expanding its capacity to conduct evidence-based policy evaluations using rigorous implementation science and community-partnered research methods. The Patient-centered Outcomes

Research Initiative also launched new funding opportunities focused on implementation and dissemination of evidence-based practices in close partnerships with health systems, clinicians, patients/consumers, and other interested parties.

5 | EVIDENCE-BASED POLICY MAKING AS TRANSLATIONAL SCIENCE: FUTURE DIRECTIONS

An evidence-based policy-focused translational research agenda requires openness to mixed-methods approaches, broader data collection efforts, rapid but rigorous methods, and expanded funding resources. First, there needs to be a comprehensive effort to frame research evaluation questions that involve curation of data at all levels and contexts of the program or policy wherever possible. The origins of evidence-based policy making as we know it in the United States today stem from the growth of the social science fields that were recruited to evaluate the rapid expansion of US federal social programs in the 1960s and 1970s.[23,24] Many of these evaluations relied on quantitative data that may or may not have captured the lived experiences of end-users in addition to quantitative outcomes. Mixed-methods approaches that combine quantitative with qualitative data are especially valued when the intervention's "evidence" may have been derived from more select populations that were not representative by those most affected by the problem.

Second, effective evidence-based policy making will require improved capacity to capture meaningful data on socio-economic and environmental impacts.[25,26] In many cases, policy studies may not elucidate the more nuanced everyday experiences of individuals[25] that impact health, such as changes in employment opportunities, safety, or social networks.[26] Organizations and systems may also act unpredictably and there needs to be more nuanced data on the impacts of programs and policies on organizational change, which in turn can influence provider and patient experience.[27,28] Improved data availability across different population, organizational, and end-user experiences can increase the value of research efforts among communities and are invaluable for understanding why a policy did or did not have its intended effect. Data access would also need to be balanced with provisions for privacy protection, especially for marginalized populations.[23]

Third, evidence-based policy often requires rapid generation and translation of evidence. Many communities and organizations cannot wait for the evidence to address a policy need. In these situations, hybrid effectiveness implementation designs can shorten the translation timeline without sacrificing rigor or generalizability.[29] Several US and international initiatives, notably in HIV, have leveraged different scientific methods including implementation, community engagement, and systems science to inform actionable decisions on programs and policies when the evidence is incomplete.[6,30]

Fourth, an evidence-based policy-focused translational research agenda would benefit from additional sources of funding. Philanthropists (foundations) have flexibility in topic selection and funding decisions, which makes them well-suited to leverage cross-disciplinary

expertise to conduct broad population-based policy evaluations. These evaluations are especially needed given that health outcomes are influenced by social and economic trends that are rarely captured from clinical data alone.[31] For example, the Arnold Foundation has adopted the use of randomized designs to inform programs and policies related to health, criminal justice, and other social issues.[32]

Ultimately, for evidence-based policy making to realize its potential, we need methods such as implementation science and community engagement that consider the complex and nuanced role of individuals, populations, and systems, as well as data infrastructure and resources to support these methods. Incorporating these approaches can help researchers better understand the impact of programs or policies—not only whether they work, but how they work and for whom, and what will it take to sustain them in the real world. Implementation science and community engagement research in turn can also help ensure programs and policies work at the local level, benefitting those who need them the most.

Amy M. Kilbourne PhD, MPH[1,2]
Melissa M. Garrido PhD[3,4]
Arleen F. Brown MD, PhD[5,6]

[1]Quality Enhancement Research Initiative, U.S. Department of Veterans Affairs, Washington, District of Columbia, USA
[2]Department of Learning Health Sciences, University of Michigan, Ann Arbor, Michigan, USA
[3]Partnered Evidence-based Policy Resource Center, VA Boston Healthcare System, Boston, Massachusetts, USA
[4]Department of Health Law, Policy and Management, Boston University School of Public Health, Boston, Massachusetts, USA
[5]Division of General Internal Medicine and Health Services Research, UCLA School of Medicine, Los Angeles, California, USA
[6]Division of General Internal Medicine and Health Services Research, Olive View-UCLA Medical Center, Los Angeles, California, USA

Correspondence
Amy M. Kilbourne, Quality Enhancement Research Initiative, U.S. Department of Veterans Affairs, Washington, DC, USA.
Email: amykilbo@med.umich.edu

ORCID

Amy M. Kilbourne https://orcid.org/0000-0001-5815-6401
Melissa M. Garrido https://orcid.org/0000-0002-8986-3536
Arleen F. Brown https://orcid.org/0000-0001-9948-8955

REFERENCES

1. Balas EA, Boren SA. Managing clinical knowledge for health care improvement. *Yearb Med Inform*. 2000;1:65-70.
2. Proctor EK, Geng E. A new lane for science. *Science*. 2021; 374(6568):659.
3. Michener L, Aguilar-Gaxiola S, Alberti PM, et al. Engaging with communities—lessons (re)learned from COVID-19. *Prev Chronic Dis*. 2020;17:E65.
4. U.S. Congress. H.R.4174—115th Congress (2017–2018): Foundations for Evidence-Based Policymaking Act of 2018. January 14, 2019. Accessed January 27, 2022. https://www.congress.gov/bill/115th-congress/house-bill/4174
5. The White House. Memorandum on Restoring Trust in Government Through Scientific Integrity and Evidence-Based Policymaking. Accessed January 27, 2022. https://www.whitehouse.gov/briefing-room/presidential-actions/2021/01/27/memorandum-on-restoring-trust-in-government-through-scientific-integrity-and-evidence-based-policymaking/.
6. Damschroder LJ, Knighton AJ, Griese E, et al. Recommendations for strengthening the role of embedded researchers to accelerate implementation in health systems: findings from a state-of-the-art (SOTA) conference workgroup. *Healthcare*. 2021;8(suppl 1):100455. doi:10.1016/j.hjdsi.2020.100455
7. The White House, Executive Order 13985 Advancing Racial Equity and Support for Underserved Communities Through the Federal Government. January 20, 2021. Accessed February 15, 2022. https://www.govinfo.gov/content/pkg/FR-2021-01-25/pdf/2021-01753.pdf
8. Rubin JC, Silverstein JC, Friedman CP, et al. Transforming the future of health together: The Learning Health Systems Consensus Action Plan. *Learn Health Syst*. 2018;2:e10055.
9. Reger MA, Lauver MG, Manchester C, et al. Development of the veterans crisis line caring letters suicide prevention intervention. *Health Serv Res*. 2022;57:42–52.
10. Bokhour BG, Hyde J, Kligler B, et al. From patient outcomes to system change: evaluating the impact of VHA's implementation of the Whole Health System of Care. *Health Serv Res*. 2022;57:53–65.
11. Combs T, Nelson KL, Luke D, et al. Simulating the role of knowledge brokers in policy making in state agencies: an agent-based model. *Health Serv Res*. 2022;57:122–136.
12. Zivin K, Chang M-UM, Van T, et al. Relationships between work-environment characteristics and mental health provider burnout in the Veterans Health Administration. *Health Serv Res*. 2022;57:83–94.
13. Zhen-Duan J, Chary A, NeMoyer A, et al. Key stakeholder perspectives on the use of research about supported employment for racially and ethnically diverse patients with mental illness in the United States. *Health Serv Res*. 2022;57:95–104.
14. Chinchilla M, Montiel GI, Jolles MP, et al. Linking health education, civic engagement, and research at a large Federally Qualified Health Center to address health disparities. *Health Serv Res*. 2022;57:105–110.
15. Albright K, de Jesus Diaz Perez M, Trujillo T, Beascochea Y, Sammen J. Addressing health care needs of Colorado immigrants using a community power building approach. *Health Serv Res*. 2022;57:111–121.
16. Pearson E, Kirsh S, Pizer SD. Modeling underservedness: an evidence-based approach to managing access to care. *Health Serv Res*. 2022;57:77–82.
17. Leykum LK, Finley EP, Penney LS, et al. Engaging Veterans, caregivers, and system stakeholders to improve VA home and community-based services. *Health Serv Res*. 2022;57:66–76.
18. Walker SC, White J, Rodriguez V, et al. Cocreating evidence-informed health equity policy priorities with community. *Health Serv Res*. 2022;57:137–148.
19. Stadnick NA, Cain KL, Oswald W, et al. Co-creating a theory of change to advance equitable COVID-19 testing and vaccine uptake in underserved communities. *Health Serv Res*. 2022;57:149–157.
20. Braganza MZ, Pearson E, Avila CJ, Zlowe D, Øvretveit J, Kilbourne AM. Aligning quality improvement efforts and policy goals in a national integrated health system. *Health Serv Res*. 2022;57:9–19.
21. Kho A, Daumit GL, Truesdale KP, et al. The National Heart Lung and Blood Institute (NHLBI) Disparities Elimination through

Coordinated Interventions to Prevent and Control Heart and Lung Disease Alliance. *Health Serv Res*. 2022;57:20–31.

22. Hoppe TA, Litovitz A, Willis KA, et al. Topic choice contributes to the lower rate of NIH awards to African-American/Black scientists. *Sci Adv*. 2019;5:eaaw7238.

23. Weiss CH, Murphy-Graham E, Petrosino A, Gandhi AG. The fairy godmother—and her warts making the dream of evidence-based policy come true. *Am J Eval*. 2008;29(1):29-34.

24. Kay A. Evidence-based policymaking: the elusive search for rational public administration. *Aust J Public Adm*. 2011;70(3): 236-245.

25. U.S. Census. The promise of evidence based policymaking. https://www2.census.gov/adrm/fesac/2017-12-15/Abraham-CEP-final-report.pdf

26. Pabst A. Rethinking evidence-based policy. *Natl Inst Econ Rev*. 2021; 255:85-91.

27. Venkataramani AS, O'Brien R, Whitehorn GL, Tsai AC. Economic influences on population health in the United States: toward policymaking driven by data and evidence. *PLoS Med*. 2020;17: e1003319.

28. Crabtree BF, Nutting PA, Miller WL, et al. Primary care practice transformation is hard work: insights from a 15-year developmental program of research. *Med Care*. 2011;49 Suppl:S28-S35.

29. 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;50(3):217-226.

30. Hontelez JAC, Bulstra CA, Yakusik A, Lamontagne E, Bärnighausen TW, Atun R. Evidence-based policymaking when evidence is incomplete: the case of HIV programme integration. *PLoS Med*. 2021;18: e1003835. doi:10.1371/journal.pmed.1003835

31. Greenhalgh C, Montgomery P. A systematic review of the barriers to and facilitators of the use of evidence by philanthropists when determining which charities (including health charities or programmes) to fund. *Syst Rev*. 2020;9:199.

32. Arnold Foundation. Arnold Ventures. Accessed March 14. 2022. https://www.arnoldventures.org/work/policy-labs