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Authors

Tan, May Lynn
Vlahov, David
Hagan, Erin
[et al.](#)

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Short Report

Building the evidence on Making Health a Shared Value: Insights and considerations for research

May Lynn Tan^{a,*}, David Vlahov^b, Erin Hagan^a, M. Maria Glymour^{a,c}, Laura M. Gottlieb^d, Ellicott C. Matthay^{a,c}, Nancy E. Adler^a

^a Center for Health and Community at the University of California San Francisco, San Francisco, CA, USA

^b Yale School of Nursing at Yale University, West Haven, CT, USA

^c Department of Epidemiology and Biostatistics, University of California San Francisco, San Francisco, CA, USA

^d Department of Family & Community Medicine, University of California San Francisco, San Francisco, CA, USA

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ABSTRACT

The Robert Wood Johnson Foundation (RWJF)'s Culture of Health Action Framework guides a movement to improve health and advance health equity across the nation. Action Area One of the Framework, Making Health a Shared Value, highlights the role of individual and community factors in achieving a societal commitment to health and health equity, centered around three drivers: Mindset and Expectations, Sense of Community, and Civic Engagement. To stimulate research about how Action Area One and its drivers may impact health, Evidence for Action (E4A), a signature research funding program of RWJF, developed and released a national Call for Proposals (CFP). The process of formulating the CFP and reviewing proposals surfaced important challenges for research on creating and sustaining shared values to foster and maintain a Culture of Health. In this essay, we describe these considerations and provide examples from funded projects regarding how challenges can be addressed.

Introduction

The Robert Wood Johnson Foundation (RWJF)'s Culture of Health Action Framework, adopted in 2013, provides a blueprint for improving health across the nation. The Framework presents specific principles and priorities that are posited to create and reinforce social norms and institutional practices that support population health, well-being, and equity through complementary pathways. The Framework was informed by earlier research and stakeholder input on the social and structural factors required to improve population health in the United States (Acosta et al., 2017; Trujillo & Plough, 2016). It is congruent with extensive prior and ongoing investments made by RWJF and others to reduce health disparities by addressing the root causes of poor health and health inequities (Braveman and Egerter, 2008, p. 80). New, innovative, cross-disciplinary research is now needed to advance the Framework's ambitious agenda of eliminating health disparities and improve the nation's collective well-being (Plough, 2015).

The cornerstone of the Framework is Action Area One, Making Health a Shared Value, which underscores RWJF's vision that a Culture

of Health requires a societal commitment to prioritize good health for individuals and groups, leading to the adoption of social systems and power structures that enable and sustain health equity (Chandra et al., 2016). As defined by RWJF: "Health equity means that everyone has a fair and just opportunity to be as healthy as possible. This requires removing obstacles to health such as poverty, discrimination, and their consequences, including powerlessness and lack of access to good jobs with fair pay, quality education and housing, safe environments, and health care (What is Health Equity?, 2019)." Achieving health equity depends on confronting barriers that disproportionately impact certain groups and which are largely beyond the control of any one individual, thus necessitating collective effort and shared support across multiple sectors and classes, not just those negatively impacted. This reinforces the need for Making Health a Shared Value as a foundation and catalyst for other Action Areas in the Framework. Yet despite its perceived importance, there has been relatively little evidence established on *how* to make health a shared value, or on how that shared value might subsequently contribute to changes that improve population health.

The three drivers of Making Health a Shared Value – Mindset and

* Corresponding author. 3333 California Street Suite 465 San Francisco, CA, 94118, USA.

E-mail address: May.Lynn.Tan@ucsf.edu (M.L. Tan).

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Expectations, Sense of Community, and Civic Engagement – have been defined and described previously (Chandra et al., 2016), including a detailed overview of their intertwined roles. Briefly, Mindset and Expectations refer to an established outlook in which both individual and collective health are valued and prioritized, and which drives people to act in ways that improve and protect their own health and the health of others. Sense of Community relates to how interconnected one feels with others in his or her community, and may strengthen individuals' commitment to shared goals. Civic Engagement represents people's active involvement to advocate for or implement positive changes to the community. In the Action Framework, these drivers are theorized to work interactively to move populations toward establishing health as a shared value. Moreover, the Making Health a Shared Value Action Area is not seen as an independent change agent but rather as linked with each of the other three Action Areas in the Framework – Fostering Cross-Sector Collaboration; Creating Healthier, More Equitable Communities; and Strengthening Integration of Health Services and Systems – through bi-directional pathways that create synergistic opportunities to advance population health and equity (Chandra et al., 2017).

Approach

Evidence for Action (E4A), one of RWJF's signature research funding programs, supports research that informs the Framework's Action Areas through the study of policy, programs, or practices that have the potential to affect population health. In weighing proposals, we pay particular attention to rigorous design, intervention targets, health outcomes, and scale of likely impact (Gottlieb et al., 2016). Specifically, we select projects for funding that meet criteria of rigor, actionability, relevance, ability to meaningfully contribute to the existing evidence base, inclusion of appropriate outcome measures, and feasibility.

With a goal of catalyzing research on how population health can be improved through the cultivation of shared values or through mechanisms related to any of the three drivers, E4A issued a special national Call for Proposals (CFP) specifically focused on Making Health a Shared Value. To inform the scope and parameters of this CFP, the E4A team first reviewed the existing evidence about relationships among the three drivers and health. We expanded a previous literature review on the topic (Chandra et al., 2016) to include additional published studies, programmatic reports, and Grey Literature about interventions pertaining to the drivers. We also consulted with experts about important gaps in knowledge.

The process uncovered key considerations for research design and dissemination that both shaped the research aims of the CFP and guided the selection of projects for funding. These considerations relate to challenges of: 1) defining drivers within the context of a Culture of Health; 2) articulating potential mechanisms or theories of change; 3) aligning research with key links in long causal chains; 4) addressing methodological challenges to scientific rigor; and 5) translating findings into sustainable practice. In this essay, we describe these issues and provide examples of how some of the challenges can be overcome, based on research projects funded through the CFP.

Challenge 1: Defining drivers within the context of a Culture of Health.

In the Action Framework, drivers are defined broadly, which gives researchers and practitioners the flexibility to both conceptualize and measure them in different ways. For example, Sense of Community has previously been defined by scholars as an individual's sense of membership or emotional connection to a community or group (McMillan and Chavis, 1986). Yet the Framework does not limit the driver to this definition; it can also encompass a number of related constructs, such as social support and social networks (referring to the quantity, quality and density of one's relationships (House, Umberson, & Landis, 1988)), social cohesion (a community-level measure of the attributes that allow groups to function, such as trust between and among community members (Chuang, Chuang, & Yang, 2013)), and social capital (norms

and resources that exist among groups that facilitate interactions and transactions (Lochner, Kawachi, & Kennedy, 1999; Szreter and Woolcock, 2004)). The common thread tethering these different interpretations to the Action Framework is the idea that cultivating a connection to others is an integral component to developing and sustaining shared values.

At the same time, many related concepts that are conceptually distinct are commonly conflated in discussions or research on the Action Framework. The Mindset and Expectations driver is especially vulnerable to this, given that both "mindset" and "expectations" have broad uses both colloquially and within other academic disciplines. The Framework employs this driver to represent the idea of a shared set of values, norms, and priorities that support health and health equity. This shared outlook may be reflected in measures at the individual level, such as opinions about health equity policies, motivations to act toward a common interest, or perceived interconnectedness or interdependence; or they may be captured at a social level, such as in school climate, norms and values. However, despite these broad parameters, other interpretations of "mindset" do not directly relate to the Action Framework: for example, mindfulness (awareness of one's thoughts, feelings, and sensations), knowledge (e.g. about a particular topic), and one's mindset toward a specific personal behavior such as healthy eating or physical activity. These interpretations all engage similar-sounding terminology but relate more to individually-centered mentalities rather than a shared value system. Finally, while the original nomenclature for the driver uses the singular "mindset" (Chandra et al., 2016) to capture the notion of a distinct, convergent viewpoint shared by many people, the plural "mindsets" can be used to convey that there may be multiple variations of a shared viewpoint, depending on context – all of which can actuate a Culture of Health.

In the context of RWJF's vision and research investments, investigators are encouraged to contemplate novel ways to frame and interpret drivers, but they should consider whether these interpretations still relate directly to a Culture of Health. The studies that were funded through the CFP present a diverse set of examples of how drivers may be conceptualized. In one study, Mindset and Expectations are represented by decision makers' intentions to support policies that benefit historically marginalized groups. Another study characterizes Mindset and Expectations about health as being situated on a spectrum that ranges from a "shame and blame" paradigm to a more refined socio-ecological understanding of the root causes of health disparities. In a third study, Mindset and Expectations are represented by the underlying values and beliefs about gun ownership and stewardship shared by diverse sub-cultures of the gun-owning population. The final study uses opinions about health interconnectedness (perceived interconnectedness and support for health) as an indicator of a community's Mindset and Expectations. Table 1 displays the full list of relevant drivers for each study and outcomes to which they correspond.

Challenge 2: Articulating the potential mechanisms or theories of change.

Irrespective of how they may be defined in specific research contexts, RWJF considers the three drivers tied to Making Health a Shared Value to be interrelated (Trujillo & Plough, 2016), without a strictly linear pathway through which population health outcomes are anticipated to change as a result of intervening on any single or combination of drivers. Rather, as a result of intervention, drivers may be activated and converge to produce a hypothetical springboard or "pivot point" that, in concert with one or more other Action Areas, spurs meaningful change in communities and systems. At the same time, a lack of specificity on the potential sequencing, directionality, and strength of factors leading to health outcomes limits the ability of practitioners and policymakers to intervene strategically. It also creates challenges for researchers and program evaluators to identify conditions and circumstances in which drivers of any of the Action Areas may or may not be part of a change mechanism. Therefore, new research should clarify (or disentangle) the multiple potential paths that lead to shared values and establish

Table 1
Studies funded through Evidence for Action's Making Health a Shared Value Call for Proposals.

Name of study	Research Aims	Study Design	Selected outcomes	Drivers
1. Evidence-Based Strategies to Increase General Public and State Legislator Support for Policies to Fund and Enhance Early Childhood Development	Test the extent to which communication strategies (narratives and inoculation messages) promote public and policymaker support and intentions to advocate	Randomized control trials (separately for public and policymakers)	<ul style="list-style-type: none"> Public support for early childhood intervention policies Intention to advocate for early childhood intervention policies Levels of empathy toward impacted groups 	<ul style="list-style-type: none"> Mindset and Expectations Civic Engagement
2. Making Health a shared Value of Youth CulturE (HAVOYCE)	Test the effect of an arts-based public health literacy program on: 1) shifting mindsets and expectations related to the diabetes epidemic affecting youth of color 2) sense of community belonging 3) civic engagement related to health, justice, and other socio-environmental concerns.	Cluster randomized trial	<ul style="list-style-type: none"> Beliefs about causes of Type 2 diabetes Sense of belonging Civic engagement among program participants and audiences Social norms for healthy behaviors Long-term policy changes 	<ul style="list-style-type: none"> Mindset and Expectations Sense of Community Civic Engagement
3. Identifying Shared Values to Support and Inclusive Culture of Health around Firearms: What Communication Messages Work?	Identify shared values among distinct subcultures of gun owners; develop message framing strategies that rely on shared values; and test effectiveness of messages in changing attitudes toward civic engagement and opinions on gun policy	Focus groups, Randomized control trial, Longitudinal study	<ul style="list-style-type: none"> Firearm-related beliefs, attitudes, practices, norms Mindset toward firearm and other public policies Level of civic engagement with gun violence prevention 	<ul style="list-style-type: none"> Mindset and Expectations Civic Engagement
4. Building a Culture of Health Through the Built Environment: Adaptable Solutions to Community Well-being	Determine impact of blight reduction on Action Area 1 drivers, and how drivers may mediate relationship between blight reduction and health and social outcomes.	Cluster randomized trial, Focus groups and key informant interviews; ethnographic observation	<ul style="list-style-type: none"> Quality of life Violence Substance use Psychological distress Collective efficacy Sense of safety Voting rates Organizational participation 	<ul style="list-style-type: none"> Mindset and Expectations Sense of Community Civic Engagement

empirical evidence on the relative effectiveness of intervening on drivers in certain contexts compared to others.

To do this, *theories of change* must be clearly hypothesized at the outset of research, because they are not always obvious to an observer. For example, what is the mechanism for how shared norms are developed in a population? They might be created through grassroots, populist movements, whereby values, attitudes, and beliefs are cultivated at an individual level, aggregated across a large group of people, and consolidated through effective leadership – leading to a societal “pivot” in how an issue is treated. Experiences from the civil rights and environmental movements (Chandra et al., 2016), along with democratic movements in other countries (Gonçalves, 2014), help to illustrate these phenomena. An alternative pathway is that cultural norms and priorities are shaped less by individuals extemporaneously changing their views, and more through policies that regulate behaviors and practices at a societal level, to which Mindset and Expectations adapt over time. For example, after a ruling of the Supreme Court in favor of marriage equality, survey respondents indicated greater acceptance of gay marriage as a social norm, even when their personal beliefs remained unchanged (Tankard and Paluck, 2017). This has implications for equity, because people may outwardly comply with perceived social norms, at least initially, even if they disagree. These contrasting theories on how population Mindset and Expectations may be shaped are not in direct conflict: effects of multiple pathways are likely playing out simultaneously. Likewise, there is no expectation that one single mechanism applies across drivers or among different groups and contexts. However, investigators aiming to demonstrate the impact that the drivers have on health in a specific setting – vis-à-vis direct interventions or other sources of variation – must first specify the pathway(s) they are using or testing as a basis for the research.

One of the studies funded through the CFP helps to illustrate this

concept. Researchers at Cornell University and Portland State University are evaluating the effects of values-based policy messaging strategies to promote funding and support for early childhood development programs, using an experimental design (Table 1). Strategies will be developed for both the general public and state legislators using “policy narratives” and “inoculation messages” designed to cultivate a shared health mindset. Policy narratives are short stories that bring to life the outcomes or consequences of a particular program or policy for audiences that may not have otherwise relatable personal experiences. Inoculation messages expose audiences to weak forms of oppositional messages against a certain program or policy and help prepare decisionmakers to resist them. Here, the investigators’ proposed theory of change presumes that individuals can be induced to change their views through strategic messaging, and that when influential people (e.g., policymakers) adopt an equity-focused mindset and expectations, policies can change accordingly. Based on this proposed mechanism, the use of randomized control trials to test different types of messaging will establish whether there is a causal connection between messages and intent to act. The specification of a clear and reasonable theory of change provides a strong rationale for the selection of the intervention as well as each evaluative component of the project.

Challenge 3: Aligning research with key links in long causal chains.

Causal chains connecting social interventions to population health outcomes are lengthy and complex (Braveman, Egerter, & Williams, 2011), especially when taking into consideration the multiple and iterative stages involved in cultivating Mindset and Expectations, Sense of Community, and Civic Engagement – all of which require substantial investments in trust- and capacity-building. It would be difficult for a single study to fully assess longer term health impacts of interventions – such as those acting on the drivers tied to Making Health a Shared Value – that have long latency periods. Recognizing these constraints, E4A

established two key aims for funding through the CFP: 1. To test the effects of specific interventions on drivers to determine the extent to which drivers can be changed, and 2. To establish evidence of causal relationships between drivers and health outcomes [Exhibit 1]. Investigators could choose to address either or both aims in a research project. Given the dearth of empirical evidence supporting the linkages between interventions and health outcomes, we considered it necessary to focus on key stages of change that could be examined within a shortened timeline (grant periods were up to 48 months). We acknowledge that establishing intermediary linkages is a necessary step toward the eventual goal of determining longer term health impacts, and that narrowing the scope of a study to focus on just one or two pivotal links in the causal chain allows researchers the opportunity to incrementally expand the empirical evidence supporting the role of this Action Area within the larger Framework.

Because the drivers tied to Making Health a Shared Value rely on interactions among people at the group or community level, environments in which people are naturally induced into group interchanges – such as schools – provide promising settings for conducting research on short-term change mechanisms. School-aged children and youth are also at a formative stage in their developmental process, and they tend to be highly susceptible to peer influence; making this a potentially important life stage for cultivating shared values. One project funded through the CFP, HAVOYCE, takes advantage of these conditions to learn how changes can be sparked within a school system to improve health (Table 1). The HAVOYCE project is an arts-based program in San Francisco high schools that seeks to eliminate type 2 diabetes through a spoken word intervention both delivered by and targeting youth. This multi-component intervention includes partnerships, capacity-building workshops and mentorship to generate compelling, youth-focused content delivered through live performances and social media campaigns. Through a cluster randomized trial involving six public high schools, the research study will measure the extent to which the intervention changes youth engagement, civic action, and social norms – all of which are anticipated to be measurable within two academic years. Longer term outcomes of healthy behaviors, policy changes, and reductions in health disparities will also be assessed.

A third funded study deals with the public health problem of gun violence by focusing on a change mechanism to garner broader support for policies that prevent gun violence (Table 1). In this study, investigators will define gun owner subgroups, identify their core values, and develop and frame public health messages that are consistent with values across subgroups. Communications approaches will then be evaluated through focus groups and a randomized controlled experiment to determine the effects of inclusive, targeted messaging on a national sample of gun owners’ views toward gun policy and their interest in civic engagement on gun violence prevention. Findings from this study will provide evidence of how to increase support for protective policies; and because the enactment of gun violence prevention policies is associated with population health (Crifasi, Meyers, Vernick, & Webster, 2015; Diez et al., 2017), longer-term effects may be inferred without the need to wait for health outcomes to materialize in real time.

Challenge 4: Addressing methodological challenges to rigor.

In addition to the constraints of long timelines, research on shared values is subject to other methodological challenges that, while not unique to Making Health a Shared Value, require special consideration. These include ensuring that there are relevant community-level measures, designing studies that maximize support for causal inference, and calculating power based on the correct unit of analysis.

Since the emphasis on shared values implicitly calls for a focus on group or community-level – as opposed to individual – experiences, researchers must find ways to accurately assess group-level changes in drivers and health. With some distinct exceptions (e.g. collective efficacy, social capital, voting), there are few community-level validated measures that can indicate the extent to which Making Health a Shared Value drivers operate or change in groups or populations – making measurement a challenge for evaluating the impact of interventions targeting the drivers. For instance, there are no commonly used or validated measures for community levels of bias or discrimination, although researchers have devised indices by aggregating individual-level survey data – such as a community-level index of prejudice (Lee, Muennig, Kawachi, & Hatzenbuehler, 2015). Of available broadly validated measures, not all have been validated for use among specific communities or populations that may interpret constructs or report experiences in different ways (Enfield and Nathaniel, 2013; Makelarski et al., 2013).

The difficulty of randomizing social interventions has also been well acknowledged (Kaufman, Kaufman, & Poole, 2003), and alternative quasi-experimental approaches may still not be able to overcome some challenges to causal inference. Communities and groups are not interchangeable; each one carries a distinct history that determines its composition, predisposition to health and well-being, and receptivity to change. This can complicate the process of trying to match communities on known characteristics or risk factors and introduce problems with confounding (by factors that influence both community values and health, such as self-selection of individuals into groups or communities), and contamination (because individuals travel between communities and mix with others) that can distort or attenuate the estimated effects of an intervention. Moreover, there can be heterogenous exposures of individuals within a group, neighborhood or community (Sharkey and Faber, 2014), as well as differential effects that an intervention may have on subgroups. Estimating population mean effects without disaggregating by subgroup can mask some of these important outcomes on vulnerable populations, such as those less engaged in formal systems of surveillance or program participation. Finally, testing community-level interventions or responses to changes in drivers means that the community or “cluster,” not the individual, is the unit of analysis (Donner, 1998). This has implications for power due to the limited number of communities that can feasibly be included in a study. In some cases, the handful of communities available to the researcher to serve as intervention and comparison communities forms a sample size that is too small to detect the effects of an intervention or of changes in drivers.

A variety of approaches may be considered to help overcome some of these challenges, such as stepped-wedge designs in which an

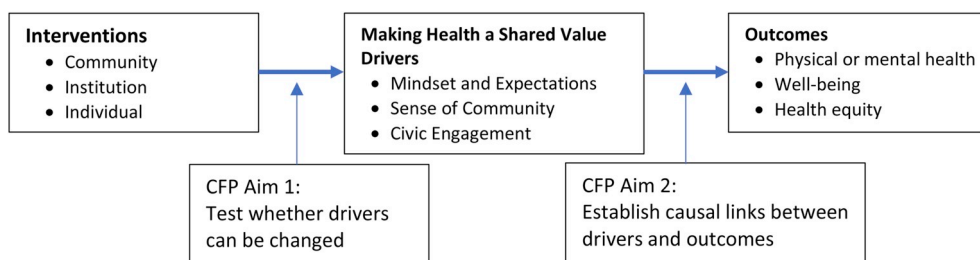


Exhibit 1. Conceptual relationships among interventions, drivers, and health, and the specific links targeted by the Evidence for Action Making Health a Shared Value Call for Proposals (CFP).

intervention is introduced in stages across similar communities, so that temporal differences may be leveraged to isolate effects of the intervention; as well as observational studies of “natural experiments,” or exogenous changes in policies or programs that result in clear delineations of those who are exposed and unexposed to an intervention or condition. Conversely, simulation or modeling studies – while potentially useful for generating hypotheses – often do not directly test the effects of interventions and are thus not prioritized by E4A, whose focus is on funding studies that establish evidence of impact.

The fourth study funded through the CFP (Table 1) offers an example of a cluster-randomized design with a large sample size that may be used to study Making Health a Shared Value. Investigators in New Orleans are developing evidence on whether blight remediation activities, such as vacant lot greening and building improvements (e.g. trash removal; building repairs and repainting) change residents’ mindset about health interconnectedness, sense of community, and civic engagement, and ultimately reduce neighborhood, family, and youth violence. Three hundred vacant neighborhood lots were randomized to receive treatment and matched with lots in 300 comparison neighborhoods, with each lot representing a cluster of residents. This large sample of lots provides ample power to detect changes in outcomes, which are specified both at individual (feelings of health interconnectedness) and community levels (voting rates, community-level density of organizations, potential for collective efficacy). The nature of the built environment intervention, considering that residents are unlikely to move in droves between treatment and comparison neighborhoods during the study period, reduces the risk of mis-categorizing the exposed communities. Resident surveys and qualitative interviews and focus groups will provide information on differential impacts among certain groups or contexts. Ultimately, this study will determine the extent to which improvements on the built environment in disadvantaged neighborhoods can change how residents feel about health as a shared value, and it will be one of the first studies to also estimate causal relationships between drivers and population health outcomes.

Challenge 5: Translating findings into sustainable practice.

As the cornerstone of the framework for building a Culture of Health, in order to make progress toward this vision it is imperative that research on Making Health a Shared Value produces findings that are translatable to practice. To maximize the likelihood of translation, evidence may need to be developed within the context of actual programs and policies rather than under controlled “laboratory” conditions. This may be accomplished by engaging stakeholders at various stages of the process – from informing initial research questions, validating the constructs and measures to be used, providing input on intervention design and implementation, and interpreting and applying study results. Researchers must also give careful consideration to the sustainability of interventions being evaluated. There is little utility in demonstrating that a program or policy can change shared values without information about the feasibility of implementing or maintaining it at a large enough scale, and in a sustainable way, to impact population health.

Of the four studies funded through the CFP, all are taking place under real world conditions, with two in place-based contexts (urban high schools and neighborhoods) and the other two leveraging technology to virtually reach a national audience of stakeholders and decisionmakers (gun owners, the general public, and state government officials). Stakeholders in all projects have been or will be engaged in informing specific aspects of interventions to ensure appropriateness, including those aspects related to the formation of messaging, the delivery of services, and potential unanticipated effects. These projects reflect the principle that health cannot be established or sustained as a shared value without authentic engagement from those whose mindsets and actions are integral to the process.

Conclusion

RWJF’s vision for Making Health a Shared Value calls for changes in

how individuals and populations think about and value health, well-being, and equity, with the goal of creating widespread demand for conditions that support good health – not just for some, but for all. In order to achieve this, practitioners, policymakers, and members of society need evidence of what works to incrementally “drive” this Action Area forward. In soliciting and funding research to build this evidence, we identified unique challenges to conducting research in this area. We anticipate the projects chosen for funding through the CFP will make important contributions in terms of both what we know and how we generate that knowledge; yet there remain vast chasms that still need to be filled by additional empirical work. We encourage researchers and practitioners to collaborate on identifying new and novel research questions related to developing shared values. Future work ideally will address the research challenges described here and be designed to rigorously test specific mechanisms that align with a clear and actionable theory of change. Findings from this type of research will inform the refinement of the Action Framework by enabling RWJF to elaborate on the contexts and conditions under which Making Health a Shared Value drivers can be most effectively operationalized. Moreover, a better understanding of how to cultivate shared values may help us build bridges across social, cultural, and political divides, to improve health, well-being, and equity for all.

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Conflicts of interest

Authors have no conflicts of interest to report.

Ethics statement

Human participants were not involved in the development of this article, so no IRB approval was obtained.

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