

**Enhancing Public Health Outcomes
in Developing Countries:**

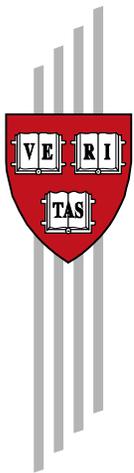
**From Good Policies and Best
Practices to Better Implementation**

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Enhancing Public Health Outcomes in Developing Countries: From Good Policies and Best Practices to Better Implementation

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Abstract

In rich and poor countries alike, a core challenge is building the state's capability for policy implementation. Delivering high-quality public health and health care – affordably, reliably, at scale, for all – exemplifies this challenge, since doing so requires deftly integrating refined technical skills (surgery), broad logistics management (supply chains, facilities maintenance), adaptive problem solving (curative care) and resolving ideological differences (who pays? who provides?), even as the prevailing health problems themselves only become more diverse, complex and expensive as countries become more prosperous. The current state of state capability in developing countries, however, is demonstrably alarming, with the strains and demands only likely to intensify in the coming decades. Prevailing 'best practice' strategies for building implementation capability – copying and scaling putative successes from abroad – are too often part of the problem, while individual training ('capacity building') and technological upgrades (e.g., new management information systems) remain necessary but deeply insufficient. An alternative approach is outlined, one centered on building implementation capability by working iteratively to solve problems nominated and prioritized by local actors.

Key words: Policy Implementation, State Capability, Public Health, Subnational Variation

The views expressed in this paper are those of the author alone, and should not be attributed to the World Bank, its executive directors or the countries they represent. This paper refines the key messages originally presented as a keynote address to the Nordic Public Health Association conference in Aalborg, Denmark, in August 2017. My thanks to the conference organizers (and in particular Finn Diderichsen) for this opportunity, and to Francisco Ferreira for helpful comments.

Introduction

In both popular and scholarly discourse, unwelcome news regarding the state of public affairs – international relations, the national economy, the quality of local public services – is largely understood to be the product of “failed policies”, and thus that “good policies” are needed to turn things around. Such debates are important and clearly have their place, not least because a clearly articulated and evidence-informed “policy” provides coherence, justification and motivation for purposive action in response to the (real or proclaimed) state of the world. Good policies – those that meet professional standards – are clearly better than poor ones. But any policy is only as good as its implementation; even if there are solid grounds – a body of theory, evidence, or experience – for believing that a particular “policy” will indeed yield improved outcomes, its successful realization is contingent upon, among other things, the willingness and ability of the designated agency to duly implement it. Put differently, the effectiveness of a given state’s policy turns on the extent to which the soundness of the policy’s content and the depth of political support it enjoys is matched to a robust implementation apparatus – one that is able to realize the policy’s goals, consistently, at scale, for all, under pressure.

Alas, all too frequently in public health (and elsewhere), this crucial match-up does not occur: sound policies are adopted, or needed reforms are enacted, but they do not lead to the desired outcome because the agency tasked with implementing them is unwilling and/or unable to do so (Andrews et al 2017; Buntaine et al 2017). Moreover, if implementation capability is so important to realizing policy effectiveness it is also conspicuous that researchers, for their part, pay relatively little attention to assessing and understanding implementation capabilities, and to contributing to strategies responding to those situations in which the designated implementing agency is clearly not up to the task. Applied research papers in international development, for example, routinely conclude with a section exploring the “policy implications” that follow from the analysis, but it is the rare paper that considers the “implementation implications”, namely a serious discussion of whether and how a designated implementing agency (e.g., a ministry) might actually be able to carry out the policy. Similarly, it’s hard to name more than a handful of social science books with ‘implementation’ in the title, or even as the implied subject matter (perhaps the most famous is Pressman and Wildavsky 1984). (Though in English a discourse on ‘policy’ is often, if implicitly, synonymous with ‘implementation’, for present purposes these concepts are regarded as separate phenomena.)

This paper seeks to speak to these gaps by providing (a) a broad overview of the current state of state capability for implementation – generally, and using specific examples from public health in low- and middle-income countries (where these challenges are most consequential, even if still relevant elsewhere); (b) an account of how and why prevailing responses to implementation deficits are so often inadequate; and (c) an outline, on the basis of this analysis, of what an alternative strategy might look like (for further details, see Andrews et al 2017). Sections corresponding to each of these three domains follow, concluding with a final discussion of the constraints to more fully responding to 21st century implementation challenges in public health in developing countries.

The State of State Capability: Generally, and in Public Health in Particular

No matter the sectoral or geographical entry point, it’s hard to reach anything other than a sobering conclusion regarding the current state of state capability for policy implementation. Whether assessed by aggregate measures of national performance, by field experiments or ethnographic accounts, the end

result is essentially the same: most governments in low- and middle-income countries are not able to deliver on their core responsibilities; the trajectory of their performance is mostly flat-lining or declining; and the demands on these delivery systems – via (among other things) continued population growth, extended longevity, and rising citizen expectations – are only going to intensify in the coming decades. Let us briefly explore each of these claims, and their implications, in turn.

First, a quick global survey on the contemporary state of state capability. To begin this exercise, one can consult the range of national “indexes” that now exists on all manner of policy topics, covering a broad range of countries and time periods. For present purposes, we can examine indexes (and associated rankings) on themes such as ‘quality of government’, ‘bureaucratic effectiveness’ and ‘control of corruption’. Good faith efforts have been made to ensure these indexes meet minimum quality control standards, but they inherently have various strengths, weaknesses and limitations, and as such it is best to take them seriously but not literally. These caveats aside, when the most relevant of these indices are integrated into a single overarching measure of ‘state capability’ (see Andrews et al, 2017, chapter 1) the picture is depressingly clear: only 13 of today’s developing countries (out of 102 for which data is available; these 13 countries are: Chile, South Korea, Singapore, Qatar, Indonesia, Colombia, Turkey, South Africa, Albania, Saudi Arabia, Uruguay, and Croatia) are on a path to having to having a state that, by the end of this century, can perform at the level of the weakest-performing of today’s OECD countries. Put differently, if current trends continue, only about 10% of those people currently living in the “historically developing countries” (i.e., those low-income countries that became independent in the post-colonial period, mostly in the 1950s and 60s) will have grandchildren who reside in a country with level of implementation capability approximating those of Portugal today. One can also use this data to explore the trajectories of individual states (e.g., Guatemala): for those countries having only slightly improving levels of capability, basic extrapolation suggests it will take hundreds – or in some cases literally thousands – of years for them to catch up. (Those with consistently declining levels of capability will, by definition, never do so.) It goes without saying that such trends do not bode well for the attainment of ambitious global targets such as those articulated for 2030 in the Sustainable Development Goals. (SDG 3, for example, states that the world will, by 2030, “ensure healthy lives and promote wellbeing for all at all ages”, while SDG 16 aspires to attain, among other things, “access to justice for all” and to “build effective, accountable and inclusive institutions at all levels”. As laudable as these goals are, realizing any aspect of any of them will surely require a capable policy implementation apparatus.)

More granular levels of analysis only confirm these macro-level trends. Perhaps the most logistical, least controversial task that national governments implement is delivering the mail. As it happens, 157 countries have signed an international agreement stating simply that if they receive mis-addressed mail, they will return it to the country from whence it was sent within 30 days. This creates a neat opportunity for a basic experiment to assess capability for policy implementation: send out (say, ten) mis-addressed envelopes to all 157 countries – each of whom have pledged to implement an identical-but-simple policy – and see how long it takes for the envelopes to be duly returned. Chong et al (2014) did exactly this, and reported a full variation in the response: only one country (the Czech Republic) returned all ten letters but the spectrum was complete, with many countries (even some at middle-income level) returning none of them within the allotted time. Studies on the implementation of more complex policy tasks, such as educating children, also tell depressing tales. Successive cohorts of primary school children in India seem to be learning less, not more, with each passing year through 2013

(ASER 2013); even though every country in the world has a policy that students will be able to demonstrate basic competence in reading and writing by the end of primary school, in low-income countries the spectrum of implementation capability on this policy ranges from 20% (Nigeria) to 80% (Rwanda) (Kaffenberger and Pritchett 2017). A survey of important work on the quality of frontline health services in Tanzania, India, Indonesia, and Paraguay documents the wide gap between what medical providers should do and what they actually do – in Tanzania, for example, doctors complete less than a quarter of the essential checklist required to determine if a patient has malaria, a disease which kills around 75,000 people each year in that country (Das, Hammer and Leonard 2008). Detailed anthropological studies of otherwise carefully designed social protection programs for poor elderly women in India document how the absence of seemingly routine data on citizens (e.g., their age) creates discretionary space open to rampant abuse by local officials (Gupta 2012). In contemporary high-income countries as well, the award-winning film ‘I, Daniel Blake’ movingly portrays the harrowing consequences that flow from public administration systems that – in the name of expedience, uniformity and austerity – remain willfully indifferent to the idiosyncratic plights and personal characteristics of those they ostensibly exist to serve. Whether considered at the macro or micro level, in poor and rich countries or across the disciplines, it’s hard not to conclude that the state of state capability around the world is far from robust.

Matters are only intensified if one considers three key factors that will likely characterize the coming decades. First, populations in the 47 least developed countries (especially those in Africa) are projected to double by 2050 (United Nations 2017). Today’s wholly inadequate service delivery systems in countries like Cameroon and Mali, in short, will soon be asked to provide health and education to twice as many people. Second, the performance levels that citizens expect of their governments are also bound to rise, amplified – as noted above – by international agreements (such as the Sustainable Development Goals) that enshrine high quality coverage for all, even in the most complex and demanding sectors (such as justice, taxation and regulation), as normative commitments. Similarly, as a long line of political theorists have noted, the meeting of a given standard only keeps expectations rising; as Aldous Huxley wryly observed, “every ceiling, when reached, becomes a floor.” And the tasks required by these heightened expectations – e.g., providing medical services to ageing populations – themselves become vastly more complicated, their delivery requiring ever higher levels of implementation capability. Development, in other words, even (or especially) when it succeeds, only keeps getting harder. This is not an argument for lowering citizen expectations in developing countries; rather, it is a call to recognize that deft management on the part of domestic policymakers and external agencies is needed to keep expectations and experience in alignment, all while remaining committed to building the capability of implementation systems. (More formally, political observers from Plato to Machiavelli, de Tocqueville and Huntington, among others, have examined the dynamics of the expectations/experience gap at length, noting its importance for understanding the conditions under which citizen dissent emerges – namely, when conditions are improving, but consistently lag behind expectations. Most recently, this dynamic has been invoked to explain simmering dissent in the Middle East after the ‘Arab spring’.)

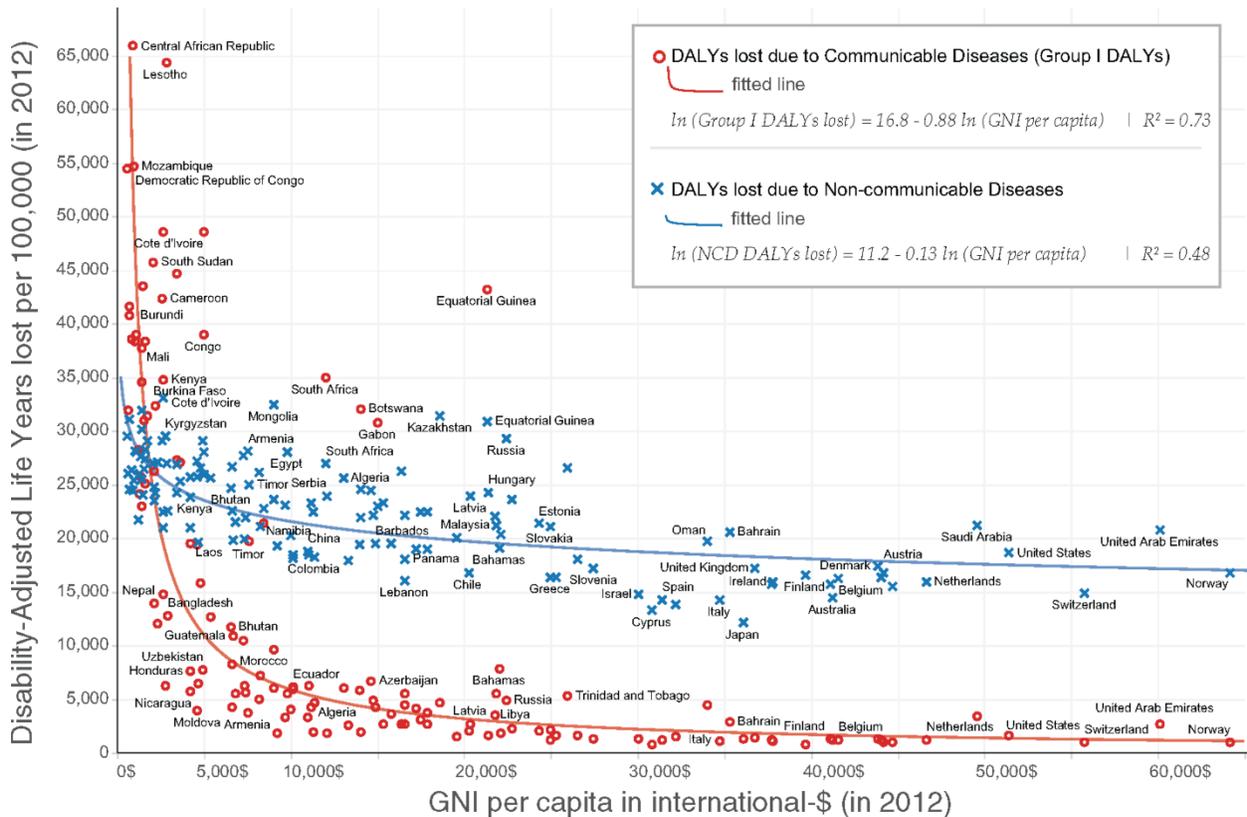
These observations raise an apparent paradox: if, as I have argued, ‘state capability’ for policy implementation in the developing world is mostly either not improving or declining, how is it that most measures of human welfare in these countries – especially measures of health, improvement of which presumably requires *some* minimally capable administrative apparatus – are steadily improving? Some

notable exceptions notwithstanding (e.g., in Syria, Congo), on average life expectancy is longer, infant mortality is declining, and nutrition levels are rising. How is this possible if most states in low-income countries are getting worse, not better, at implementing their primary responsibilities? I do not have a definitive answer, but one plausible explanation would suggest that these laudable gains in human welfare have been achieved by four inter-related factors: (a) declines in large-scale famines and civil wars (Kenny 2012, Pinker 2018); (b) the widespread adoption of basic (but high-impact) behavioral practices (e.g., washing hands, brushing teeth); (c) improvements in agricultural productivity and transport networks (which in turn have enhanced the availability of affordable food and basic medicines); and (d) global commitments to vaccination programs that can be implemented at scale via routinized front-line practices (injecting babies) and logistical systems (supply chains). (Recent technological advances creating vaccines that do not require refrigeration offer even greater possibilities for large scale implementation.)

I stress that these welfare gains have been attained *on average*; there is, to be sure, wide geographic and demographic variation accompanying them (more on this below), and these enduring inequities – especially when coupled with corresponding inequalities in income, employment opportunities and political freedoms – are themselves a legitimate source of grievance. But they also exemplify the development challenge: significant gains in population health can be accomplished by ceasing to do awful things (waging war) and by beginning to do (relatively) basic good things, but the abiding implementation challenge is forging the organizational capability to provide ever more complex services for all citizens, consistently and affordably. It entails being able to take on incrementally more challenging delivery tasks across the “health impact pyramid” (Freiden 2010) as greater prosperity expands citizens’ health profiles, and thus the complexity and scale of their health requirements. (Frieden’s [2010: 510] five-tier pyramid includes “interventions that change the context to make individuals’ default decisions healthy, clinical interventions that require limited contact but confer long-term protection, ongoing direct clinical care, and health education and counseling.”)

The pervasive inequities associated with responses to public health challenges may indeed be a product of incompetence, indifference or insufficient resources. I would suggest, however, that the very complexity of this *type* of policy challenge means that responses to them – even when carefully designed, adequately funded, politically supported and faithfully implemented – will invariably be variable: they will succeed in some places for some people, struggle in others, and be an outright failure for still others. Basic data bears this out, even on seemingly routine matters like work attendance: every country surely has a ‘policy’ that public health employees should show up for work every day, but in Morocco and Yemen recent data documents that the sub-national variation is enormously wide – in some townships absenteeism among doctors in health facilities is around 80%, while in others the number is only 20% (Brixi, Lust and Woolcock 2015: 192). Interestingly, when assessing the overall quality of health facilities at the local level, the correlation between ‘logistical’ issues (e.g., effectiveness of supply chains in providing basic medicines) and ‘social/relational’ issues (such as absenteeism) is virtually zero (Brixi, Lust and Woolcock 2015: 193), suggesting that these types of issues are different *in kind*. Put differently, or to paraphrase the opening line of Tolstoy’s *Anna Karenina*, each unhappy health facility is unhappy in its own way, thus requiring an array of reform strategies to enhance their functionality: whatever strategy one deploys to ‘fix’ the supply chains is unlikely to be effective in lowering absenteeism.

Figure 1: Disability-Adjusted Life Years Lost to Communicable and Non-communicable Diseases



Source: Sterck, Rosen, Ncube and Thewissen (2018, Figure 2)

Wide variation in performance outcomes can also be seen between low-income nations when examining the number of disability-adjusted life years (DALYs) lost each year to communicable diseases (Figure 1) – that is, diseases spread through various forms of (complex) human interaction, and thus not readily amenable to singular technical redress. (Wide variations in health outcomes also exist, of course, between high-income countries; see Schneider et al 2017).) In their assessment of this relationship, Sterck et al (2018) conclude that ‘the usual suspect’, national wealth, has been assigned undue influence in previous studies, and that a better predictor is in fact domestic “institutional capacity” (along with individual poverty and epidemiological conditions in neighboring countries). Even if national wealth and institutional capacity are themselves closely related, a growing body of evidence across different units of analysis is showing that public health problems with a decidedly ‘social/relational’ component pose distinctive policy response challenges, ones for which today’s dominant approaches – with their emphasis on what Gawande (2017) deftly calls “rescue medicine”, in which resources, visibility and prestige are assigned to those conducting rapid technical diagnoses leading to expensive pharmacological and/or surgical “cures”, rather than those engaged in the long-term, incremental but unglamorous work of prevention via public health campaigns – are often congenitally ill-suited.

How and Why Prevailing Efforts to Building Implementation Capability So Often Fail

Such concerns are not new. Indeed, in the field of international development, a venerable line of thinkers (e.g., Lindblom 1959, Hirschman 1967, Rondinelli 1993, among others) have long lamented that the management systems used to implement traditional large-scale development projects have both tremendous strengths (scale, uniformity, standardization) and crippling weaknesses (rigidity, indifference to complexity and contextual idiosyncrasies). These systems were a product of the mid-twentieth-century's enchantment with 'high modernism' (Scott 1998) – itself a product of technologies (military, scientific and administrative) developed in the Second World War (Kennedy 2013) and then redeployed in the subsequent construction of massive domestic infrastructure initiatives (Ekbladh 2010, Gilman 2004). The abundantly clear and visually spectacular accomplishments of these systems – national highways, electricity grids, airports, dams – lent them broad support across the political spectrum (albeit for different reasons), and thereby imbued them with enormous power, reach, legitimacy and durability.

Providing this background is necessary for present purposes because it raises three key questions. First, if serious concerns regarding the dominant administrative apparatus underpinning 'development' have long been voiced, why did they fail to dislodge it (or even complement it with a coherent alternative)? Second, how have events – for better and for worse – since the end of the Cold War and the subsequent acceleration of 'globalization' changed the geo-political space within which international development is now defined, justified, implemented and assessed, and the *kinds* of challenges it currently confronts? And third, to the extent that the international development business, like many others today, now finds itself being 'disrupted', how should our leading development thinkers, practitioners and organizations optimally respond? Let me provide short answers to what are clearly complicated (and interrelated) issues.

Considerations about the evolving 'adaptive development' landscape, and the place within it of new approaches being explored by an array of donors and scholar-practitioners engaging with public health challenges, sit at the nexus of these three key questions. Why did previous critiques fail to elicit change or even an alternative? It was not because the critiques themselves were 'wrong'; indeed, they were, I argue, essentially correct – Hirschman's (1967: 35) observation in 1967, for example, that

'implementation' understates the complexity of the task of carrying out projects that are affected by a high degree of initial ignorance and uncertainty. Here "project implementation" may often mean in fact *a long voyage of discovery* in the most varied domains, from technology to politics.

is as prescient today as it was when he articulated it more than 50 years ago. Logframes and related high-modernist administrative instruments, Hirschman implied, are not designed to navigate "long voyages of discovery", with all their attendant risks and uncertainties.

In *Building State Capability* (Andrews et al 2017), my co-authors and I extend this concern to argue that an unhappy (if often unintended) outcome of attempts to 'reform' public sector institutions is that success is measured by the volume of inputs duly provided in compliance with prevailing budgeting and procurement rules and international 'best practices' but with relatively little attention paid to whether performance has demonstrably improved. A good 'education project' constructs buildings, trains teachers and delivers textbooks – on time, on budget, at scale, without public controversy – but with little concern given to whether students actually learn anything (World Bank 2017). Hospitals can

spend enormous sums ‘upgrading’ their financial and management information systems without actually improving the quality of care they provide. Anti-corruption laws can be crafted to the highest international standards and passed through parliament, yet remain unable to curb corruption. In short, our administrative systems can readily provide the necessary ‘ingredients’, but too often they don’t know how to bake the cake. As insightful and original as they were, the erudite observations (and implicit critiques) of Hirschman et al were just that; there was never a corresponding commitment to building a social movement among those actually overseeing and ‘doing’ development that could articulate and (crucially) implement an alternative – that actively sought, in other words, to “beat something with something better”. This is important strategically for those unhappy with the status quo in development: compelling articulations of “what’s wrong” with orthodox administrative systems need to be matched by a parallel commitment to constructing something better, ‘better’ in the sense of being – within the space in which it operates – technically sound, politically supportable and administratively implementable.

The medium-run viability of any alternative, however, turns in no small part on navigating the broader intellectual and political ‘ecosystem’ within which it resides. On this score, the post-Cold-War development space is decidedly different from that whence it was conceived, birthed and raised in the mid-twentieth century. This is apparent in two distinct ways. Firstly, in high-income countries development is no longer an overt instrument of foreign policy agendas driven by an existential fear of communism abroad, while at home an ever-narrowing focus on domestic concerns and budget deficits has steadily shrunk the political space within which the allocation of resources to ‘development’ can be justified (whether on humanitarian or ‘enlightened self-interest’ grounds). Absent its former political and fiscal support, many of development’s intellectual elites have elected to defend the idea and practice of development by making earnest appeals to support carefully targeted programs whose efficacy can be “rigorously” demonstrated. In so doing, development (historically understood) gets defined down dramatically; for such advocates, ‘development’ is now not so much a global agenda to build open economies, democratic governments, inclusive societies and robust implementation systems for basic service delivery, but a technical quest to identify ‘proven’ niche interventions that can be provided to particular groups in particular places. (See, for example, Esther Duflo’s 2010 TED talk, now viewed over a million times, which explicitly calls for using randomized controlled trials to identify such interventions.)

Secondly, even as the pace, breadth and depth of development in the second half of the 20th century was historically unprecedented (Kenney 2012), much remains to be done, largely because (as noted above) the implementation challenges themselves get more (not less) complicated as a country succeeds. In a country where people expect to live to age 65, for example, their medical requirements are vastly different (and more complex to deliver) than those of a country where life expectancy is 45; such people begin to look forward to a new phase of life called ‘retirement’ with associated demands for pensions and social support (beyond that which can be provided by their immediate family, which is likely to be smaller in number and spatially dispersed); an economy spread across agriculture, manufacturing and services demands a correspondingly more sophisticated education and transport systems; rapidly urbanizing cities require sophisticated water and sanitation services; more complex contracts within and across national borders requires an increasingly mature legal and regulatory system. And so on. (Even with otherwise highly effective implementation systems in place, as others have noted regarding the case of the ‘Scandinavian paradox’, health inequalities may still rise over time.)

Rising complexity – coordinating the actions of millions of people to deliver ever more complicated services to ever more people with ever higher expectations – places a premium on building and maintaining implementation capability, but a common *type* of ‘binding constraint’ on enhancing this capability is one which our prevailing aid administration systems (and big bureaucracies more generally) are ill-equipped to address. This particular constraint resides at the intersection of problems requiring numerous face-to-face interactions; high levels of discretion; willingness and ability to overcome pressures to do something other than the designated tasks (e.g., engage in corruption, be absent from work); and where there is inherent uncertainty about what to do and how to proceed. Many public health challenges feature all four of these characteristics: responding to the Ebola virus outbreak in West Africa in 2014, for example, required devising measures for containing a high contagious and deadly disease, in situations where local burial practices placed enormous contending pressures on staff (how to act effectively, yet not catch the disease oneself nor violate sacred norms?), and where there was little collective knowledge, scientific or otherwise, about the disease to guide action (Quammen 2014). How does one build implementation capability in such desperate circumstances? Less dramatically, there is inherently no singular ‘proven’ strategy for lowering teen pregnancy rates, for reducing smoking or promoting healthy eating because all require behavioral/relational interventions of one kind or another. Professionals in the fields can certainly advance their collective knowledge, but only so far, and the extent to which ‘lessons’ from one context can be generalized to another is likely to be low.

An Alternative Approach: In Theory, in Practice

It is precisely *this* space in the implementation process where our traditional strategies struggle, and where an alternative is needed. Various such alternatives are now emerging, though naturally we are partial to our own formulation – known as Problem-Driven Iterative Adaptation (PDIA) – since we like to think that it is the approach most thoroughly grounded in historical experience, empirical evidence and (cross-disciplinary) development theory. PDIA, as most fully and formally articulated in Andrews, et al (2017), draws on the disciplinary traditions of public administration (Andrews), economics (Pritchett) and sociology (Woolcock). PDIA is also broadly consistent with earlier pioneering work in public health on ‘positive deviance’ (Marsh et al 2004), in which close examination of local variations in vexing issues, such as nutrition in poor communities, is used to identify those places and people where superior response strategies have been (indigenously) devised. As its constituent words suggest, PDIA is a strategy for building implementation capability that is *problem-driven* (by local professionals, as opposed to ‘solution selling’ by external experts), *iterative* (in which space is created and protected for exploring an array of responses to prioritized problems, each assessed at regular intervals, as opposed to a one-time ‘evaluation’ at the project’s conclusion), and *adaptive* (in which reformers seek customized ‘best fit’ rather than replicated ‘best practice’ responses, arrived at and legitimized through local processes). Recent work seeking to account for China’s extraordinary development success (Ang 2016) suggests its strategy has been broadly consistent with this approach; in partial contradistinction to other ‘big picture’ explanations of development success and failure (e.g., Acemoglu and Robinson 2012) which conclude that ‘good institutions gets you success’, the more actionable PDIA approach suggests instead that ‘success gets you good institutions’.

As such, PDIA understands itself to be a complement to, not a substitute for, ‘traditional’ development assistance because it seeks to respond constructively to issues that are otherwise ignored

or misconstrued by prevailing administrative instruments. *PDIA's fundamental goal is building state implementation capability by delivering results*; put differently, PDIA measures its success almost exclusively by whether it helps teams whose job it is to deliver a task to actually do this, not by assessing whether or not they have first built (or 'reformed') a structure that merely looks like an effective one. PDIA focuses less on what external facilitators do (or might do), instead putting the onus almost exclusively on nurturing and supporting what those tasked with doing the work can demonstrably do; in this sense, as a reform strategy, *PDIA seeks to influence at scale rather than operate at scale*. The primary goal is not building implementation capability among donors or other 'suppliers' of development assistance (though perhaps it may serendipitously have this effect); it is a form of applied pedagogy whereby teams within government organizations – supported by a presiding official who provides (and sustains) the necessary authorizing environment – learn to perform incrementally more complex tasks. In this sense, PDIA seeks to help organizations 'learn' in ways akin to that of individuals learning complex tasks such as a foreign language or a musical instrument: that is, by doing it, by struggling, persisting, exploring, refining.

An example of how PDIA has been used in public health comes from Mozambique, where the Minister of Health approached the Harvard Ministerial Leadership Program for assistance with addressing his country's maternal mortality concerns (Andrews 2017). A team comprising representatives from across various departments in the central ministry was assembled for a three-day workshop, and tasked with breaking down the maternal mortality problem into its constituent components. The team proceeded to identify six such components (poor access to services, cultural issues, transportation, et al), presenting them in a fish-bone diagram to show the ways in which they were interrelated. Team members then fanned out across the various provinces of Mozambique to present and then refine the diagrams on the basis of input regarding local context idiosyncrasies. The teams then worked with provincial counterparts to start addressing key issues, devising small interventions in all cases, such as providing food at waiting centers, enhancing security at clinics, and painting clinics to improve their appeal. The key idea was take small initial steps as part of a longer-run process of building towards larger solutions. This exercise was conducted as a one-year pilot, but even during this relatively short time period mobilized significant work which the World Bank then attempted to build on in a loan for the health sector. (A vastly larger and more detailed account of PDIA in action can be found in Andrews, Ariyasinghe et al [2017], in which a team in the Government of Sri Lanka is tasked with significantly expanding direct foreign investment.)

Conclusion

How can contemporary development professionals best interpret and perhaps contribute to the evolving 'adaptive implementation' landscape? My sense is that, certainly in the present moment, we should be encouraging a broad array of (putatively) 'alternatives' to orthodoxy. This was the original intent of the 'Doing Development Differently' (DDD) manifesto: those who initiated it (at Harvard Kennedy School and the Overseas Development Institute) sought to create a 'big tent' under which those exploring new approaches could gather and present their work. DDD was itself never a singular 'approach' or 'paradigm', but rather an open convening space where kindred spirits working both within and beyond governments, NGOs, advocacy groups, think tanks and major development agencies could share their experiences and hard-won 'lessons'. These insights are also important for high-income

countries, especially those struggling to provide effective health services to remote or marginalized populations (see, for example, Moran 2016 on such efforts with indigenous communities in Australia).

The very essence of complex problems, as defined above, is that they don't have a solution *ex ante*; any such solution is only discerned in and through the very process of trying to find it (Kauffman 2016). That is why we need a broad, patient and persistent 'social movement' to advance the agenda – so that, collectively and incrementally, a community of development professionals can figure out how to design, fund, implement, procure, and assess 'best-fit' interventions that respond in locally legitimate ways to vexing problems that locals themselves have nominated and prioritized. From a PDIA perspective, however, the overarching *development* challenge and objective remains building (state) capability for implementation – since any policy or strategy is only as good as its implementation. The inability of too many governments in low-income countries to be able to perform even their most basic responsibilities, in public health and beyond, is increasingly the 'weak link in the chain' for realizing everything else.

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