Enhancing **Public Sector Demand for** & **Scaling of** Health Innovation

Briefing Note summarizing
a new approach to integrating innovation
to strengthen public health systems

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Introduction

The scaling up of promising health innovations in Low- and Middle-Income countries (LMICs) is becoming an increasingly important area of interest for actors seeking to build efficient, resilient and adaptive health systems. The challenges of meeting the health targets set out in the 2030 Sustainable Development Goals are significant — even for those countries with mature and well-resourced health systems — and this is generating increased interest among many governments in exploring how health innovations might help to accelerate their progress.

International development agencies committed to supporting SGD targets have been active for many years on the supply-side of this equation, providing funding and technical assistance to innovators with a view to building a pipeline of health innovations. While the emphasis on finding solutions has surfaced some powerful and impactful innovations proven to help improve health outcomes, the 'pipeline' has become, in reality, more of a 'pile-up' with only a tiny proportion of those innovations actually successfully going to scale. Many factors appear to be influencing this process. While innovations or programs developed in the context of donor-funded projects have largely focused on scaling up through the public sector, this has been less the case for innovations generated from Grand Challenges or other independent innovation mechanisms. A large proportion of these have focused on scaling through commercial (market-driven) pathways, with support for innovators oriented towards social enterprise / for-profit models. In contrast, case studies and best practices for scaling innovations through public sector scaling pathways remain somewhat scarce, as does support for innovators pursuing those pathways.

A key contributing factor to this is that while there are a wide range of innovations that have been developed and tested against a well-defined problem, a large proportion of these have failed to take into account whether demand or political will for uptake of those innovations within the public sector exists. Some innovations gather dust on the shelf because their requirements for sustainable implementation at scale are significantly misaligned with the realities of resource-constrained settings. Others lack clarity around which problem they are really trying to address, thereby confusing potential adopters within government as to how these innovations might be most efficiently deployed. Perhaps most significantly, the processes by which many innovations are designed and tested have typically excluded or relegated government participation until the very final stages. They have assumed that if an innovation produces promising results at a pilot / proof of concept stage, demand for and the resources required for scale-up of that product or service among governments and others will naturally materialize (or be easily generated with minimal advocacy). In reality, this is rarely the case and the few health innovations that do go to scale in this more spontaneous manner are typically those that fulfil a very unique set of characteristics.[1]

This report suggests that successful scale-up of innovations through the public sector in LMICs requires a much more sophisticated understanding of, and support for, the demand-side of the process. Innovators and their supporters need to find more ways to work collaboratively with potential government adopters or purchasers of innovations from the very beginning to support co-creation of solutions and smoother pathways to scale. In this way, donors, innovators and governments can co-create an environment that more effectively enables health system integration of innovations in the long term.

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[1] Some of these characteristics that appear to support rapid, 'spontaneous' scaling include: (1) very low unit cost (a fraction of per capita health expenditures, fits within domestic fiscal constraints); (2) double- or triple-digit ROI with returns achievable in a short time horizon i.e. under a year; (3) simple and easy to adopt and use (often similar to existing technologies, i.e. plug and play); (4) tangible results that are easily observable and associated with the intervention; and (5) outcomes that create few 'losers' in terms of users, producers or challenging vested interests within the existing status quo.

About this Briefing Note

This Briefing Note summarizes a more detailed report, funded by Grand Challenges Canada (GCC), on how to better understand and catalyze demand and subsequent scale-up of health innovations by public sector actors. The two goals were to:

a) identify the key factors influencing government demand for and scaling of innovation; and

b) identify a potential model / suite of solutions that international innovation supporters such as GCC could support to enhance public sector innovation demand and scaling.

The findings were generated from a rapid review of the literature on innovation and scaling in a health context, combined with extensive key informant interviews of individuals with 'lived' experience of this issue, focusing in particular on Kenya as a specific target for pilot solutions. These findings are relevant for donors such as GCC, who support both innovation and transitions to scale, as well as public health officials (PHOs) and private sector actors in LMICs, including local social enterprises and international NGOs.

Key Definitions

- We use the definition of innovation adopted by the [International Development Innovation Alliance (IDIA)](), which refers to innovation as *a new solution (e.g. product, policy, service, partnership) with the transformative ability to accelerate impact*.

- In this report, we focus on demand by public sector actors at all levels (national and sub-national) for innovative policies, products, services and/or ways of working that are designed to improve population health outcomes. To this end, we define **'demand'** as the *request / articulation of interest by a government for a particular product or service.*

- We define **'scale'** as the point at which an innovation has been able to reach a significant percentage of its targeted clients or users within a given geographic location, population or demographic group. In particular, we focus in this report on **public sector scaling**, understood as *the range of pathways and roles through which governments play a leading role facilitating the expansion of an innovation's impact in order to sustainably address a targeted need.*

While there are no pre-determined blueprints for success, the interviews and literature that have informed this research suggest that within the public health sector, innovations tend to follow three broad scaling pathways:

a) Approval and Accreditation — when a government provides approval for a product or service to be implemented within the public health system.

b) Purchasing, Procurement and Public — Private Partnerships — when the public sector purchases goods and services as inputs into its own delivery (procurement), or contracts out or outsources service provision (usually through Public Private Partnerships).

c) Adoption and Integration — when the public sector adopts and takes ownership of and responsibility for integrating the innovations within the public health system.

As this research shows, the factors that influence the 'demand' for and 'scaling' of health innovations often overlap, to the extent that demand for an innovation will likely be highly dependent on the subsequent interest or ability to scale it. Similarly, a lack of funding or capacity for scaling contributes to disincentives to look for innovations and limits the likelihood of clear demand being articulated. For this reason, it is important to treat demand and scaling as points along a single continuum of an innovation's journey, rather than as issues that can be addressed or enhanced in isolation of each other.

Factors Influencing Public Sector Demand for, and Scaling of, Health Innovations

Six key factors were identified in this research as follows (see main report for more details):

1. Public Sector Articulation of Demand

■ *The current global emphasis on universal health coverage (UHC) has created a supportive environment for health innovation and private sector engagement – but policy goals, objectives and strategies lack specificity around innovation 'entry points'*

■ *Frontline' health staff with greater knowledge of problems and needs are not sufficiently involved in health planning and budgeting*

2. Public Sector Incentives to Look for Innovations

■ *Government officials have little motivation or time to search for innovative solutions without the existence of mandated departments or positions*

■ *Governments are more likely to seek solutions from well-connected actors with whom they have long-term relationships and who are already established within their country*

■ *Governments are less incentivized to seek solutions that are too costly or that may be disruptive to vested interests*

■ *Governments are more incentivized to adopt solutions that are presented by donors or their partners in Technical Working Groups, especially when scaling comes with external funding*

3. Public Sector Awareness of Potential Innovations

■ *Public health officials' awareness of health innovations is largely limited to those that are brought to their attention, particularly through Technical Working Groups composed of donors and large INGOs*

4. Public Sector Ability to Engage Effectively with Innovations and Innovators

■ *Our research and interviews suggest that the ability of public sector officials to engage with innovations and innovators is influenced by how far they reflect the different characteristics set out below:*

Characteristics of Innovations and Innovators that are likely to enhance government engagement	
INNOVATION CHARACTERISTIC	**INNOVATOR CHARACTERISTIC**
Low unit purchasing and operating costs	Able to communicate a clear vision of success and a defined scaling pathway
Ease of use of the innovation by government	Able to involve the public sector early in the process
Greater cost-effectiveness compared to existing technologies / approaches	Locally recognized, with long-term presence and established relationships on the ground
Ability to provide evidence of positive impact within the timeframe of a political cycle	Ability to understand the relevance of their innovation across boundaries
Integrates the latest thinking / technology in terms of how it works	Knowledge of the factors / incentives that will influence uptake and scaling of their innovation by different actors
Is relevant to policy priorities and quickly implementable	Multilingual (in the sense of being able to understand the jargon and incentives of different government actors)
Requires relatively small changes in existing systems, behaviors, infrastructure and/or practices	Ability to integrate participatory, human-centered design techniques into the design or delivery of the innovation

5. Public Sector Financial Resources and Political Will To Fund Scale-Up

- *Very little public health expenditures is discretionary and available for scaling innovations*
- *Elected policy makers have strong political motivations for quick returns, low risk, high visibility and relevancy to voters*
- *In devolved or federal countries sub-national health spending is often very limited, and challenged by cash flow problems from the center*

6. Public Sector Rules, Regulations and Procedures

- PPP regulations are not suited for scaling new innovations
- Procurement and contracting regulations are often outdated, burdensome and complex and either not designed for new innovations or favor large, existing suppliers

A 'Mountain model' to enhance public sector demand and scaling

Building on the findings of this research, this section summarises a facilitated process that can respond to the challenges and opportunities identified. Its primary goal is to provide support to LMIC national and local governments in scaling innovations that are aligned with their health priorities. This point cannot be overemphasized — it is not prescriptive. In fact, the only structure it has is a set of stages, relevant stakeholders and decision points surfaced from this research that will help to guide the overall process and ensure an efficient use of everyone's time. It has been designed in accordance with the following 'critical success factors' that surfaced through our interviews:
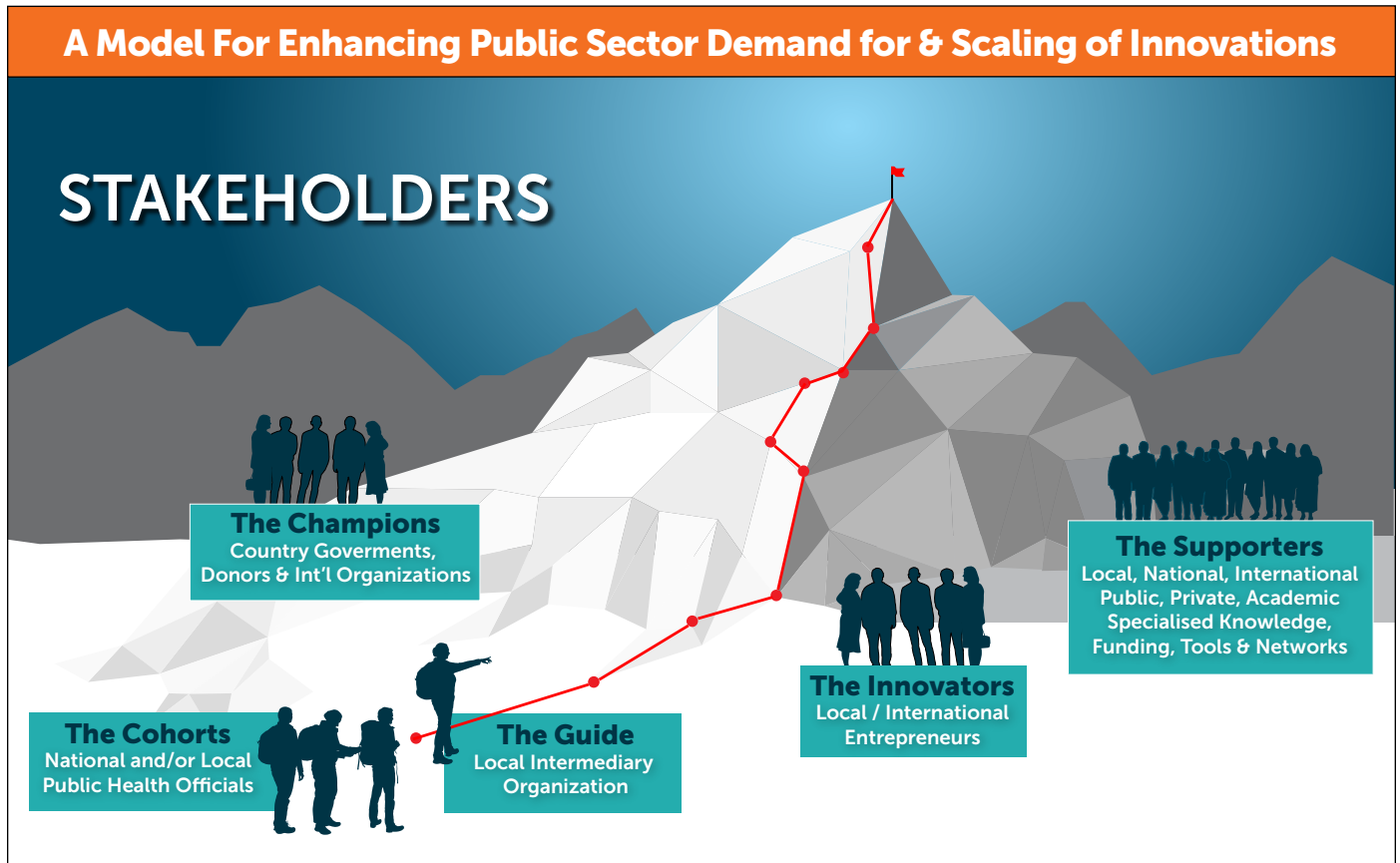
- ✔ Treat **demand and scaling as points along the continuum of an innovation's journey**, rather than as issues that can be addressed or enhanced in isolation

- ✔ **Design to the incentives** (actual and potential, professional and personal) of different actors

- ✔ Ensure **local actors lead in determining goals, pace and direction**, using Human Centered Design approaches to co-create metrics and milestones to capture engagement and sustainable capacity (rather than only those associated with the innovations being scale)

- ✔ Facilitate **flexible access to different kinds of support** (especially from local actors) as needs emerge, rather than one-off training / capacity-building initiatives

- ✔ Enable **early engagement and relationship-building among and between supply/demand actors**, sustained by regular **cohort learning opportunities**

- ✔ Leverage / strengthen **existing local assets and networks** as the basis for sustainability

In taking these 'critical success factors' into account, we developed an integrated approach that uses the metaphor of climbing a mountain to communicate the different kinds of support and intervention that will be required at key points along the demand and scaling journey. Key to this process is establishing the following five stakeholder groups (see Figure 1 on page 6), whose expertise and resourcing will be mobilized in a demand-driven way to help address barriers as and when they emerge.

FIGURE 1: Key Stakeholders within the "Mountain Model"

A Model For Enhancing Public Sector Demand for & Scaling of Innovations

STAKEHOLDERS

The Champions
Country Goverments,
Donors & Int'l Organizations

The Supporters
Local, National, International
Public, Private, Academic
Specialised Knowledge,
Funding, Tools & Networks

The Innovators
Local / International
Entrepreneurs

The Cohorts
National and/or Local
Public Health Officials

The Guide
Local Intermediary
Organization

1. **THE CHAMPIONS** — Country/county governments, innovation funders and international agencies who are interested in providing overarching resources for activities to enhance public sector demand and scaling of innovation in a particular context / sector.

2. **THE COHORT** — a discrete group of national and/or local public health officials who share a willingness and ability to embark on a process of improving their uptake and scaling of health innovations.

3. **THE GUIDE** — a local intermediary organization with deep contextual knowledge and cross-cutting networks, who will listen, learn, support and connect the Cohort to different resources and actors at key points along the scaling journey to help overcome barriers. In this way, the Guide performs the critical long-term 'hand-holding' of government actors as they encounter inevitable challenges in ascending the mountain.

4. **THE INNOVATORS** — a pool of local, national and international entrepreneurs with solutions that can be matched, adapted and mobilized to meet the specific innovation demands of governments, as and when this demand is articulated.

5. **THE SUPPORTERS** — a pool of diverse public, private and academic actors from local, national and international contexts who can be mobilized at different points in the scaling journey to provide specialized knowledge, technical expertise, funding tools and/or networks to the Cohort based on the challenges they face.

The first step in establishing these stakeholder groups is to convene one or more initial **Orientation sessions**, in which interested actors from all groups come together to align around a vision of success, objectives, relevant metrics and milestones of progress and a common

language to ensure clarity of communication along the way. This session is also critical in ensuring government actors are able to meet and start building relationships with the wide variety of other actors who will play a critical role along the scaling journey — especially innovators — and so they can take a leading role in shaping and designing the approach.

Through the Orientation session(s), a targeted Cohort of government actors from national and local county levels (in the Kenya pilot) will then be assembled and matched with a local Guide organization who will be their principal interlocutor as they work through the different stages needed to enhance their demand for and scaling of health innovation. Every cohort will likely follow their own particular route to the summit, based on their varying levels of readiness, understanding and resources as well as the different directions that their Guide may recommend along the way.

A Six-Stage Journey through Demand and Scaling

Building on the insights from this initial research and set of key informant interviews, we have identified six broad stages that we anticipate each Cohort will need to work through in order to make sustainable progress in sourcing and scaling innovations to meet their needs.[2] Importantly, this process will be demand-led rather than imposed or prescriptive, and the Guide will be the key to ensuring successful mobilization of actors and resources to help address whatever challenges emerge along the way.

STAGE ONE — Articulate Demand

A key finding of this report is that while most LMICs have well-articulated policy goals and objectives, these are often not translated into a sufficiently granular level to provide new or existing innovations with obvious entry points to contribute to those goals. We expect that

targeted technical assistance will be a key part of the solution here, working closely with national and local health officials to look at key gaps and inefficiencies hindering the achievement of policy goals and priorities and translating these into specific innovation entry points. Understanding current incentives (and disincentives) of different actors within the public system will also help to identify potential advocates and critics that will need to be navigated along the way.

STAGE TWO — Scan, Assess and Select Innovations

Thousands of innovations in health already exist. Though some of our interviews indicated that more needs to be done to ensure that there is a critical mass of health innovations ready for scaling, the focus of this second stage will be on helping government actors efficiently scan what it available, assess the pros and cons of different solutions and then make decisions around which they want to adapt/adopt going forward. This will require working in partnership with innovators and supporting institutions to (a) ensure that the necessary cost, impact and adoption information is available and comparable; (b) ensure they are able to clearly explain how their innovations work and how their impact is aligned with goals of concern to policymakers; and (c) articulate the potential of their innovation to accommodate contextual modification and adaptation. Subject to need / opportunity, a national or sub-national institution(s) may be engaged to lead the collection, assessment and curation of health innovations, serving as a neutral broker and convener as necessary.

STAGE THREE — Identify the Scaling Pathway

As noted in the opening to this report, experience suggests that there are three broad pathways for innovations to reach sustainable impact at scale through the public sector: (1) Approval and Accreditation; (2) Purchasing, Procurement and Public-Private Partnerships; and (3) Adoption and Integration. Based

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[2] These stages are supported by both interviewees for this research and the literature reviewed. For example, Stages 1-3 of the Mountain model align with the three phases proposed in forthcoming research from the African Collaborative for Health Financing Solutions: (1) Demand-driven articulation of opportunities for innovation; (2) 'Solution scouting' to help source and shortlist potential matching innovations; and (3) Co-design of an implementation plan aligned with the scaling pathway.
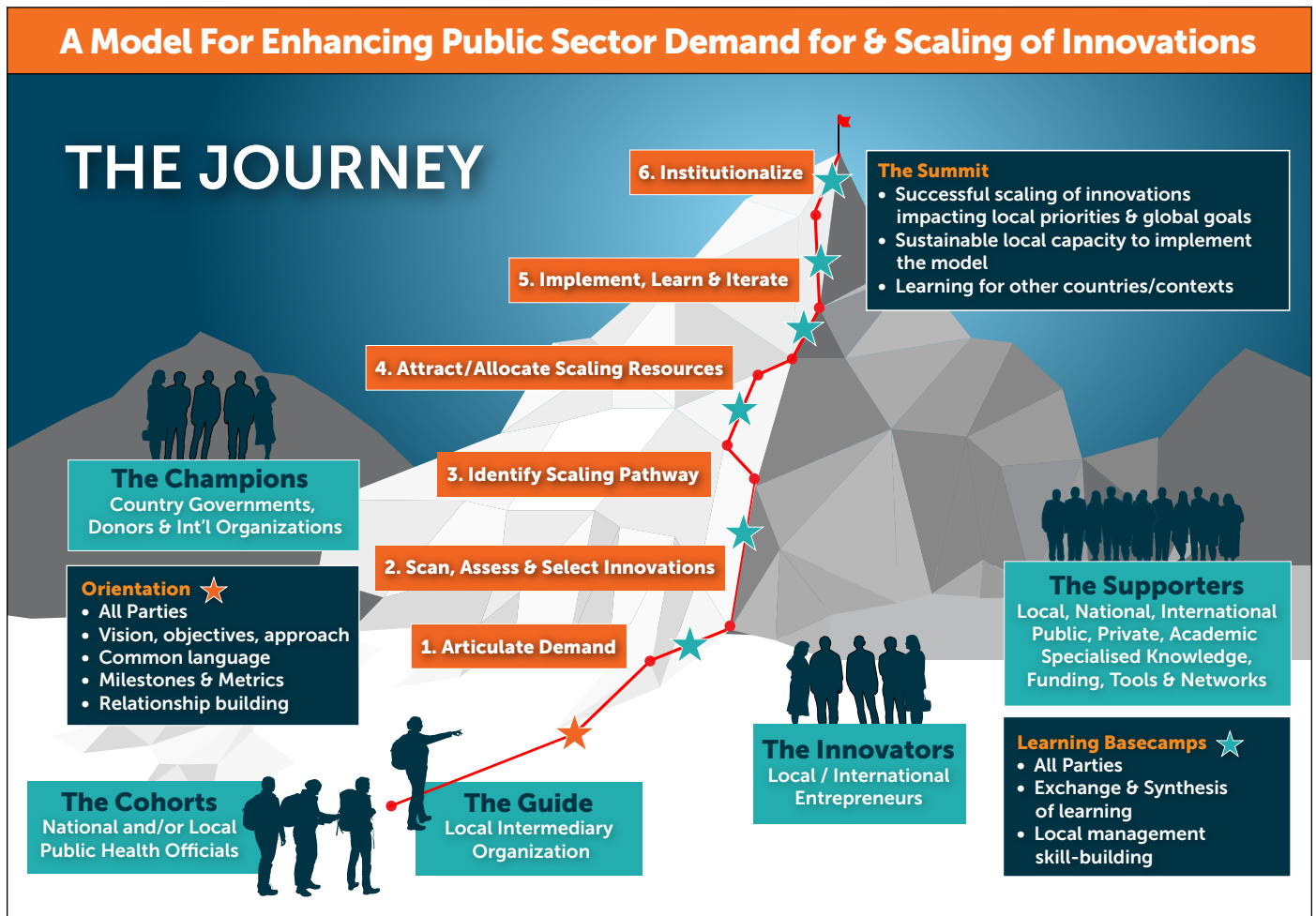
on an understanding of the problem being targeted, the specific demand articulated by the Cohort and the nature of the innovations that have been assessed as potential solutions, the Guide will work with the Cohort and other Supporters as necessary to map out the most cost-effective route to scale within their resource constrained environment. This will also likely involve assessing barriers / enablers associated with political will and identifying ways to create more enabling budgeting, procurement and regulation processes at different levels of government.

STAGE FOUR — Attract / Reallocate Scaling Resources

As noted in this report, LMIC governments have limited discretionary expenditure or resources allocated to

supporting innovation, at least within the health sector, and this is even more true of countries that remain more donor dependent than Kenya. We expect this stage to be especially challenging, requiring the Cohort to undertake a range of activities with the assistance of Supporters. This will likely include internal advocacy, political negotiation and influencing to attract or secure the reallocation of the resources needed. This will very likely be an ongoing process as resourcing requirements may fluctuate and once-committed resources may be reassigned as political priorities change. However, it seems that an initial 'carrot' of catalytic, matching funding from external donors (to cover initial innovator engagement and associated change management processes to support uptake) could be helpful in unlocking additional resources to support ongoing operating costs. Working with the Cohort to

FIGURE 2: The Cohort Journey through the Mountain Model

A Model For Enhancing Public Sector Demand for & Scaling of Innovations

THE JOURNEY

6. Institutionalize

5. Implement, Learn & Iterate

4. Attract/Allocate Scaling Resources

3. Identify Scaling Pathway

2. Scan, Assess & Select Innovations

1. Articulate Demand

The Summit
• Successful scaling of innovations impacting local priorities & global goals
• Sustainable local capacity to implement the model
• Learning for other countries/contexts

The Champions
Country Governments, Donors & Int'l Organizations

Orientation
• All Parties
• Vision, objectives, approach
• Common language
• Milestones & Metrics
• Relationship building

The Cohorts
National and/or Local Public Health Officials

The Guide
Local Intermediary Organization

The Innovators
Local / International Entrepreneurs

The Supporters
Local, National, International Public, Private, Academic Specialised Knowledge, Funding, Tools & Networks

Learning Basecamps
• All Parties
• Exchange & Synthesis of learning
• Local management skill-building

We are committed to using the Mountain model as a vehicle for empirical learning by introducing regular 'Learning Basecamps' during or after each of the five stages to help all of the associated stakeholders come together to reflect and exchange insights on their experience.

mandate responsibilities associated with the sourcing and uptake of innovations to new or redefined positions within government teams could also be effective.

STAGE FIVE — Implement, Learn and Iterate

Scaling is a long and difficult process, yet it is ironically the implementation phase that often attracts the least attention and planning. In fact, this stage is fraught with pitfalls including the need to adapt the innovation to align with changing systems structures and processes, often on an ongoing basis. This is accompanied by a need to strengthen or modify the wider system to support scaling of the innovation. Critical in this stage is the need to continue the adaptive learning approach and supporting data collection tools from the previous stages. Monitoring is also essential to know whether the innovation is having the expected impact, and whether iterative changes in direction or implementation might be needed in order to improve progress along the scaling pathway. Generating this kind of data and convening actors for regular review and discussion is vital to the broader demonstration of impact, which in turn helps to establish and sustain credibility, ownership, demand, resourcing and political backing.

STAGE SIX — Institutionalize

The final stage of the Mountain model is actually one for which the foundations will have been laid throughout the entire process. By 'institutionalize' we are here referring to the capacity of the public sector actors (or other local institutions as appropriate) to independently implement the different stages of the Mountain model successfully such that demand and scaling responsibilities are integrated / mandated within existing roles and partnerships (or in new institutions). Following each stage of the Mountain model, participants will come together in a Learning Basecamp to discuss — among other things — what it would take for that stage to be locally-led and implemented on a sustainable basis. This final stage will then bring all of this together to understand what a sustainable, end-to-end version of the Mountain model might look like, who it would involve and how it would be resourced.

It is impossible to say for certain how long it may take Cohorts to work through these different stages and reach the 'Summit' point (see Figure 2 on page 8). However, we are committed to using the Mountain model as a vehicle for empirical learning by introducing regular 'Learning Basecamps' during or after each of the five stages to help all of the associated stakeholders come together to reflect and exchange insights on their experience. This learning will also be used to help drive innovation and scale-enabling changes in the wider environment, targeting in particular existing institutions or departments with roles that support cross-governmental learning and support.

Milestones and Metrics of Success

In a project of this kind, where there are few successful case studies to learn from, it will be important to measure the relative effectiveness of the Mountain model against a different set of metrics to those normally associated with innovation scaling (which tend to quantify success purely in terms of people reached or impacted by the solution). Enhancing public sector demand for, and scaling of, innovation is very much a change management process, and will likely require indicators that are focused on levels of engagement and sustainability. Figure 3 below provides an early indication of what these milestones and metrics of success for the Mountain model might look like, recognizing that these will ultimately be decided in collaboration with the key stakeholder groups in the Orientation session noted above.

FIGURE 2: Potential Milestones & Metrics of Success for the Mountain Model

Potential Milestones & Metrics of Success

INDICATOR THEME	SHORT-TERM	MIDDLE-TERM	LONG-TERM
Incentives & Engagement	■ Government actors and Innovators are motivated to participate in the Cohorts	■ Innovations are identified that match articulated demand ■ Cohort participants demonstrate sustained depth and duration of engagement	■ Platforms/forums are formalised to support regular and effective engagement between Govt, Innovators, funders and other partners (national and county levels)
Capacity & Skills	■ Innovation demand and associated engagement needs are articulated ■ Diverse offerings from Supporters are secured	■ Cohort participants develop and apply new knowledge and skills ■ Cohort capacity needs are effectively matched to Supporter offerings	■ Formal, sustainable capacity and mandate is established to support ongoing learning around and promotion of innovation at national and county levels
Resources & Ways of Working	■ Governments are able to define resourcing needs associated with different scaling pathways	■ Barriers and practices hindering innovation integration are identified ■ Resources for innovation scaling are attracted / reallocated	■ Enabling policies and processes supporting effective innovation procurement, resourcing and scaling are in place at national and county levels

Conclusion: A Call for Champions & Supporters to get involved

This Briefing Note summarizes a fuller report from the first part of a wider initiative supported by Grand Challenges Canada to enhance public sector demand for, and scaling of, innovation. As we move closer to testing the Mountain model with a specific cohort (or cohorts) of government health officials in Kenya in 2021, we warmly invite other actors who are interested in this process to join us and contribute their learning, expertise and resources in either the Kenya pilot, or testing the Mountain model in another country context or sector. This is an exciting and challenging initiative, but one which we hope will greatly enrich and advance the immature evidence base around public sector scaling of innovation to improve and save the lives of countless millions in need of better services and support.

If you would like to get involved, please email Tom Feeny (Senior Program Director)) at tfeeny@r4d.org.

For more information visit **www.R4D.org**