

A Platform to Accelerate Global Reductions in Chronic Diseases



Toward Action

Samuel G. Ruchman*, Sandeep P. Kishore^{†,‡}, Prabhjot Singh^{†,‡,§}

New York, NY, USA

Addressing the increasing burden of chronic and non-communicable diseases (NCD) worldwide, especially in low- and middle-income countries (LMIC), will demand innovative action that cuts across political, social, and health systems. NCD initiatives remain underfunded and under-prioritized at global and national levels, exacerbating vulnerabilities to NCDs' rising human and fiscal toll, for both health systems and households [1]. Private foundations have largely untapped capacity to achieve high impact in effectively addressing NCD, especially in LMIC, by investing in platforms to improve and coordinate action on health challenges, including: 1) a global NCD business plan; 2) a next-generation network; 3) a central action center; and 4) a laboratory for systems research and demonstrations.

PREPARING FOR THE WORK AHEAD: LESSONS FROM MALARIA

Platforms to coordinate mass action are crucial in other global health efforts. The fight against malaria, despite being less complex than the broad array of diseases and risk factors that NCD efforts must address, provides important insights for advancing work against NCD, especially in LMIC. In 2015, Bill Gates and Ray Chambers jointly released the world's first business plan for ending malaria, which will guide strategic thinking and investment for malaria elimination, especially on the research and development and innovative financing agendas, for decades to come [2]. This business plan provides the blueprint for setting a comprehensive eradication strategy that is reinforced at multiple political levels and across sectors.

Gates and Chambers's plan builds on key contributions from business and foundations. First, internationally, foundations have helped convene accountability mechanisms to ensure political will for the creation and implementation of vital policies. One example was uniting 49 heads of state in the African Leaders Malaria Alliance. Second, multisectoral partnerships, such as the Roll Back Malaria Partnership, have supported countries in developing operational plans, analyzing funding gaps, and coordinating advocacy. On global and national levels these partnerships have aided public officials in making the case for prioritization of malaria through return on investment analysis. Setting quarterly targets for implementation of interventions such as bed nets is considered to have improved coverage.

The time has come for such a business plan—a blueprint for NCD—given the stark disparity between

funding for and burden of NCD. Aggregated statistics show that in 2015 NCD accounted for just 1% (\$480 million) of global health financing and 4% (\$140 million) of private and corporate philanthropy, excluding the Bill and Melinda Gates Foundation. Of this, 9% (\$41 million) of funding was focused on tobacco, more than one-half of which was provided by the Bill and Melinda Gates Foundation, and 27% (\$130 million) of funding was focused on mental health, more than half of which was channeled through nongovernmental organizations and foundations via private philanthropy [3].

There is no shortage of interventions. The Council on Foreign Relations' Independent Task Force report on NCD [4], World Economic Forum [5], and cohorts of academics [6,7] have crucially identified cost-effective priority interventions, such as mass media campaigns against salt intake or subsidies for healthier foods, urgent research gaps, and entry points for multipronged action in the interactions between risk factors, structural issues, and poverty. However, it is difficult to mobilize resources for NCD and to reduce, manage, and prevent them because NCD are diffuse, socially embedded, and not amenable to a single health care delivery, policy, or social intervention alone. These are key hurdles toward early catalytic action, and an integrated platform and plan for NCD is still missing.

BUILDING A PLATFORM FOR ACTION

Toward a global blueprint on NCD we propose 3 action levers that must be engaged to make progress toward meeting the 2030 global goal of reducing preventable and avoidable deaths by one-third.

- **Policy Action:** structural reduction through proven policies in line with the 2011 UN Political Declaration on NCD and the Global Action Plan from the World Health Organization.
- **System Action:** redesign of health systems and construction of novel clinical care models, with increased funding for public sector health care and incentives for private sector health care to compete.
- **Social Action:** proactive prevention through social mobilization, driven by the risk factor profile of the younger demographics that creates and sustains health outside facilities.

Finally, underlying these 3 pillars, there must be a real-world, real-time system for monitoring burden,

The authors report no relationships that could be construed as a conflict of interest.

The views expressed in this article are those of the authors and do not necessarily represent the views of the Icahn School of Medicine at Mount Sinai, the Mount Sinai Health System, the Petersen Center for Health care, or the Office of the UN Secretary-General's Special Envoy for Health in Agenda 2030 and for Malaria.

From the *Office of the UN Secretary-General's Special Envoy for Health in Agenda 2030 and for Malaria, New York, NY, USA; †Arnhold Institute for Global Health, Icahn School of Medicine at Mount Sinai, New York, NY, USA; ‡Department of Health System Design and Global Health, Mount Sinai Health System, New York, NY, USA; and the §Peterson Center on Healthcare, New York, NY, USA. Correspondence: P. Singh (prabhjot.singh@mssm.edu).

GLOBAL HEART
© 2016 World Heart Federation (Geneva). Published by Elsevier Ltd. All rights reserved.
VOL. 11, NO. 4, 2016
ISSN 2211-8160/\$36.00.
<http://dx.doi.org/10.1016/j.jheart.2016.10.010>

risk, and progress. More accurate, up-to-date intelligence will accelerate investments in high-impact areas and identify structural barriers to progress in poorly performing areas.

To date there is no central, globally visible platform for catalyzing solutions that cut across the action levers, driving health gains with low-cost, innovative, scalable tools. Although each action lever warrants focus in isolation, a new action center that can integrate learnings and solutions between the levers could power greater, sustainable impact.

For example, reducing the burden of both cardiovascular disease and diabetes requires isolated and concerted action across the 3 action levers. Structural reduction requires strong policy measures (e.g., regulatory changes in food industries, built environment that promotes physical activity, tobacco taxes such as those implemented in New York City). Those communities at risk or already sick require scaled up and improved access to high-performing disease management (e.g., blood pressure and lipid screenings, distribution of statins and glucagon to contain the disease). Finally, movements for behavioral and social changes outside health facilities provide a mechanism for addressing the diseases at their roots in the social and economic fabric of the community.

TOWARD ACTION: OPPORTUNITIES FOR PRIVATE FOUNDATIONS

Innovative platforms for NCD can cut across these structural, operational, and behavioral issues. For example, the Young Professionals Chronic Disease Network (YP-CDN) comprises more than 5,000 young professionals in 157 countries. They have successfully advocated for the inclusion of NCD drugs, such as statins and the beta-blocker bisoprolol on the World Health Organization's Essential Medicines List; have published op-eds and scientific literature; and have led grassroots activism efforts, including the creation of Nigeria's first bone marrow and stem cell registry. YP-CDN epitomizes peer-to-peer engagement for accelerating complex sets of changes on local and global levels.

These leaders are essential for transforming public health systems from being centered in facilities that react to communicable diseases to a culture that emphasizes prevention-focused policies, outreach, and social mobilization that is both cost efficient and relevant to communities. The Nairobi chapter of YP-CDN has reached thousands of youth in churches, schools, and slums in creating a health movement for proactive, community-based prevention. These leaders now serve in Kenya's Ministry of Health on the NCD Unit and work toward improving structural reduction and disease management. A global NCD fellowship could similarly be an important contribution to building international next generation leadership for multipronged NCD efforts that grow and scale with community leaders [8].

Both the support of action centers that integrate real-world context and the engineering of high-value and high-impact care models, policy interventions, and social mobilization are needed to fuel health gains across the 3 action levers. The highest performing interventions could then be scaled, integrated, and sustained with business and operational plans through networks of doers and institutional leaders.

Here we propose 4 inter-related opportunities to pursue an action agenda, which will require an investment of approximately \$25 million over the next 5 years to create a common, integrated platform.

- **Business Plan.** A global strategic business plan for NCD action will include a blueprint to identify, finance, and implement high-value, cross-cutting approaches. This plan will guide investments and political commitments to power policy, system, and social action with core stakeholders inside and, most importantly, outside of traditional health systems.
- **Next-Generation Network.** A young professional NCD action network would constitute a global social good, delivering blueprints and roadmaps to implement policy levers that can achieve NCD reductions and evaluate their impacts at the community level. Growing this network to 100,000 change agents in capital cities and rural communities worldwide will require an estimated \$2 million per year for 5 years. Such an investment would prepare the next generation of health leaders to drive the NCD response in communities worldwide.
- **Global Action Center.** A global network of actors, including academic institutions and civil society stakeholders, closely collaborating with the WHO Global Coordination Mechanism and United Nations could foster public, private, and civil society health systems action in diverse contexts at \$2 million per year for 5 years. A key feature of this platform would be the use of pre-existing and novel impact data, including key indicators for the business plan on NCD and the most relevant Sustainable Development Goal indicator inputs from community members worldwide in a distributed network. Data would be analyzed with real-time, real-world monitoring technologies to assess impact and guide implementation in a continuous feedback loop, guided by the community stakeholders themselves.
- **Action Research.** A learning laboratory to drive demonstration and real-world operational projects for basic health systems research would translate known knowledge into high-impact, high-value actions across geographic contexts. This could be implemented at scale costing \$1 million per year for 5 years, with opportunities to scale in any geographic context.

CONCLUSION

Optimizing the outcomes of foundations' strategic investments in NCD will require new approaches that cut

across complex structural, behavioral, and operational factors in NCD prevention and management, and a coordinated platform to support them. Only a comprehensive strategy for population health—one that seeks both to improve health outcomes and to impact societal determinants of risk [9]—can achieve sustainable reductions in the burden of NCD on health systems and the communities they serve. A coherent business plan for NCD, similar to that for malaria, will be especially pertinent in LMIC as the structural and behavioral issues that underlie many NCD continue to evolve over the next 15 years. Private foundations should seize the opportunity to make catalytic investments in action centers that support communities to create, implement, and scale up cost-effective solutions for their needs across the levers described here. Ultimately such efforts will become part of a global exchange of innovations, led by a new generation of health workers sharing insights and successes across borders and at scale worldwide. A bold action plan and innovative platforms will empower new leaders to transform health systems into proactive, prevention-focused networks of policies, practices, and social movements tailored to the needs of a new era in global health.

REFERENCES

1. Kankeu HT, Saksena P, Xu K, Evans DB. The financial burden from non-communicable diseases in low- and middle-income countries: a literature review. *Health Res Policy Syst* 2013;11:31.
2. Gates B, Chambers R. From Aspiration to Action: What Will It Take to End Malaria? Available at: <http://endmalaria2040.org/assets/Aspiration-to-Action.pdf>. Accessed April 29, 2016.
3. Institute of Health Metrics and Evaluation. Financing Global Health: Viz Hub. University of Washington. Available at: <http://vizhub.healthdata.org/fgh/>. Accessed April 29, 2016.
4. Independent Task Force on Noncommunicable Diseases. *The Emerging Global Health Crisis: Noncommunicable Diseases in Low and Middle-Income Countries*, Independent Task Force report no. 72. New York, NY: Council on Foreign Relations Press; 2014.
5. World Health Organization and World Economic Forum. From Burden to “Best Buys”: Reducing the Economic Impact of NCDs in Low- and Middle-Income Countries. Available at: http://www.who.int/nmh/publications/best_buys_summary.pdf?ua=1. Accessed April 29, 2016
6. Daar AS, Singer PA, Persad DL, et al. Grand challenges in chronic non-communicable diseases. *Nature* 2007;450:494–6.
7. Beaglehole R, Bonita R, Horton R, et al. Priority actions for the noncommunicable disease crisis. *Lancet* 2011;377:1438–47.
8. Kishore S. NCDs: can we and should we not do better? *The Lancet Global Health Blog*. Available at: <http://globalhealth.thelancet.com/2014/08/26/ncds-can-we-and-should-we-not-do-better>. Accessed October 21, 2016.
9. Kindig D, Stoddart G. What is population health? *Am J Public Health* 2003;93:380–3.