THE ROCKEFELLER FOUNDATION

FINAL EVALUATION

Disease Surveillance Networks Initiative
Global

February 2011

Final Evaluation
of the
Rockefeller Foundation's
Disease Surveillance Networks Initiative
Global

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ACKNOWLEDGEMENTS

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ACRONYMS

ADB	Asia Development Bank
ANALP	Active Network for Accountability and Learning in Humanitarian Action
APEC	Asia Pacific Emerging Infections Network
APSED	Asia Pacific Strategy for Emerging Infectious Disease
ASEAN	Association of Southeast Asian Nations
CDC	US Centers for Disease Control and Prevention
CHORDS	Connecting Health Organizations for Regional Disease Surveillance .
DAC	Development Assistance Committee of OECD
DOD	Department of Defense
DSN	Disease Surveillance Networks
FAO	Food and Agriculture Program of the UN, based in Rome, Italy
FETP	Field Epidemiology Training Program
FELTP	Field Epidemiology Laboratory Training Program
GDD	Global Disease Detection program, CDC
GEIS	Global Emerging Infections Surveillance program, DOD
GladNet	Global Laboratories Directory and Network
GOARN	Global Outreach Alert and Response Network (Formal global WHO network)
GMC	Greater Mekong Collaboration, a project of the ADB Bank to create CDC-type disease surveillance and control in ADB eligible recipient countries
IGO	Intergovernmental Organization
IHR	International Health Regulations, passed by the World Health Assembly in 2005; implemented in 2007
MOH	Ministry of Health
MBDS	Mekong Basin Disease Surveillance
NTI	Nuclear Threat Initiative
OECD	Organization for Economic Cooperation and Development
OIE	Organisation Internationale d' Epizootique, animal health organization based in Paris
PHEIC	Public Health Emergency of International Concern
PHS	Pacific Health Summit, held in London, June 2010
SEAMEO	Southeast Asian Ministers of Education Organization, medical education network of ASEAN
SEARO	Southeast Asian Regional Organization of WHO, based in New Delhi, India
TEPHINET	Training Programs in Epidemiology and Public Health Interventions Network, a professional network of field epidemiology training programs located in 43 countries around the world, with its secretariat in Atlanta
USAID	United States Agency for International Development
WHA	World Health Assembly, annual assembly of member nations in the WHO
WHO	World Health Organization
WPRO	Western Pacific Regional Organization of WHO, based in Manila, Philippines

Executive Summary

The Rockefeller Foundation's Disease Surveillance Networks (DSN) Initiative was launched in 2007 under the new Strategy framework of the Foundation with the objectives of:

[1] Improving human resources for disease surveillance in developing countries, thus bolstering national capacity to monitor, report, and respond to outbreaks;
[2] Supporting regional networks to promote collaboration in disease surveillance and response across countries; and
[3] Building bridges between regional and global monitoring efforts.

In August 2009-2010 an independent external evaluation of the DSN Initiative was undertaken in three parts: in Asia, Africa, and at a global level. This report presents the results of the Global Evaluation which had the following objectives:

[1] To assess the relevance, effectiveness, efficiency, impact and sustainability of the Rockefeller Foundation's support to the DSN Initiative.
[2] To assess the underlying hypothesis of the DSN Initiative, that robust trans-boundary, multi-sectoral and cross-disciplinary collaborative networks lead to improved disease surveillance and response.
[3] To make forward looking recommendations to the Foundation on 1) the implications of the achievements, challenges and lessons from the DSN Initiative for the strategy and investments of the Rockefeller Foundation at a global and regional level; 2) priority linkages and synergies for DSN learning to benefit the work of other Rockefeller Foundation initiatives, regional offices, and key partners; 3) key priorities for funding and partnerships to sustain the gains made by the Foundation in the field of disease surveillance networks; and 4) other implications as identified.
[4] To contribute to the field of philanthropy by emphasizing the use of evaluation in grantmaking and by informing the field of development evaluation and assessment about methods and models to measure complex networks.

The DSN Initiative has five outcome areas:

[1] **Networks:** Trans-boundary disease surveillance networks in Southeast Asia and in Eastern and Southern Africa are formed, sustained, and evolved to enable disease surveillance practitioners to collaborate, share information, and learn how to more effectively address disease threats.
[2] **Capacity:** Disease surveillance practitioners and their institutions strengthen, apply, and distribute technical and communication skills in disease surveillance to more effectively address disease threats.
[3] **Tools:** Disease surveillance practitioners have increased access to and the use of improved tools and methods to effectively and efficiently monitor, share, and report information, and to respond to disease threats.

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[4] **Transdisciplinary Leadership in One Health:** Policymakers, human health, and veterinary practitioners take a transdisciplinary approach to policy and practice in animal and human health, emphasizing the One Health principles at the global, regional, and local levels.

[5] **Organizational Excellence, Accountability, and Learning:** The DSN Initiative team operates effectively and efficiently, provides leadership in the Rockefeller Foundation, contributes to the Foundation's mission, is relevant and accountable to its stakeholders, and learns from its monitoring and evaluation.

Based on feedback by grantees, stakeholders, field interviews, and desk studies, the Global Evaluation Team found that the DSN Initiative achieved these outcomes to a moderate or great extent. The hypothesis of the Initiative was generally supported by global and regional data, showing that robust trans-boundary, multi-sectoral/cross-disciplinary collaborative networks lead to improved disease surveillance and response. This is more systematically addressed in the regional reports covering specific outbreak responses and joint exercises.

The major contributions of the DSN Initiative to global health were found to be the fostering of the new fields of One Health and Global Health Diplomacy; use of informal networks in surveillance; and transnational collaboration and governance.

Stakeholders at global, regional and national levels validated the relevance of a networked approach to disease surveillance, and supported the concept, rational and logic underlying the DSN Initiative. The DSN Initiative was seen by stakeholders and influential leaders as an effective way of building trust among partners in historically unstable regions, and contributed to increases in capacity through training, tools, and technical support.

The evaluation found that grantees at the global level are showing good signs of sustainability by leveraging the funds of the Foundation to attract other donors. While the data indicates that many of the DSN Initiative activities and concepts are taking root globally and regionally, there is a risk that winding down support to the emerging fields of One Health and Global Health Diplomacy may leave them without much needed support at this stage of their development.

A major dimension of sustainability is the ability to achieve and sustain the profile of new ideas and practice. The evaluation noted that the DSN Initiative grantees in Asia and Africa do not write and publish their work as much as would be expected and needed to maintain and grow a new field. The Global Evaluation Team encourages the Foundation to emphasize the need for grantees to publish their work in peer-reviewed literature to enhance the work's influence in health and policy fields.

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The effectiveness of Foundation management of the DSN Initiative was evaluated within the limitations of available data. The evaluation found a good alignment of resources (staff, grant funding and non-grant activity) to the outcome areas and strategy of the DSN Initiative throughout the course of the initiative. Changes in management of the DSN Initiative, however, affected the continuity and consistency of grantees' relationships. Changes also limited the synergies across Rockefeller Foundation initiative portfolios.

For more effective ongoing management, the Global Evaluation Team encourages the Foundation to improve the documentation and data capture of initiative work to include the use of benchmarks and indicators in the initial review of proposals, improve documentation of changes to plans as work evolves, and synergies between portfolios of work.

The breadth of the influence of the DSN Initiative beyond disease surveillance warrants consideration of a new title for the body of work that reflects the many contributions made to communities of practice. The evaluation proposes "rebranding" some of the DSN Initiative work as Communities of Transnational Public Health Policy and Practice, to better reflect an evolving field going forward.

The Global Evaluation makes the following recommendations:

[1] The Foundation should continue to invest in transnational strategies as well as country-by-country strategies, as the two are not mutually exclusive and with increasing globalization transnational investment is essential to successfully assure "smart" globalization.

[2] The DSN Initiative contributed to the development of network strategies in climate change resilience and other areas of the Foundation's work. Elements of existing DSN networks should be considered as valuable Foundation (and stakeholder) assets to be fostered through additional funding where needed, and to be extended to other portfolios of investment.

[3] Sustainability is the ultimate proof of added value, thus an exit strategy for Foundation investment is of central importance. In particular fostering thoughtful integration of key Mekong Basin Disease Surveillance (MBDS) network elements with other efforts, such as the Association of Southeast Asian Nations (ASEAN), Asia Pacific Strategy for Emerging Infectious Disease (APSED), United States Agency for International Development (USAID), Asia Development Bank (ADB) and US Centers for Disease Control and Prevention (CDC), could help to assure population security in the region for the longer term.

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[4] As investment in some outcome areas of the DSN Initiative portfolio continues, revisiting the portfolio for a definitive summative evaluation using the tools and metrics developed in this global evaluation will be of added value especially in the areas of One Health and global health diplomacy, the establishment of the South Asia network, the maturation and evolution of governance of Connecting Health Organizations for Regional Disease Surveillance (CHORDS), the transfer of informatics capacity, and the strategy for institutionalization and sustainability of the MBDS network.

[5] Given the South-South nature of collaborative networking efforts in the portfolio, a greater emphasis on bilateral South-South negotiations within the emerging realm of global health diplomacy, and a more robust effort at inclusion of diplomatic and scientific leaders from the South will enhance the utility of this new field.

[6] Encourage and support publishing and communicating the work of the DSN Initiative and grantees. While global health diplomacy has prolific publications, in other areas of the DSN Initiative increased publications from grantees both in the peer reviewed and non-peer reviewed literature would enhance the visibility and influence of the work.

[7] Landscaping for prospective Rockefeller Foundation initiatives should include detailed identification of stakeholders and indicators as well as a theory of change. In particular population health metrics should be identified and modeled to where impact is anticipated through investment.

[8] The Foundation should make explicit the expected synergies among grantees towards the common vision of portfolio. Convening grantees is an important strategy in this regard. Experience with the DSN Initiative suggests MBDS convening with other grantees during their sessions and the initial Bellagio disease surveillance meeting was particularly fruitful in this regard. Specific prospective network mapping and indicators would assist this process.

[9] While Disease Surveillance Networks has served as the title of this portfolio in fact the work has created Communities of Transnational Public Health Policy and Practice in two regions and globally. Re-branding this effort more accurately is worthy of consideration.

We would like to commend the Foundation's efforts at building evaluation capacity in developing countries, and internally at the Foundation. There are considerable strides being made within the Foundation that will address the challenges the DSN evaluators faced during the course of work, including improving accessibility to records and reports, formalizing learning mechanisms within the Foundation, operationalizing evaluation and learning, and establishing metrics to aid in ascertaining impact of Foundation efforts.

The Global Evaluation Team
University of Washington

1. Introduction and Objectives

In August 2009, the Rockefeller Foundation commissioned an independent external evaluation of the Disease Surveillance Networks (DSN) Initiative in Asia, Africa, and globally. This report covers the results of the global component of the *summative and prospective*[1] evaluation, which had the following objectives:

[1] Assessment of performance of the DSN Initiative, focused on its relevance, effectiveness/impact, and efficiency within the context of the Foundation's initiative support.

[2] Assessment of the DSN Initiative's underlying hypothesis: robust trans-boundary, multi-sectoral/cross-disciplinary collaborative networks lead to improved disease surveillance and response.

[3] Assessment of the quality of Foundation management (value for money) for the DSN Initiative.[2]

[4] Contribute to the field of philanthropy by:

    a. Demonstrating the use of evaluations in grantmaking, learning and knowledge management; and

    b. Informing the field of development evaluation about methods and models to measure complex networks.

While implicit in Objective 4a and 4b above, it should be noted that the evaluation was also framed as a learning exercise for its participants. In particular, an outcome of the evaluation is the demonstration of excellence and capacity in developing country evaluation partners to carry out such work.

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1 It should be noted that many of the grants in the DSN/PAN (Pandemics) portfolio are in early phase or mid-course, thus an iterative rather than summative evaluation has been carried out.

2 This evaluation did not include formal financial or economic analyses, only general observations based on performance for cost.

2. Context of the DSN Initiative

The DSN Initiative portfolio of grants for this evaluation consisted of grants awarded from the start of the DSN Initiative in 2007 through August 30, 2010.

The DSN Initiative built upon work supported by the Foundation beginning in 1999. At that time, the MBDS effort was struggling with limited resources. The unique contribution of Rockefeller Foundation funding was the scope of the resources offered. Organizational assistance, technical tools and capacity building are critical to assuring the success of the MBDS regional network, and the Foundation was the pioneer funder in these areas. Among other things, the Foundation supported an electronic platform for reporting among the six Mekong countries (Cambodia, China (Yunnan and Guangxi Provinces), the Lao People's Democratic Republic, Myanmar, Thailand and Vietnam) to help build trust and consensus among these entities. The development of trust through experience is just as crucial to a network's success as technical acuity, and the strategic areas of Foundation investment played an integral role in developing network trust.

New areas of the DSN Initiative included the introduction of One Health surveillance to unite veterinary and human surveillance capacities, and global health diplomacy to enhance transnational negotiations. The core concepts and strategies from the Mekong region have more recently been implemented in East and Southern Africa, with the first regional grant to an African grantee awarded in July 2008.

3. Evaluation Methodology

The overall evaluation of the DSN Initiative was conducted in three parts—in Asia by the Southeast Asian Ministers of Education Organization (SEAMEO) team, and in Africa by the Swiss Tropical and Public Health Institute (Swiss TPH) in partnership with the African Population and Health Research Center (APHRC). The Global Team from the University of Washington acted as a coordinator, backstopping the regional evaluations through the provision of access to scientific literature, the sharing of tools and technical advice, and coordination of communications. The Global Team was also primarily responsible for the evaluation of grants that were made in more than one region or globally.

The evaluation was designed using the Organization for Economic Cooperation and Development/Development Assistance Committee (OECD/DAC) evaluation criteria of relevance, effectiveness, efficiency, impact and sustainability.

The evaluation questions were developed by the Managing Director for Evaluation of the Rockefeller Foundation in collaboration with the Lead Evaluator and in consultation with the senior leaders of the Foundation. A matrix of questions for the global and two regional evaluations were prepared sequentially during the evaluation process. The global evaluation matrix can be found in an Annex to this report and helped steer the formulation of interview guides and questionnaires, coding, and analysis for the global-level work.

The evaluation design was greatly aided by the outcome mapping of all DSN Initiative grants undertaken by the DSN Initiative team at the outset of the evaluation. Grants were mapped to all four outcome areas (networking, capacity building, new tools and approaches, and One Health), attributing percentages of each grant in the portfolio to each outcome area. A copy this mapping can be found in an Annex to this report.

Two fundamental elements for the global work were developed early in the process: a *stakeholder analysis* and a *theory of change* model.

▶ **Stakeholder Analysis**—Given the diversity of grants and outputs in the DSN Initiative portfolio, a theoretical mapping of stakeholders was initially developed by the Global Team and tested systematically through the Team's in-depth grantee interview process.
▶ **Theory of Change**—the Global Team reconstructed and reconfirmed a theory of change model based on initial grant review with the core staff of the Foundation responsible for the DSN Initiative.

■ Evaluation Methodology

▶ **Access to Information**—Consistent with a separate analysis carried out of the DSN Initiative portfolio by Universalia Management Group[3], despite major efforts by staff at Rockefeller Foundation Headquarters and at the Regional Office in Bangkok, many key documents describing the DSN Initiative's portfolio of work were not accessible through the Foundation's databases and proved difficult to obtain. Access to information was also reliant on pre-existing relationships of the lead evaluator and lead regional evaluator (SEAMEO) in gaining key informant interviews, access to relevant meetings and high-level policy input. This problem was particularly an issue for the Global Evaluation Team where many communications needed to be done at a distance, but for whom the quality of information mandated an "in-person" (rather than an email or telephone) mode of information gathering. Access to such opportunities proved challenging.

▶ **Development of questions, tools and methods**—The Global Team used a heuristic approach to the development and finalization of methods, tools and specific questions to address the criteria areas and sub-questions of the matrix.

▶ **Network Analysis**—The Global Team introduced and used network mapping in the evaluation analysis to provide a more detailed and granular level of analysis of the disease surveillance networks in Asia and Africa. A regional network analysis expert from the Population Institute of Mahidol University in Bangkok, was contracted to support the Mekong region and global network analysis.

▶ **Support of Regional Evaluations**—The Global Team also undertook extensive technical support for the regional evaluation efforts.

▶ **Evaluation Advisory Committee**—An Evaluation Advisory Committee (EAC) was used to ensure a well-designed and thorough evaluation. Evaluation specialists reviewed the approach of the evaluation teams, provided coaching to teams, and feedback on methods and workplans. The Terms of Reference for the EAC is included in Annex 4.

3.1 Data Collection

The evaluation matrix sets out the specific data sources for each set of questions, including data collected from external stakeholders, grantees, grant participants, and Rockefeller Foundation staff through in-depth interviews, focus groups, and surveys. Team members observed key meetings of global stakeholders and grantees. Data was also gathered through a desk audit of Foundation documents and a review of literature and media sources. A full discussion of methods, tools and question development is included in an Annex to this report.

The focus of the data collection of the Global Team was not only to gain qualitative insight into the work, but to triangulate through stakeholders' impressions of grantees and beneficiaries to confirm findings for all teams.

3 DSN Dashboard Draft July 20, 2010, Universalia Management Group October 2010

4. Findings

The Global Evaluation Team identified a number of key overarching findings. They are described here, with additional findings below specific to performance area.

4.1 Key Overarching Findings

[1] The evaluation team found broad support for the hypothesis that robust trans-boundary, multi-sectoral/cross-disciplinary collaborative networks lead to improved disease surveillance and response. The majority of survey respondents confirmed the relevance of this hypothesis. Many of them who were from areas without a regional DSN expressed a desire to see regional DSNs developed in their areas. Global leaders also confirm the value of regional networks. However, the analysis of measurable indicators that would quantify changes to improved surveillance and response on the ground was outside the scope of the Global Evaluation. The Mekong Region Evaluation provides substantive evidence of improvements in surveillance practice and response time.

[2] The Rockefeller Foundation is seen by high-level decision makers, policy leaders and regional and national counterparts, as a thought leader and pioneer investor in networks for public health; sub-regional governance in public health; innovations in tools and approaches; and global health diplomacy. The Foundation is perceived to a lesser extent as a leader in the more technical field of public health surveillance, which is appropriate. This distinction is important in defining the Foundation's niche and added value.

[3] The Rockefeller Foundation's role and niche in disease surveillance is widely viewed by global actors as the ability to convene actors from many sectors and regions to introduce and discuss new and innovative topics. The evaluation team found that stakeholders associate the Foundation with inventive and progressive thinking. The global grants in the Foundation's DSN Initiative portfolio drew heavily on this niche, and used the Foundation's convening power very effectively to create global communities of practice.

[4] Our mapping of grant activities suggests that design and innovation flowed from the local to global levels for certain tools and outcome areas, and from global to local levels in areas that required systematic change and the acceptance of new theories and concepts. Through discussion with DSN Initiative officers, it is apparent that the logic of the portfolio evolved rationally as lessons learned were innovatively adapted between regions. Systematic capture of the evolution process was not found during this evaluation.

[5] Grantees selected were generally capable of using the Foundation's funds and reputation to accomplish the activities they set out to do. The portfolio review revealed that grantees delivered outputs as contracted, in general, with modifications to scheduling and funds disbursement

Findings

varying somewhat from the original timeframes. The perception of the quality of outputs for global grantees varied widely between stakeholders based on the novelty of the product. For example, global health diplomacy was seen as relevant by stakeholders, while there remains some discord around the actual definition in the field.

[6] The Global Evaluation Team looked closely at the output→outcome→ impact pathway to determine the extent to which conclusive outcome and impact statements could be made. Our findings, based on the views of both global stakeholders and grantees, is that the work of the DSN Initiative is just now maturing, and evidence of practice changes and attitudes is now evident. Change and innovation is taking place within each outcome area to a high extent, but needs additional time and funds to come fully to fruition.

[7] Findings based on historical program areas, network mapping, and recent views of the Foundation, all support the Foundation's niche and comparative advantage in developing meaningful networks. The global network map clearly illustrates network ties generated by Foundation funds. In addition to technical network ties, scholars and practitioners see the high value of networks as it relates to creating a base for regional stabilization, cooperative efforts, and peace.

[8] Rockefeller Foundation strategy, information systems and monitoring and evaluation practice were found to be underdeveloped at the time the evaluation was undertaken. The evaluation was hampered by the lack of systems support for metrics of population health measurement which are critical evidence in prioritizing surveillance and response activities within and across countries. There was minimal evidence of an exit strategy for longstanding investments in Southeast Asia prior to the Foundation's decision to close the portfolio, creating a risk to longevity of assets developed through DSN Initiative funding.

[9] The evaluation team noted a lack of emphasis on documentation in the peer-reviewed and non-peer-reviewed literature of the work of the Foundation for most DSN Initiative grants and outcome areas. It is crucial that the Foundation and its grantees record the social and scientific advances associated with Foundation funding. This is essential to enhance the visibility of important contributions in public health practice made by the Foundation's investments.

[10] Through ongoing interaction with the Foundation, the evaluators found that the importance of evaluation has been recognized within the Foundation, bringing with it several strategies to improve the ability to monitor grantees, share learning, and access data and records within the Foundation. As the Foundation demonstrates the value of evaluation in creating better portfolios and meaningful change, it will contribute to the field of philanthropy by using monitoring, evaluation and learning for quality improvement, and by modeling accountability to stakeholders and users.

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Situation Analysis and Rationale of Portfolio

▶ The regions that received the majority of the grants are known to be hotbeds for emerging infectious diseases (Figure 1). The Mekong region is highly influenced by globalization because of its central location between the two most populous and fast-developing countries in Asia, India and China. Emerging infectious diseases such as severe acute respiratory syndrome (SARS) and highly pathogenic avian influenza (HPAI) had been identified when grantmaking began, making this a logical location to improve disease surveillance efforts. The Mekong region investments were made initially to an existing network that had the political support of the participating countries and the WHO's Western Pacific Regional Organization's (WPRO) regional office, but was struggling with a lack of structure and resources. This grouping of countries was primarily organized around the practice of keeping "health" as a conflict free space to enhance relationships in post conflict areas such as the Mekong region. East African investment created a health related network based in an economic political grouping. Control of diseases in these regions is important to the marginalized populations living in the border areas and to the security and economic development of the regions and the world.

▶ The Rockefeller Foundation has supported MBDS since 1999, and there is strong evidence that the network has demonstrated effectiveness in reporting and containing outbreaks such as dengue, SARS and influenza. Trust and collaboration developed to a very high level over the years have decreased the tendencies to cover up disease cases and have increased the capacity to respond.

▶ Africa is a priority region because the data maps for diseases such as influenza are practically blank. During a key informant interview, a global expert stated that currently, data about influenza only comes from 100 laboratories in two countries, demonstrating the vast need for Information and Communication Technologies (ICT) and capacity building in the region.

▶ The two continents chosen for the DSN Initiative are linked together through common characteristics that made them candidates for DSN Initiative grants. Specifically, evidence supports the Foundation's rationale for funding both regions, which have fragmented surveillance systems and a high level of human-animal interaction through wildlife and agriculture. Thus, the DSN Initiative strategy shares similar objectives in both regions:

⇨ *To increase the human workforce capacity for disease surveillance to predict and respond to emerging diseases*

⇨ *To improve collaboration between human and animal health practitioners through a One Health model*

⇨ *To increase the network ties between countries to promote further capacity building within the regions.*

Findings

Figure 1. Hot Spots for Emerging Disease Threats. Kate Jones et al (2008): Global trends in emerging infectious diseases: Nature, Vol 451.21.
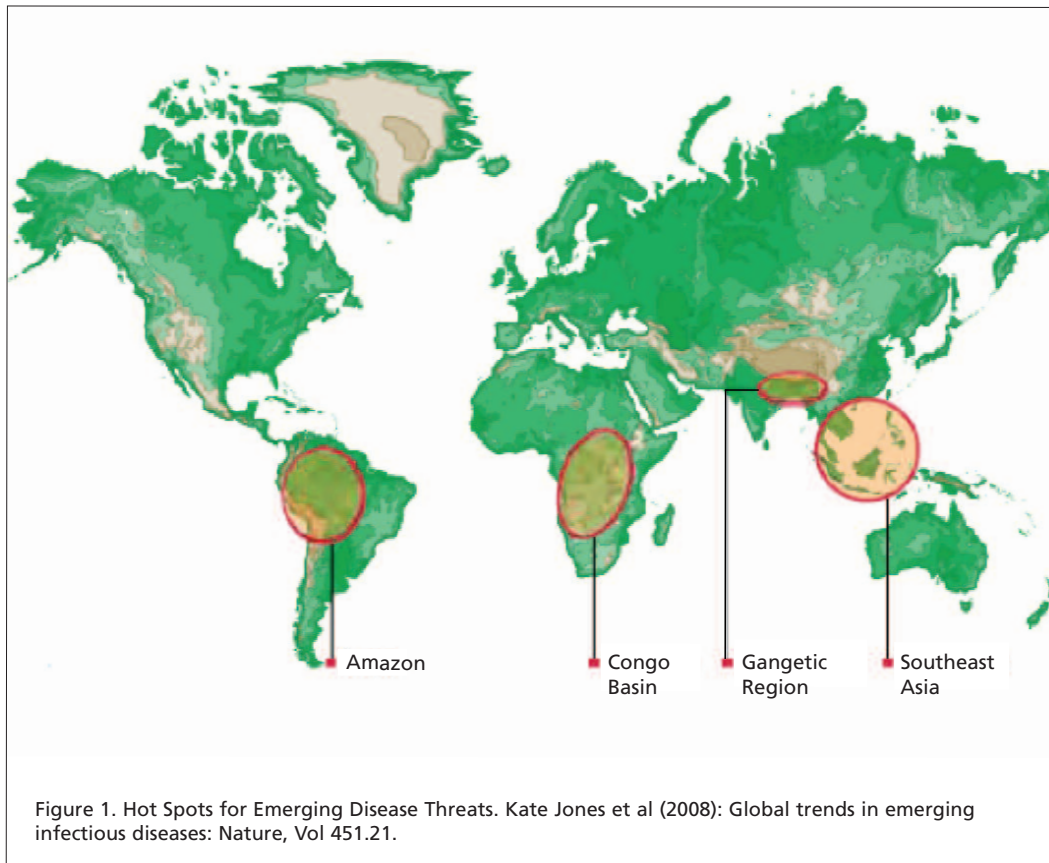
Additionally, history shows that diseases may have a larger impact in these two regions. During the 1918 influenza epidemic, the death rates were 10 times higher in India and South Africa than in the United States or the United Kingdom.

Sequencing of DSN Initiative work

The Global Evaluation Team constructed a timeline that illustrates the development of the DSN Initiative and its components over time.

▶ The grantmaking of the Initiative started in 2007 in the Mekong region, assessing needs there, strengthening the existing networks and building upon earlier work in ICT and capacity building that the Foundation had funded previously. Grants were made to formalize the MBDS network, which was used as a model for later grants in Africa, and as an example during the convening of regional DSNs at Bellagio.

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▶ The One Health approach was prioritized first globally and in Africa. Two global grants and one African grant in 2007, targeted the One Health approach, while grants targeting One Health in the Mekong Basin sub-region did not emerge until 2008.

▶ In 2008, the main focus for the Mekong Basin sub-region was on capacity building and One Health. Many African grants were initiated the same year and were largely mixed-focus grants with two One Health grants and one on capacity building. The global focus on One Health was sustained, and additional efforts were made on global health diplomacy through Bellagio meetings.

▶ In 2009, most grants targeted the African sub-region or a global prospective. African grants targeted multiple outcome areas and ICT tools. Globally, a grant was funded to implement executive education in global health diplomacy, and a subsequent grant was funded to monitor health diplomacy. Evaluations of the Foundation's DSN Initiative globally and regionally were also funded.

This sequence of grants is conceptually robust. However, the coherence of the portfolio suffered due to frequent changes to the DSN Initiative staff over the course of its lifetime.

Program Logic and Evolution of Portfolio

▶ The programmatic logic flows from the local to global level for networks and ICT, developing tools and network governance structures that can be replicated elsewhere and on a grander scale, whereas the grants demonstrate a flow from the global to the local level for One Health and health diplomacy. These global-based grants help set the theoretical frameworks of these emerging fields and seek to gain stakeholder buy-in prior to implementing practice changes. Both of these fields require large changes at the systems level. Programmatically the outcome areas intertwine logically to a great extent, as tools contribute to capacity, capacity contributes to new fields of practice, and collaboration interrelates all the other outcome areas.

▶ The shifts in focus over time, in part due to the changes of DSN Initiative staff, often align with changing global political and public health climates that were shaped by events such as SARS, H1N1 and Avian influenza outbreaks, the International Health Regulations established by the World Health Organization (WHO), and changes in lab sample sharing practices. These events increased the focus on human/animal health, providing a rationale for developing the One Health perspective, and also spotlighted the growing need for health diplomacy. While this evolving focus complicates the assessment of DSN Initiative grants as a portfolio, it does

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demonstrate that the initiative was responsive to disease surveillance challenges faced by the global health community. Key informant interviews with multiple stakeholders validated the One Health perspective and the need for more health diplomacy.

Rationale Behind Regional Investments

▶ According to numerous sources, the DSN Initiative is an exploration of whether networking at a regional level inherently builds country capacity. Experts and stakeholders broadly support the hypothesis, and the evaluation found evidence to support it on regional levels. Stakeholders believe networks can be an entry point for strengthening national health systems toward universal health coverage, acting as a catalyst to stimulate new research, and providing a resiliency mechanism in regions where they are active. The regional network structure promotes sharing knowledge, resources and best practices that will improve a country's efficiency in adopting effective surveillance and response systems. Network structures are broadly seen by our data sources as a way of distributing capacity and assuring timely access to technical capacity in resource-poor settings. The ongoing MOU mechanism in the MBDS indicates the governments are in agreement with this view.

▶ Some experts take the view that a country or disease-specific approach may be more relevant than a regional approach. However in terms of "Smart Globalization" the increasing transnational nature of pandemics suggests this is not an "either/or" situation, but more likely a situation where the word "both" better applies—which is reflected in the MBDS grants to each member country. Concern was also stated about focusing on emerging diseases rather than diseases that are easily treated with known and available remedies. However, this latter concern contradicts the actual priority disease focus of the networks, which emphasizes known diseases with high transmission potential, such as cholera.

▶ Transnational investment is innovative, as many other organizations fund at the national level. Stakeholders concluded that both networks and individual country investments are relevant to disease surveillance and ongoing healthy tensions should exist between them (e.g. when a particular country is lacking infrastructure for disease surveillance, an individual country investment may need to occur first in order for a network to be effective). To achieve a balance, the niche of different networks should be investigated, and appropriate robust evaluation activities that look at population health metrics should be implemented.

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4.2 Relevance

> **EVALUATION QUESTIONS**
>
> To what extent is the DSN Initiative based on robust conceptual think-ing in the fields of health and development (transdisciplinary concepts, ecohealth, One Health, etc.)?
>
> Is there a clearly articulated situation analysis that provides the ration-ale for the DSN Initiative and demonstrates its relevance?
>
> To what extent does the DSN Initiative respond to global and regional issues and trends?
>
> To what extent are global and regional issues and trends understood to be driven by network phenomena?

4.2.1 Concept/Rationale

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▶ Through the DSN Initiative, the Foundation articulated the importance of a multidisciplinary and multifaceted approach to preventing the spread of disease in a world of rapid and constant global interaction. The threat of emerging infectious diseases was addressed using a variety of innovative methods and promoted new conceptual approaches to global health, many of which have been adopted by other funders and organizations in the global health landscape.

▶ The intersectoral work in One Health has a robust theoretical basis in the zoonotic origin of human pathogens and the changing nature of animal/human exposure and risk. The practice of strengthening linkages between sectors and intervening in the disease emergence pathway is in the early stages of development.

▶ Global health diplomacy has an ambitious agenda to set out a new field linking diplomacy and health. One challenge, especially among developing countries, is prioritizing issues amidst political and economic pressures. Supporting countries so they develop the capacity to address local and solvable issues, rather than focusing solely on emerging diseases is highly relevant, and is highlighted by situations such as sample sharing for influenza vaccine (i.e. Indonesia 2007) between developing countries and global health organizations.

▶ Rockefeller Foundation documents accurately lay out a complex situation involving unpredictable disease emergence, a need for collaboration within historically unstable regions, increasing globalization that negatively impacts

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marginalized populations, and an overall lack of capacity to protect the world's peoples from widespread disease outbreaks. The rationale behind the initiative provides strong justification for the Foundation's ongoing work in the field of disease surveillance networks and related projects.

▸ The presence of the Foundation's regional offices in Asia and Africa, along with capable staff to provide guidance and oversight, have ensured that the DSN Initiative is highly responsive to emerging situations and opportunities in Asia and Africa.

▸ Disease surveillance is adapted to the political and institutional landscape of a country or region and at times includes non-traditional members of a disease surveillance system, with this inclusiveness extending to the local level as documented at cross-border sites.

▸ Creating a global "safety net" is the key thrust of the International Health Regulations adopted by the World Health Assembly in 2005, and in force in 2007. While the SEAMEO evaluation documents a strong awareness of and focus on International Health Regulations (IHR) implementation through MBDS, key informant interviews at the regional level were less sanguine about the contribution of the network to the effort. At the WHO's Southeast Asian Regional Organization, the MBDS was seen almost as a competitor to the Asia Pacific Strategy on Emerging Diseases (APSED) process, and a desire was expressed for all resources to flow through the latter. At WPRO, there is more familiarity with MBDS, but less active collaboration lately between the Regional Office and MBDS. As global health diplomacy as a field matures and becomes more "grounded," a clearer analysis and remedy for tensions between organizations at the regional level may emerge.

▸ Existing regional agreements in place are well summarized in the SEAMEO evaluation report, and it is clear that the network model is being adopted to address numerous global health challenges by many organizations and associations. Disease transmission in particular is increasingly recognized as regional and global, spreading through natural networks established through increased mobility.

Discussion

The conceptual thinking behind the DSN Initiative portfolio is considered robust consistently across all intended outcome areas and outputs by multiple sources of data. The concepts applied range from the very practical (i.e., the performance of disease surveillance and response) to the very theoretical (i.e., the development of health diplomacy as a discipline). The thought leaders involved in the Foundation's DSN Initiative are regarded as preeminent thought leaders and authors in the field so triangulating the value of this is challenging. The breadth of thinking has allowed a few key topics to come to the forefront of surveillance: the importance of nontraditional surveillance, and "trust-based" interactions in disease reporting and response—a hallmark of the MBDS.

◼ Findings

Situation analyses were clearly articulated for the networking, information, communications and technology and capacity building components of the portfolio. The speed of the transmission of diseases and the acknowledgment of zoonotic sources of disease were well articulated and align with the portfolio goals. In capacity building, while the inadequacies of systems are well known, the specification of training, placement, career paths and future in-service training needs for One Health and public health workforces lacked explicit targets aligned with justified workforce needs in the participating ministries, provincial offices or other sites. There is mention of a formal process to review these human resource needs in Foundation documents. However, follow-up discussions with project team members suggest these efforts (a joint learning initiative and mapping of health personnel) were not accomplished. For global health diplomacy, the specification of situation analyses is largely case based, and thus could be considered anecdotal, as often occurs in the emergence of a new field of study.

One question around the network rationale is whether disease processes of transmission are driven by networks? The answer is unequivocally "yes," with social networks, travel networks and trade networks leading the list. The focus on infectious disease in DSN is clearly "using a network to address a network phenomenon." A second question concerns the extent to which innovation, policy advances and overall success in improving human health are driven through the creation of networks among institutions and individuals, and that is also widely understood to be true. This is reflected not only in the DSN networks and their relationship to other networks as outlined in the Organizational Network Mapping done in this evaluation, but in the proliferation of networks in the two target regions and globally as mirrored in those results.

4.2.2 Logic

EVALUATION QUESTION

To what extent is the logic of the DSN Initiative supported by evidence or expert opinion?

Findings

▶ The logic of the portfolio is based solidly on evidence and expert opinion. Networks, capacity building, One Health and global health diplomacy are supported to a great extent as validated through various interviews with grantees, Foundation managers, and stakeholders, as well as Foundation background documents. The logic for ICT tools development was not emphasized in our data sources. This may imply that is not as well rationalized within the overall portfolio and its objectives, or that the logic of ICT tools is assumed and did not warrant explicit statements.

■ Findings

▶ According to the Foundation's background documents, the landscaping for the DSN Initiative encompasses more than 50 organizations and individuals of diverse experience, expertise and background, demonstrating a comprehensive vetting of expert opinion.

▶ Stakeholders suggest that there should be a mix of activities for all the outcome areas, and that the different work areas should be linked for more synergy among grantees.

4.2.3 User Needs

EVALUATION QUESTIONS

To what extent is the DSN Initiative relevant to the needs of stakeholders and users, including the public, in Asia and Africa?

Were key stakeholders involved in the problem formulation?

Findings

To answer this question, the Global Team developed a stakeholder mapping for the global level analysis. The relevance for civil society regionally is addressed in the more granular regional evaluations.

▶ In all outcome areas, the global evaluation data confirmed the overall relevance of Foundation investments to user needs.

▶ A major strength of the MBDS is that the meetings have been held in different countries each time and in locations outside of the capital cities. This allows people to better understand the local culture and the situations on the front lines of disease surveillance to build a response that is most relevant to user needs.

▶ The need for global health diplomacy training was highlighted by events on the regional level, but was conceptualized by global teams that developed curricula that integrated health and foreign policy concepts. Many of the ICT tools developed are based on regional needs and are being tested within regions.

▶ The key disease surveillance stakeholders had a strong voice in the problem formulation of the DSN Initiative. The initiative was developed in the Asia region in close proximity to stakeholders. Meetings that brought all the players together were held to set their own priorities and ways of working together. Input from national programs was also incorporated from the very beginning. Early discussions around initial investments in the Mekong region (1999-2000) involved not only the prospective members, but also their regional and global counterparts in WHO.

Discussion

The MBDS network served to highlight needs in the region and promoted regional collaboration through joint planning and implementation of preparedness. The creation of new electronic tools for surveillance answered a long-standing concern with outdated, paper-based reporting in the Mekong region. ProMED as an informal reporting mechanism was seen to facilitate transparency on issues such as cholera, which countries are reluctant to report.

Health diplomacy is at an early stage of development, and has thus far focused on the interface between developing countries and global agendas. An example was cited by a key informant in Bangladesh where 4 million dollars has been spent on making H1N1 vaccines available without addressing more pressing health needs of the population. A country-by-country approach could be useful in assuring that trainees in this new discipline are well deployed in their home countries. The more regional and global networking approach currently in place is a logical approach at this stage. An additional need articulated was for South/South diplomatic skills to enhance cooperation. If health diplomacy can help solve South/South issues, donors may be able to move past individual country investments and support other needs. Thus, using the network to incubate the discipline and insure its eventual success will have resonance at the country level.

4.2.4 Role/Niche/Comparative Advantage

EVALUATION QUESTIONS

To what extent is this area of work a historical niche of the Foundation? If it is not, is there a clear rationale to explain why the Foundation chose this Initiative area?

To what extent does the Foundation have a comparative advantage in the disease surveillance field and key related fields?

Findings

▶ This work corresponds to the historical niche of the Foundation to a high extent. The Rockefeller Foundation has a rich history of building public health infrastructure in areas where it is most lacking. It has historically convened essential institutional actors to establish networks and collaborations to tackle large problems and it has a reputation for promoting innovative approaches in health and working across silos.

■ Findings

▶ Legacy programs in the Foundation include components of animal health, network construction, and capacity building in public health. These elements of the Foundation's niche and advantage played a major role in the success of DSN Initiative efforts.

▶ The Rockefeller Foundation has a comparative advantage in organizing networks for disease surveillance. The Foundation has the flexibility to respond to local needs because it is independent of larger political structures that constrain other health actors.

▶ The Foundation can convene and orchestrate the necessary players to instigate conversations around topics of great importance. Using the Bellagio Centre the Foundation promotes innovative ideas and encourages people to "think big." The Foundation has a legacy of creating new fields of knowledge. Thus, the Foundation is seen as a leader and initiator of key importance in the field.

▶ Novel approaches to disease surveillance may gain more traction when backed by the Foundation because of the reputation and trust it has worldwide. As one grantee stated, "The fact that we're able to say we're supported by Rockefeller Foundation opens a number of additional doors because that is a name that people respond to with very great trust."

4.2.5 Value Added, Alignment and Leadership

EVALUATION QUESTIONS

To what extent did/does the Foundation add value to the disease surveillance field and the work of stakeholders? In what ways?

How would disease surveillance have progressed without Foundation funding?

To what extent is the Rockefeller Foundation seen as a leader in the field of disease surveillance?

To what extent is the DSN Initiative aligned to the mission, strategy and intended results of the work of the Foundation?

Findings

▶ Many key informants supported the value of the Foundation's efforts in the networks and global health diplomacy pieces of the DSN Initiative, and see the Foundation's work as building the infrastructure that societies need to fulfill their public health obligations.

▶ On the questions of whether some results of the DSN Initiative might have been achieved without Foundation funding due to the dynamism of

the disease surveillance field, evidence from both the Global and Mekong region evaluation reports suggests that timely Foundation funding was necessary for efforts to progress effectively, and that without these funds grantees' work might have foundered.

▶ Stakeholders had differing views of the Foundation's mission and strategy, and as a result their view of alignment of the DSN Initiative were not always the same. During the focus group held with high level policy makers participants interpreted the meaning of the Foundation's strategy differently.

▶ However, based on internal interviews with DSN Initiative staff within the Foundation, we found that there was good alignment between the intended results of the Foundation and the work of the DSN Initiative. The innovative and collaborative approach to minimizing the impact of disease outbreaks aligns well with the strategy of the organization to improve the lives of poor and vulnerable people through increased resiliency and more equitable growth. The aim of decreasing the impact of disease outbreaks because they disproportionately affect poor and vulnerable populations strongly aligns with the Foundation's mission. Stakeholders emphasized the importance of the Foundation knowing and defining their strategy direction internally in order to be effective in their investments.

▶ The role of the Foundation as an early and innovative leader and funder in DSN is clear in emphasis on integrated disease surveillance; use of networks in public health; new models of public health governance at the sub-regional level; and One Health and global health diplomacy. In One Health, the Foundation predated many in emphasizing this interface in grantmaking through DSN.

4.3 Effectiveness
4.3.1 Planning and Strategy

EVALUATION QUESTIONS

Was the DSN Initiative adequately planned?

What was the internal situation in the Foundation when the DSN Initiative began and was there strength in this positioning to launch the Initiative?

Did the DSN Initiative build on existing networks and collaborations? How?

Did the Initiative identify places for early wins to leverage momentum for the future? If so, how?

Identify the evolution of the strategy over time. What factors have contributed to its evolution?

■ Findings

Findings

▶ The planning and strategy for the DSN Initiative were adequate to achieve the outcomes of the Initiative. The DSN Initiative team managed to the proposal approved by the Board which clearly outlines proposed activities that would be undertaken during the life of the Initiative, naming partners and projects that would contribute to the resolution of the problems identified in the situation analysis. The subsequent results and outcome mapping of grants helped to focus and evolve the work over time and allowed the introduction of new collaborations such as global health diplomacy.

▶ The proposal briefly describes anticipated impacts, potential risks, assessment criteria and a budget. The DSN Initiative was positioned to build on existing collaborations with grantees in the Mekong Basin and other partners globally to address inadequate capacity for coordinated response to disease outbreaks within the region and globally.

▶ A number of situational factors helped make this a timely initiative: the agreement of countries within the regions to abide by the IHR (2005), increased awareness that new diseases emerged at the human-animal interface, and a trend toward open and informal information sharing, amid the emergence of new diseases with pandemic potential such as HPAI and H1N1.

▶ Many of the grantees funded through the Initiative had established relationships with one another prior to the launch of the DSN Initiative, especially in relation to ICT, global health diplomacy and One Health. Specifically, the WHO and the Graduate Institute collaborated on the development of global health diplomacy. ProMED was becoming well known in the regions, and Tufts and the University of Minnesota worked in partnership prior to and following their DSN grants.

▶ Many of the grants at the global level aimed to convene experts in health, diplomacy, disease surveillance, food safety, agriculture, and networks. These meetings pooled knowledge and developed calls to action, stating commitments to work toward the resolution of global health problems. It is important to note that convening at Bellagio has been an excellent strategy for consolidating planning and strategy. From the eHealth summit series, to the disease surveillance networks meeting to global health diplomacy, the use of the Bellagio facility has been key to the success of DSN.

▶ Changes to plans occurred minimally on the individual grantee level. Overall, the major changes of the Initiative consist of including work not proposed in the original documentation, such as global health diplomacy, or certain grants in the Africa regions (traffic risks).

▶ The profile of grants looks slightly different between Asia and Africa because of the length of time that the DSN Initiative was active within each region

■ Findings

(longer in Asia) and the unique opportunities and partnerships that arose within each region. The adaptation to the environment was assisted by the strategic selection of grantees that had established relationships in the region. Grantees were often involved in or able to access global communities of practice and used the Foundation's convening power to catalyze conversation and commitment to address issues such as food security, global health diplomacy and best practices in regional disease surveillance networking.

4.3.2 Outputs

EVALUATION QUESTIONS

Describe the planned and actual products and services delivered by the Initiative.

To what extent are outputs perceived to be of high quality?

To what extent has the Initiative developed high quality instruments that have been tested to assist in best practice?

Have individual researchers been identified and included to enhance their capacity in research?

A summary of outputs of the DSN Initiative by outcome areas is shown in Table 1 (see following pages).

Findings

▶ The extent to which individual researchers were identified was rated fair, except in the global health diplomacy outcome area in which more efforts were made to publish research. Global health diplomacy grantees identified the need to establish a literature base for the emerging field. One Health also highlighted the work of individual researchers through the Tufts grant, and other grants on the regional level.

▶ The quality of some meetings that brought together grantees (Annecy-CHORDS) was not ranked as highly by some respondents. Participants believed that some of the presenters and discussion leaders had inadequate expertise which decreased the relevance of the meeting. In addition, participation in the second disease surveillance networks meeting and its governance was controversial because of predefined roles created by those who convened the meetings. This has recently been acknowledged and overcome (see Summary remarks).

■ Findings

▶ Definitions of One Health and global health diplomacy are not uniformly understood among stakeholders. As these concepts continue to become integrated into the policy agenda, efforts should be made to establish a common understanding with key stakeholders.

▶ ProMED has continued to grow its user base, but many stakeholders verify ProMED reports using more formal sources. ProMED appears to have been positioned as the sole "feedback" mechanism for MBDS, which may have prevented the more thoughtful development of appropriate regional dissemination by MBDS members.

▶ In general, grantees sought to use best practices in the development of their products, and many consulted with a number of experts to create quality outputs.

▶ Though some of the work is considered low profile, high level decision makers felt that the Foundation adds value by having a long term view of investments.

Table I: Summary of Outputs for Grants in the Global Evaluation Grant Basket

Outcome Area	Proposed Outputs	Planned Outputs From Grant Documents	Actual Outputs*
Networks	A global network of disease surveillance networks that share experiences and lessons learned, and forges new relationships.	Convene experts to share knowledge and ideas to improve cross-border collaboration and early detection of disease outbreaks.	A forum of representatives of disease surveillance networks from around the globe was held to share best practices and develop a framework for future collaboration.
		Establish a global community of infectious disease surveillance practitioners with a focus on sharing best practices in governance, training and the deployment of appropriate technologies.	Connecting Health Organizations for Regional Disease Surveillance (CHORDS) was launched to implement the Bellagio "Call to Action."

cont.

■ Findings

Table I: Summary of Outputs for Grants in the Global Evaluation Grant Basket

Outcome Area	Proposed Outputs	Planned Outputs From Grant Documents	Actual Outputs*
ICT	Demonstration or pilot projects that illustrate how ICT can be used in disease surveillance and response.	Operate the ProMED listserv, improve the sensitivity of disease reports, overcome language barriers through the adaptation of GPHIN, and develop the ProMED-MBDS website.	PRO/MBDS continues to operate a listserv and website, and the network of subscribers has grown. Regarding issues of language barriers, there has been an increase in coverage of Chinese or Thai language media. Chinese and Thai language websites were also developed.
	Layered training and institution-building to strengthen the ability to apply information technologies to public health practice today.	Through CHORDS build effective information structures and utilization of ICTs to improve connectivity, communication and sharing especially for countries with limited resources.	Wiki and other web-based communication and information exchange structures are in use for CHORDS participants.

cont.

■ Findings

Table I: Summary of Outputs for Grants in the Global Evaluation Grant Basket

Outcome Area	Proposed Outputs	Planned Outputs From Grant Documents	Actual Outputs*
One Health	Bridging animal-human health and establishing early warning systems through community-based participatory surveillance, training and workshops.	Assemble a group of physicians, veterinarians, scientists, and other health professionals who are trained in disease outbreak reporting and provide a forum to disseminate information and foster partnerships. Develop a zoonotic disease risk management capacity assessment tool, a comprehensive curriculum on zoonotic diseases, and conduct training workshops for human, animal and agricultural sectors.	A workshop was held to explore zoonotic disease risk and possible mitigating methods. A capacity assessment tool was developed to evaluate national preparedness in dealing with zoonotic diseases outbreaks.
	Explore opportunities to support partners in the development of new veterinary-public health educational models.	Conduct an assessment to determine the needs of veterinarians and the potential benefit of advanced education in veterinary public health.	An assessment of the veterinary public health education systems in Indonesia and Thailand was conducted to identify needs and gaps.
	Identify and support alternative business models to help secure poor people's livelihoods and allow them to participate in food supply value chains.	Formulate a strategy to develop "one world, one health" leadership capable of managing complex dilemmas affecting the global food system.	The Bellagio "One Health" leadership model was shared. "The Ranikhet Declaration" was created to affirm the work done at Bellagio related to food security and commit partners to further activities. A framework was developed through the work on food security that is scalable to a variety of contexts.

cont.

■ Findings

Table I: Summary of Outputs for Grants in the Global Evaluation Grant Basket

Outcome Area	Proposed Outputs	Planned Outputs From Grant Documents	Actual Outputs*
Capacity Building	Not specified in Initiative Proposal	Identify core competencies and approaches to capacity building; share guidelines and protocols for cross-border surveillance and response. Conduct trainings specifically for MBDS members and ProMED personnel. Build laboratory capacity by identifying the needs for technical support and equipment to achieve rapid diagnostics and safe handling of pathogenic materials and operations in the laboratories. Develop trainings for field epidemiology personnel and apply distance learning to building capacity where needed.	An outline of capacity building competency development and leadership education approaches based on 17 different learning styles was drafted. A competency model was created, and approaches for developing and nurturing these competencies were defined. Various training courses were held. The Bellagio "Call for Action" was endorsed, pledging to continue regional and global collaboration and to promote disease surveillance capacity. Capacity building was promoted through agreements with MBDS and MECIDS.
Global Health Diplomacy	Not specified in Initiative Proposal	Define an academic discipline at the nexus of global health and foreign affairs. Hold a series of meetings at Bellagio on global health diplomacy Develop a global health diplomacy network. Develop the Health Diplomacy Monitor, a monthly publication covering negotiations related to global health. Develop various training and capacity building activities in health diplomacy and foreign policy. For example, develop a training manual for health diplomacy and web-based modules for executive education and building negotiation skills.	A training manual, a textbook, and two other publications on global health diplomacy were published. Three meetings on global health diplomacy were held at Bellagio to discuss training, research, and information sharing. The Health Diplomacy Monitor, which shares information and updates about global health diplomacy through publications and a website, was developed. Ten courses were conducted over a four-year period, and about 300 people were trained.

■ Findings

4.3.3 Outcomes

Findings

▶ Of the three original outcome areas identified in the DSN Initiative pro-
posal, there have been great strides in each area. The One Health concept
has gained traction with key stakeholders and is widely known by local,
regional and global experts and practitioners. It has also received funding
from other major donors to prevent diseases from emerging at the human-
animal interface.

▶ MBDS can and has served as a model for other regional DSNs because it
has built trust and improved communication between countries through
DSN activities. Tools have been developed and gradually integrated into
the repertoire of regional practitioners.

▶ The majority of outputs contribute directly to the outcome areas of the
Initiative. Global health diplomacy was added to the three original out-
come areas in order to strengthen the ability of developing countries to
interact with other counties and agenda setting global health intergovern-
mental organizations (IGOs).

▶ Collaborations are taking place between sectors: diplomacy and health and
also animal and human health. There is also collaboration between coun-
tries during joint outbreak investigations and between regions through
CHORDS. Stakeholders have a wider view of the uses of regional net-
works and would support the development of such networks in regions
where DSNs are not currently in place. Grantees report increased demand
for their services and products.

▶ Many stakeholders surveyed knew of persons who participated in the Field
Epidemiology Training Program and other trainings that they felt were
relevant and useful. Assuming these trainees continue to practice in their
area, this is a direct increase in human resources for disease surveillance.

▶ The number of functional cross-border sites that share information
between countries has increased, and there are concrete examples of how
these border sites identified and responded to disease outbreaks in the
Mekong evaluation report. This is key to successful response to disease
outbreaks in border areas (see Mekong Region Evaluation Report).

▶ Networking allows countries to use one another's strengths, decreasing the
need to improve in every capacity and assisting in an efficient use of
resources (see Mekong Region Evaluation Report).

▶ The evaluation found that while regional offices of WHO may be skepti-
cal of sub-regional networks, key personnel in these networks have served
in global and regional disease surveillance scientific advisory teams and as
experts. Reporting directly from a sub-regional network to the WHO
would not be expected to occur, however under the IHR framework any
member country which is aware of a potential Public Health Emergency of

International Concern (PHEIC) in any other member country is charged to report it. Thus, the peer pressure within such informal networks to promote transparency among members is increasingly seen as important at the global level of WHO and other IGOs. In addition, anecdotally there is evidence that reporting through ProMED has involved investigations with WHO. Stakeholders have recognized that the IHR (2005) have provided incentives for improved disease surveillance at the regional level, and regional networks can help countries meet their reporting obligations.

▶ The DSN Initiative involved diverse partners from many sectors, often under the umbrella of single grants, promoting communication and cooperation across disciplinary, political and regional boundaries.

▶ A major network exchange outside of DSN funded activities is the USAID Emerging Pandemic Threats program. This program funds a number of former DSN grantees in work related to the One Health projects they performed for the Foundation. The grantees from the DSN portfolio are now collaborating on these new projects.

Discussion

The outcomes of the long-standing work in the Mekong region are more easily identified than in the Africa region and globally where the Foundation's work is younger. Many of the global grants have had insufficient time to become fully established and report on solid outcomes, however emerging evidence of influence and change is strong. Some DSN Initiative influence is difficult to measure, such as the conversations ignited through collaborations that continue "off-record," but they surely do occur according to respondents. The DSN Initiative has helped to develop a new lexicon in disease surveillance and global health through innovative ideas, however, because there are many players in this field it may not be possible to attribute results solely to the Rockefeller Foundation.

■ Findings

4.3.3.1 Outcomes: Organizational Network Analysis

The diverse, fragmented, and siloed set of actors participating in disease surveillance 10 years ago has continued to evolve and organize under the influence of several drivers. The WHO has driven much organization through its Global Outreach Alert and Response Network (GOARN); the US Centres for Disease Control (CDC) has developed regional surveillance centers across the globe via the Global Disease Detection program; and the Canadian government in concert with the WHO has begun to organize laboratorians in the Global Laboratories Directory and Network (GLaDNet) laboratory surveillance directory. Furthermore, organizations such as the UN's Food and Agriculture Organization (FAO) and Organisation Internationale d' Epizootique (OIE) have begun to have joint meetings to improve sharing of information across disciplines, while the International Health Regulations have given countries a mandate to begin working together on a common framework for cross-border health.
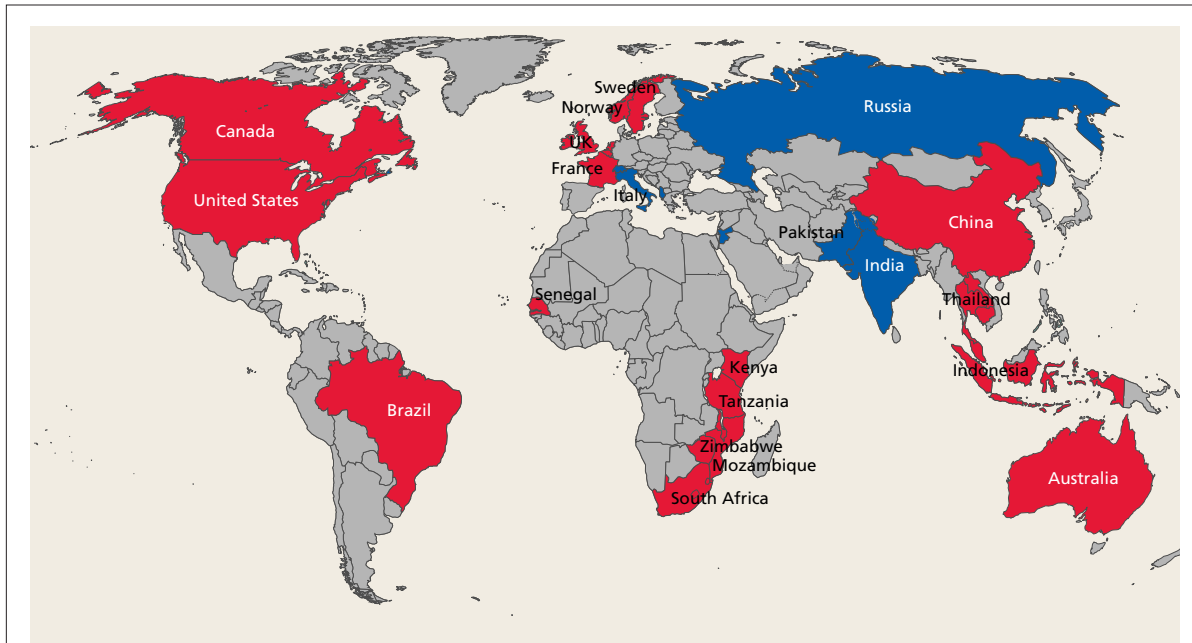
Figure 2. Global footprint of the DSN represented by major institutions impacted by the global grant basket (red), and additional countries from original CHORDS meetings (blue). This map excludes the many additional countries influenced by multinational organizations and other meetings convened by the Foundation.
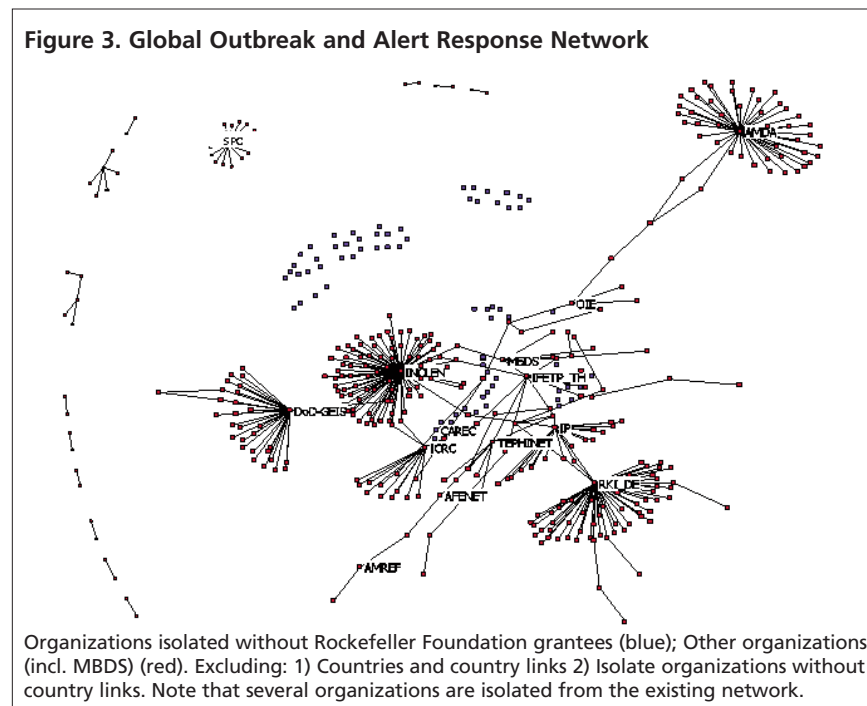
Findings

The DSN has had a clear overlap and influence on the continuing development of these efforts, as efforts such as ProMED/MBDS provide additional data to the larger surveillance infrastructure, while MBDS itself is cited as a possible model for sub-regional networks and multi-country partnerships. In addition to these examples, several DSN global grantees cited Rockefeller Foundation funds as helping to launch pilot projects and attract additional funds from other donors. Finally, through development of the CHORDS network, the Foundation has established a platform for continuing development and support of network exchanges as long term beneficiaries of the initial investment. A concrete example of a network exchange facilitated, but not directly funded, by Foundation activities is cited in the interim report from ISID (2007 PAN 206), which was able to capitalize on regional meetings to spread the use and adoption of ProMED/MBDS to 518 subscribers.

▶ Out of an estimated 111 organizations, groups or jurisdictions funded (13) or influenced by the DSN global grants (98), approximately 80 percent are not currently represented in the 536 organizations counted among the 23 GOARN networks identified as having organizational ties. This finding implies that the DSN was highly effective at incorporating new collaborative partners into disease surveillance.

▶ Among the DSN global grants whose proposals were available for review, 103 network relationships were originally proposed. Of two DSN grants whose interim reports were sampled, organizational ties from interim reports (42) outnumbered those from the initial proposals (13), representing the formation of new concrete interactions.

▶ The DSN connected several organizations that were not represented among the GOARN network sample to existing networks. Many countries that had minimal network representation benefitted from additional organizational ties from the DSN.

▶ A small number of DSN grantees acted as hubs in the larger network, connecting dozens of other organizations to the larger disease surveillance community, and forming additional connections between organizations and countries already represented. Examples of these hubs seen in the network graph include the International Society for Infectious Diseases, the WHO, and the Wildlife Conservation Society.

▶ In this case, we were able to provide a snapshot of the global network and show how DSN-funded grants impacted relationships in the network, with deeper and more extensive ties between organizations and countries. Systematic data collection in future initiatives could help reveal the evolution of these networks over time in response to funding.

■ Findings

▶ Among two grants compared between proposal and interim reports, far more concrete organizational ties had been formed than those initially proposed. This may be evidence of the catalytic effect of the grants; it also speaks to the importance of capturing in grantee reports the actual organizational relationships formed. The countries impacted directly by DSN funds were evenly spread across Africa, Asia, Europe, and North/Central America, with some representation in Oceania and South America. These countries represent a population of approximately 2.6 billion people. Many countries in the preexisting network are represented by at least two organizational links. Most countries (105) show only one link, and none of these were impacted by Foundation funds. However, these 105 countries, including many island nations, have a combined population of under 1 billion. This implies that the DSN impacted more populous countries with greater access to the disease surveillance infrastructure, and hence may have served to strengthen the global disease surveillance network infrastructure.

▶ Existing networks form a significant infrastructure that can be leveraged and built upon in future grants. Measuring existing network ties from GOARN and other sources may help the Foundation strategically identify 1) gaps in network coverage, 2) portions of the network highly dependent on a subset of organizations, and 3) potential key players having ties to target organizations.

The following two figures show the changes in network ties as mapped through data obtained in the Global Evaluation Team's desk audit.

Figure 3. Global Outbreak and Alert Response Network

Organizations isolated without Rockefeller Foundation grantees (blue); Other organizations (incl. MBDS) (red). Excluding: 1) Countries and country links 2) Isolate organizations without country links. Note that several organizations are isolated from the existing network.

Figure 4. Global Outbreak and Alert Response Network

Rockefeller Foundation global grantees (large blue); Organizations incorporated by RF grantees (small blue); GOARN organizations (including MBDS) (red); Excluding: 1) Countries and country-organization links, and 2) Organizations isolated without these links.

4.3.4 Policy Influence

EVALUATION QUESTIONS

To what extent have policy frameworks been created that have reduced fragmentation in the Mekong region and East Africa?

How have health policies harmonized across countries in the region?

How has the MBDS example influenced other network policy initiatives in other parts of the world?

To what extent are there specific new plans to influence policy in the member states, in the regions, globally?

Are there examples that demonstrate how the Initiative affected policy or improved practice in member countries in the regions involved?

To what extent has the DSN Initiative expanded the policy capacity of network participants?

To what extent has the Initiative broadened policy horizons?

■ Findings

The analysis of the DSNs overall policy influence used a policy cycle diagram to analyze the policy work of the DSN Initiative (Figure 5). Based on the analysis of the Initiative documents the Initiative's policy influence extends from agenda setting (eg. One Health) to policy options for the way information is shared between countries and network participants, to topics affecting national, regional, and to global policy agendas, and policies that are established to integrate human and animal health sectors. Different grants in the portfolio influence different quadrants of the diagram, in their respective policy spheres.

Figure 5. Policy Cycle Diagram
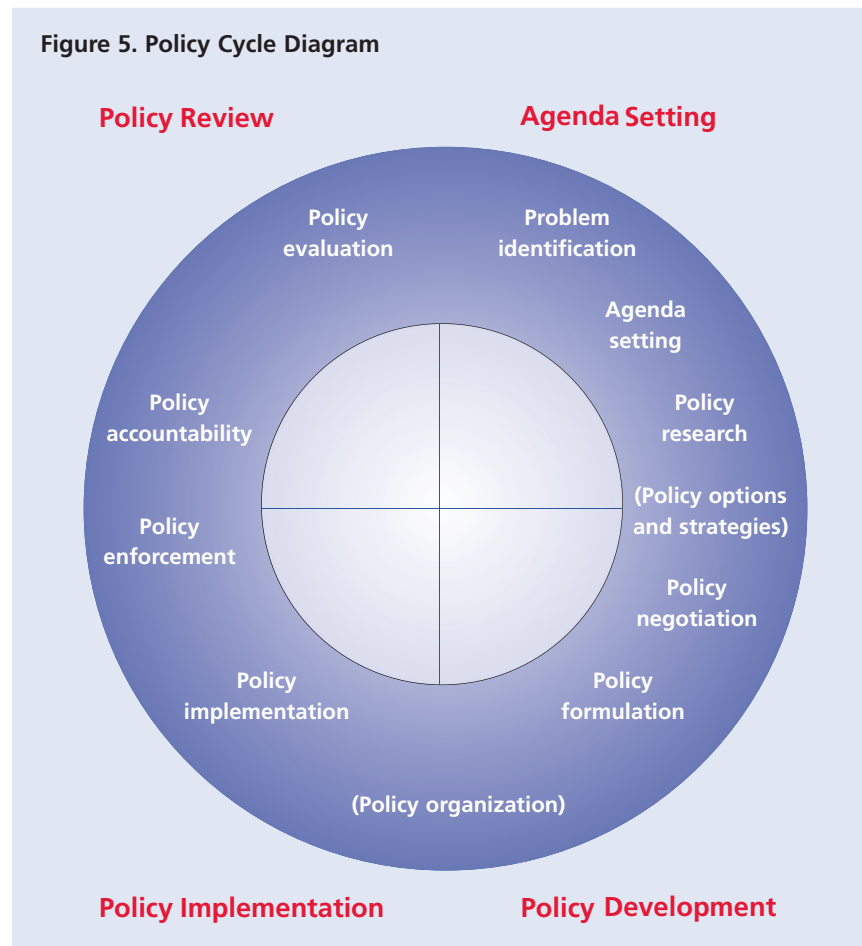
The global health diplomacy grants mainly fall into the Agenda Setting quadrant, with activities focused mainly on getting global health diplomacy onto the policy agenda for individual countries as well as the global policy stage. Memoranda of Understanding between countries, describing how information will be shared between them, lay in the policy implementation quadrant, and so forth.

Findings

▶ On the global level, the DSN Initiative has propelled One Health, regional disease surveillance networks, and global health diplomacy onto the policy agenda. The work in One Health and networks has moved through the policy cycle the farthest, both well into the implementation quadrant. US agencies and WHO regional frameworks such as APSED have incorporated One Health into the core of their work. There are still opportunities to develop One Health in terms of education policy, as some stakeholders and grantees believe that to have effective One Health collaboration practitioners need to be trained together. Regional networks and the policies necessary to support them are active in Africa and Asia. Global health diplomacy falls into the agenda setting quadrant at this early stage of development.

▶ Although in the Mekong region evaluation report, MBDS was not viewed as having a significant effect on formal policy frameworks, where it is active, especially at cross-border sites, its implementation demonstrates that there have been changes in policy and procedures that allow for informal information exchange.

▶ The evaluation team found little evidence in publications in the white or gray literature or on participating ministry of health (MOH) websites that health policies have harmonized across the Mekong region through the MBDS process. This remains to be done.

▶ Experience with MBDS has contributed greatly to the development of the Southern African Centre for Infectious Disease Surveillance (SACIDS). Within the first six months of operation, SACIDS was able to create a governance structure, standard operating procedures and a plan-of-action. DSN Initiative partners are working to make another regional network active in South Asia, and there is interest in the Pacific to review the MBDS model for adaptation in that region.

▶ Principles and ideas developed through meetings, such as Bellagio, are to be taken back to the participants' own communities, companies, governments, and universities to influence the creation of local initiatives.

▶ Grantees in the Mekong region have undertaken needs assessments for capacity building in the use of information technology. The grantees have made recommendations about educational curricula that could be used in policy development. Grantees also plan to hold trainings and symposiums to get their respective topics onto policy agendas globally and nationally.

▶ Thailand is a good example where practices have started to change to incorporate the One Health concept. There, policy makers from both human and animal health ministries meet on a regular basis, and they are also working with the agricultural and wildlife sectors.

■ Findings

▶ Grantees report having been part of discussions regarding global disease detection, surveillance, and biologic threats, working with the National Security Council, the Nuclear Threat Initiative and other groups to share lessons learned. Network experiences have been used to inform the United States' decision making on global disease surveillance in terms of increasing international cooperation, deterring bio-weapon use, and building bio-safety, bio-security and trust.
▶ New policy horizons have been generated through convening difference actors, drawing from the expertise of a variety of grantees and introducing new fields of practice.

Discussion

See further discussion of policy influence in the Discussion and Summary section of this report.

4.3.5 Capacity

EVALUATION QUESTIONS

To what extent does the Initiative include capacity building, training, and implementation?

Is there a capacity building strategy, workplan and resource plan?
To what extent have changes occurred in knowledge, attitudes, policies, or practice in the behaviors, relationships, activities or actions of the people, groups and organizations with whom the DSN Initiative is involved?

To what extent have desired capacity change outcomes at the individual, institutional, network and policy levels occurred?

Findings

▶ The DSN Initiative is, at its core, a capacity building endeavor. While capacity building is central to all outcome areas, a lack of concrete measures and mapping of capacity building inputs and results limited a comprehensive evaluation of the full extent of achievement of capacity building efforts.
▶ Early grants in the Mekong region were used to determine the capacity needs of the region and grantees were selected who would help build capacity through their grant activities by transferring knowledge to local practitioners.

Findings

▶ Every grant in the sample of global grants, and many in the regional sample, encouraged capacity building through improved communication, skill building or resource sharing.
▶ Capacity outcomes have been achieved to a significant degree. Workshops were offered, curricula and tools developed and individuals were trained in their use. Forums were created that allowed knowledge sharing and best practice development. Plans for laboratory, human resource, and technological capacity were included in many grants in the portfolio. Practice and skills have visibly improved, and the result of improved capacity is evident at cross border sites in the Mekong in improved response times, sharing of information, etc. (see Mekong Region Evaluation Report)
▶ Change at many levels has occurred to a great extent. Broad changes associated with DSN activities include interaction between sectors and network participants, a wider acceptance of informal disease information sources, acceptance of One Health principles by a broad range of stakeholders and increased awareness that global health is a foreign policy topic.
▶ Networks have evolved over time and can now be used to exchange resources as well as information, and joint trainings between animal and human health practitioners and multinational trainings are occurring.

Discussion

See further discussion in the Summary and Discussion section of this report.

4.3.6 Research Capacity

EVALUATION QUESTIONS

Has the network fostered research collaboration between countries or across disciplines?

Have there been changes in organizational capacity to do research?

Has the networking in the two regions created additional capacity?

Findings

▶ The grantees involved in the emerging field of Global Health Diplomacy recognize the need to establish a literature base and have prioritized research as a focus area, crossing the health and diplomacy disciplines, and publishing articles emphasizing the importance of the subject matter.
▶ Work performed by One Health grantees became the nexus of USAID's RESPOND work.

■ Findings

▶ The literature review performed by the evaluation team revealed very few publications related to DSN Initiative funded activities. One Health is a topic area that has seen an increase in the number of articles published. Many of the articles are technical in nature and written by animal health experts.

▶ The Mekong region evaluators found little evidence of increased research collaboration, except in performing joint outbreak investigations.

Discussion

There was very little evidence of direct increases in research collaboration or capacity. Indirectly, however, the increased collaboration introduced in the global forums for food security, global health diplomacy, and regional networks have potential to lead to new research opportunities and collaborations. The DSN Initiative is not a research initiative, however some applied research was performed, and researchers were included in some grant activities. While traditionally the work undertaken through the DSN network funding area is not reported in academic literature, the innovative work would make a valuable contribution to the literature. The Rockefeller Foundation could increase the influence and reach of its DSN grantmaking if it required or incentivized publication of results by grantees.

4.3.7 Influence on Technology

EVALUATION QUESTIONS

Has the DSN Initiative brought forward technology development, adoption or adaptation in the two regions where it is active?

Findings

▶ Current technology was adapted to improve communication between broadly dispersed stakeholders, For example, websites and wiki pages were used by grantees to aid in information sharing. Development of web-based training modules aimed to improve the number of trainings offered, and increase the accessibility of some trainings.

▶ Networks place some emphasis on standardizing lab technology to unify case definitions and protocol within a region.

▶ Data mining tools and mapping tools were utilized over the course of grantee activities.

▶ Technology developments were not always taken up readily on the regional level, and some global uses may not be fully accessed by potential beneficiaries because of cultural and language barriers.

Discussion

Tools were developed for use within the Mekong region and globally. As discussed in the Mekong region evaluation report, different areas in the region have varying technical and cultural capacities to adopt the tools offered. Grantees are aware of the benefits of technology, but in some areas, it takes significantly more time for technology to be adopted and integrated into regular use. In addition, the benefits of use may need to be made more explicit to users because they have not built up the intuition to know how to fully utilize technology when it is made available to them.

4.4 Sustainability

EVALUATION QUESTIONS

To what extent have MBDS and SACSIDS developed and implemented a plan to become institutionally sustainable?

To what extent have MBDS and SACSIDS developed and implemented a plan to reduce dependency on donor funding? Are the plans realistic? What is the probability of success?

Have new funding partners been recruited and are they now supporting MBDS and SACSIDS?

Findings

▶ Sustainability remains an issue for networks in Asia and Africa, primarily MBDS in terms of institutionalization, and SACIDS in relation to its early stage of development. The Africa and Asia DSN Evaluation reports discuss in detail the sustainability issues of the DSN Initiative work in both regions.

▶ The Global Evaluation found broad recognition for the need for institutional independence of disease surveillance networks to ensure ongoing transparency, engagement of key stakeholders, and building of trust among key stakeholders.

▶ Informants raised a number of factors impacting grantees' sustainability, including planning, flexible support for innovation, and the complexity of issues and jurisdictions. The development of governance models, ongoing business plans, and funding exit strategies should have been undertaken by DSN grantees at an earlier stage in the Initiative.

▶ The timing of phasing out funding was repeatedly mentioned by key informants and grantees alike as being simultaneously a factor in the

◼ Findings

success of new ventures, but also a challenge for donors to accurately assess. Factors that were identified as influencing this timing included the complexity of the activity, the progress of grantees toward grant goals, the development of termination plans, and the availability of alternate funding sources. In the case of specific entities such as MBDS, the complex multi-country focus of the activity, the degree of innovation, and the significant political and cultural changes required for progress were cited as barriers requiring long-term commitments to solve.

▶ Our analysis identified several activities under development among grantees for funding diversification:

⇨ *Attracting new funders*
⇨ *The development of research as a fundable activity*
⇨ *Levying fees from users/stakeholders (e.g. CHORDS)*
⇨ *Self-financed course delivery*

▶ Several concerns were raised by key informants that impact the potential sustainability of grant activities. These included lack of coordination with other funders such as USAID, the potential for a low dollar value to dissuade donors, and the difficulty using disease reporting activity as a metric of institutional sustainability given the natural fluctuation in the incidence of diseases.

Discussion

Assessing the sustainability of funded activities is of key importance in determining whether Rockefeller Foundation investments are catalyzing change. The evaluation matrix focused on three questions on sustainability: plans for sustainability, diversified funding and increased partnerships. While we found broad evidence of efforts toward sustainability for all three questions, in many cases these efforts have not yet matured.

The problem of financial independence is linked to that of institutional sustainability and partnerships. Planning for alternate funding sources or other funding models is closely connected to organizational planning and the development of close partnerships, such that DSN programs are delivering value to their partners and the global community. Examples of this value mentioned by our informants include expansion into fundable research activities, the development of a fee-based model for expert consultation through CHORDS, and self-financed courses.

The current global economic climate makes diversification of funding sources imperative for the ongoing success of DSN grantee programs. Although

alternate funding partners have been identified in some cases, at least one is itself also funded by the Rockefeller Foundation. The 2010 Rockefeller Foundation Grantee Perception Report (GPR)[4] finds that while DSN grantees received a relatively high proportion of their budgets from the Foundation, 86 percent of grantees connect with other organizations to scale up their work, while 69 percent "bring other investors into [their] program to create leverage of existing work." In both cases, these exceeded the average of other Foundation grants, even though DSN grantees received less active support on average for securing outside funding.

Several programs, such as ProMED, CHORDS, and MBDS, by their nature are inherently collaborative and inter-institutional. As these organizations move forward, they must expand their governance and cooperative relationships to ensure financial sustainability. The Rockefeller Foundation, in turn, should help these organizations realize development plans that reward independence while giving them adequate time to achieve grant goals.

4.5 Impact

Findings

- ▶ The DSN Mekong Evaluation finds evidence of improvements in surveillance systems, coordination and information sharing leading to improved response times and containment of the spread of highly pathogenic infectious diseases that in turn saved lives and livelihoods in Mekong region countries.
- ▶ Many effects and impacts of the Initiative are still maturing, but are recognized by stakeholders as influential in bringing about positive changes in practice. Examples include improving evaluation know-how in developing countries to provide a valuable knowledge hub and improve systems, and the potential for grantee activities to improve food safety in developing countries, if fully implemented.
- ▶ More reports are being made through ProMED, increasing the amount of knowledge that is shared between countries, and changing the experience of transborder disease information exchange. Less blaming and more cooperation and trust have emerged.
- ▶ Although a minority view, one stakeholder indicated that changes to protocol adherence hasn't improved, that there is poor coordination of care for ill people who cross borders, and that there is still a divide in terms of resources between countries, so people will cross borders from a resource poor country to receive treatment in a neighboring country.
- ▶ Networks and global health diplomacy are seen as valuable instruments that increase the peace and stability of the regions in which they are active.

■ Findings

This impact area was anticipated, but has received considerable attention from scholars. The benefits of trust between countries were recognized throughout the evaluation.

▶ One Health has been integrated into activities in a limited way, and there is still segregation between the animal and health fields.

Discussion

In general, we found evidence in the Global and Mekong region evaluations that the DSN Initiative is making an impact on the target regions and populations. However, challenges still exist for cross-border treatment and collaboration between human and animal sectors that may require additional efforts. Impact may require more time before it is fully realized. Details are presented in the reports of the Mekong region and the Africa region on how the lives of the vulnerable, trans-border disease transmission, and the supporting systems upon which they depend on were improved by the DSN Initiative.

The peace-building aspects of networking, and the way networks contribute to global health diplomacy, is discussed at length in a forthcoming book, *Pandemic Peace* by William Long of the United States Peace Institute. Dr. Long elaborates on the value of regional networks, and is a strong proponent of using such models to answer the other pressing problems of our day, such as climate change and counter-terrorism.

4.6 Management and Governance

Two dimensions of management and governance were assessed: the Foundation's role in the management of the DSN Initiative and the grantees role in network management. Questions regarding the Foundation's role in management and governance were addressed through the desk audit and through interviews with Foundation managers and grantee interviews. Questions pertaining to the management practices of grantees were addressed partly through the desk audit, but more specifically in regional evaluations.

4.6.1 Management of DSN Networks

Findings

▶ Significant change has taken place in the model of operation and management within the Foundation with the shift to an initiative model of operation. Grantees are sometimes confused about whom to interact with at the Foundation because of transition in leadership or staff turnover.

■ Findings

▶ Discussions with grantees suggest that they are aware of the importance of management and governance structures in their respective areas of work, and focus attention on developing such structures for the global networks. There are, however, unresolved governance issues for some of the networks (MBDS in particular).

▶ While grant reports were a main source of information regarding grantee management practices, the lack of standardization of grant reports made this task challenging.

Discussion

In 2006, the model of operation in the Foundation shifted to a time-limited initiative model, with portfolio of grants under a number of large global initiatives. The portfolio framework is intended to provide a higher level of consolidation of grants to achieve greater impact. In addition, teams in the Foundation are expected to work across a number of initiatives providing a challenging model of management of staff capacity to meet the ambitious goals of the Foundation. While there is strength in more people working across initiatives to prevent silos, it appears to be challenging to make the initiative model work effectively. The Evaluation Team had limited exposure to other teams in the Foundation, however the DSN staff capacity is limited for the large workload of the Initiative, and the staff seem stretched.

Further improvements are recommended to make the management model of initiatives even more effective. Meetings such as the regular Foundation Initiatives Meeting, and the Initiative Management Team, could be better utilized, and records within the Foundation could be more complete and more accessible.

4.6.2 Monitoring Learning and Evaluation

Findings

▶ A monitoring plan was incorporated into the DSN Initiative proposal to a fair extent, and in theory the progress of the Initiative is tracked with respect to various outcome areas and assessed periodically in terms of progress. However, the Global Evaluation Team observed that in reality the practice is sporadic and should be more systematic.

▶ As part of the results based management work of the Foundation, grants were mapped to outcomes, and this provided a good analysis of the extent of resource allocation according to desired outcomes.

▶ A value map was originally proposed to link investments in the DSN Initiative to the outcomes, but this was not developed as planned.

◼ Findings

▶ Indicators and metrics were identified to monitor the grantees work. For example, the number of published reports, local reports, translated reports and veterinary reports could be used to monitor improvements in reporting from ProMED. Possible metrics for tracking changes for global health diplomacy meetings include activities, level of connectivity, outcomes and needs, and the number of resolutions outside the realm of public health that contain health-related provisions.

▶ Most grantees did not conduct a formal evaluation of their grant.

Discussion

The importance of monitoring, sharing lessons learned, and evaluation is well recognized within the Foundation. The DSN Initiative was one of the first to come to an end and conduct a final evaluation. We recommend that the Foundation develop a formal monitoring and evaluation process for all the grants/initiatives supported by the Foundation to better track the effectiveness and impact of their investments.

Managers at the Foundation emphasized the importance of incorporating people with experience working with networks into both the planning of the work and the evaluation process. This was borne out with our own network studies of the portfolio and will be reflected in our strategic recommendations.

Most DSN grantees have some sort of monitoring system, but no formal evaluation plan. A systematic capture and analysis of the utility of proposed metrics would be a useful future contribution of the DSN Initiative given the diversity of grants. Mandating that an appropriate monitoring and evaluation plan be implemented by grantees in the future may allow the Foundation to learn more systematically throughout the life of an initiative rather than waiting until the end of the initiative.

4.6.3 Risk Management

Findings

▶ The Foundation managed programmatic risk of the DSN Initiative to some extent. This could be strengthened going forward. Potential risks were identified in the background documents, and various questions that would mitigate these risks were listed and planned to be addressed, but based on documents available, this was done only at a cursory level.

▶ The Foundation is incorporating risk management to a greater extent in future activities. It has been exploring the use of risk assessment methodologies including risk profiles for portfolios to estimate reputation

risk, execution risk, resource consumption, etc. Using the portfolio concept, risks could be aggregated up to the Foundation level, and the risk distribution could be calculated and set across the Foundation. Additionally, recent changes made to the grant approval process include greater consideration of risks.

▶ Grantees included risk management in their formal submission to a minimal extent, however no risk management practices were mentioned specifically in our data sources.

Discussion

Integrating a more formal risk management protocol for grants is relatively new in the Foundation, and we recommend that the Foundation continue to strengthen its assessment and management of risk. The results from testing various risk assessment strategies can be used to develop a plan that best fits the Foundation's needs and can be applied to the development of all future initiatives.

More detail on grantee risk management practices may be provided through regional evaluations. In order for a grant to be implemented and completed successfully, it would be beneficial for the Foundation to ensure that the potential risks are identified and risk management practices are in place.

4.7   Efficiency

Findings

EVALUATION QUESTIONS

To what extent are the resources used to achieve outcomes allocated based on DSN priorities?

To what extent were Foundation funds used catalytically to propel policy/ best practice/theory forward?

▶ Comparative allocation figures for the portfolio by outcome area are limited to updates created for the Board of the Foundation. The last update reviewed in the evaluation was 9/15/2010.[5] That report indicates a total of $17,227,360 in grants made: 29 percent ($5,052,773) for capacity building, 25 percent ($4,363,925) for networks, 24 percent ($4,036,739) for tools and 17 percent ($2,874,464) for One Health leadership. An additional 5 percent ($799,960) has been awarded to "other". Included in the briefing

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5   "Update on Progress in Grantmaking Disease Surveillance Networks, November 2010.

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document is a year by year break down by outcome area of expenditures which is consonant with the grant mapping by chronology carried out by the Global Team.

▶ In the outcome areas the pattern has been:

⇨ *A consistent rise over time in allocation for capacity building.*
⇨ *A high proportion for networks with a dip in 2008, likely reflecting the move of the portfolio to Sub-Saharan Africa.*
⇨ *A rise in "One Health leadership" until 2008, with a sharp decline through 2009 and 2010.*
⇨ *A relative high in investment in "tools" in 2007, with approximately equal investment in 2008 and 2009 and a lower investment in 2010.*

Thus, in sum, there appears to be less investment currently in One Health and consistent investment in capacity development and networks.

▶ Shifts in DSN priorities and resource allocation have been responsive to and reflected gaps in global disease surveillance processes, as demonstrated in this quote from a key informant, which was echoed by several experts in diverse disciplines: "There has to be health diplomacy in the mix because although we can convince the technical people, they do not define the country's policies, thus health diplomacy is needed."

▶ Another emphasis in this reporting is the identification of types and location of grantees and the percentage of investment to them. Grantees are classified as:

⇨ *developing country grantee*
⇨ *developing country grantee with re-granting to developed country institutions*
⇨ *grantee in developed countries to re-grant to developing country grantee partners*
⇨ *grantee headquartered in a developed country with work conducted through grantee's office in a developing country*
⇨ *developed country grantee to benefit developing countries*
⇨ *developed country grantee to benefit developed countries, and finally*
⇨ *international organization grantee.*

This analysis reflects a 50 percent investment in developing country grantees overall, but only a 13 percent investment in 2010 to date which does not seem to fulfill the stated principle of the Foundation to increase its grantmaking to developing country institutions.

▶ When the Initiative team mapped their outcomes for the evaluation, they mapped an investment of $16,085,170 of which they mapped 22 percent ($3,719,089) to collaborative alliances, partnerships and networks,

Results

27 percent ($4,387,687) to increasing capacity, 23.9 percent ($3,845,489) to outcome innovations and tools, and 19 percent ($3,067,386) to transdisciplinary leadership in One Health. The balance, 6 percent ($1,065,520) was mapped as "other".

It is encouraging to note the proximity of the overall investment plan to the actual investments reported to the Board as shown below:

Overall	Collaborative Alliances, networks	Capacity	Tools and Innovation	Trans-disciplinary Leadership	Other
Mapped	22%	27%	23.9%	19%	6%
Reported	25%	29%	24%	17%	5%

It appears that the priorities and resourcing of the Initiative has been maintained despite changes in staffing within the Initiative.

▶ Little evidence is available to support the efficiency of use of grant resources as measured by cost effectiveness. It would be possible to generate standard metrics for training courses by region, literature search activities, meetings, etc. and apply such metrics to future grantmaking, however, these metrics are not available in the interim financial reports and other documentation provided to the Global Team.

▶ The 2010 Rockefeller Foundation Grantee Perception Report (GPR) does broadly address the size, progression and outcomes of DSN grants relative to other grant recipients, as well as indicators relating to attracting outside funding.

⇨ *Increased interactions with Foundation staff at several points in the grant cycle (33 percent over average) likely impacted the efficiency of the grant portfolio. At the outset of the grant cycle, Foundation staff involvement for DSN grants was in the top 25 percent of all Foundation grants, and grantees perceived more pressure to focus grant priorities on portfolio goals. During the grant cycle, DSN grantees found reporting processes more helpful than other Foundation grantees, which were in the lower quartile. At the end of the cycle, significantly more DSN grantees (78 percent) reported discussing completed reports and evaluations with Foundation staff than did other grantees (55 percent), despite an equivalent investment in Foundation staff time spent on monitoring, reporting and evaluation processes.*

⇨ *Organizations funded by the DSN Initiative had a smaller overall budget, and larger median grant size than other Foundation-funded projects, therefore Foundation grants represented a larger percentage of their budget at*

4 2010 Rockefeller Foundation Grantee Perception Report (GPR), Centre for Effective Philanthropy (CEP)

Results

14 percent vs. 5 percent for all organizations. However, despite receiving less staff support to identify outside funding, DSN grants were more successful at attracting outside funds. The Grantee Perception Report found that Foundation support "[Brought] other investors into your program to create leverage of existing work" for 69 percent of DSN grantees, versus 48 percent for all Rockefeller Foundation grantees. This is consistent with reports from grantee interviews. Specific outside funders leveraged by Foundation funds included Google.org and USAID.

Discussion

One rationale for the DSN itself is that global disease surveillance is seen as inefficient and uncoordinated. To the extent that the DSN sought to build networks to address these problems, the efficiencies of Foundation grantmaking may be viewed in terms of the effectiveness and sustainability of increased coordination and the spread of best practices arising from grant projects. It is in part through this increased efficiency that DSN grants were intended to provide a large impact given the investment.

The resources invested in DSN were to a great extent responsive to opportunities, lessons learned, and emerging needs in global disease surveillance. The efficiency of this growth and development is difficult to gauge because of a lack of measurable indicators. However, the evolution does show prioritization of the key outcomes of the DSN Initiative, and changes in funding allocations were directed toward outcomes that were gaining traction such as One Health and global health diplomacy.

Rockefeller Foundation funds have been utilized by grantees to fund new, innovative work that has attracted diverse stakeholders, and that may lead to new funding models through diverse new sources. While in many cases efforts to attract these funds are ongoing in the difficult current funding climate, DSN grantees broadly agree that the Foundation's support has been helpful to a great extent in helping them attract additional funds.

The DSN grants appear to have been broadly efficient in terms of individually aligning to Initiative priorities, leveraging the Foundation's funds to promote ongoing work, and in utilizing staff input to guide outcomes. Less evidence is available to support the collective efficiency of the portfolio strategy, or the idea that the whole was more than the sum of its parts. However, as ongoing developments and coordination take place between efforts in MBDS, Africa, and the global coordinating team, further initiative-level efficiencies are likely to occur. Furthermore, as global networks such as GOARN, CHORDS, and GladNet mature, downstream impacts of Rockefeller Foundation funding will be in evidence.

5. Conclusions and Recommendations

The conception and execution of the DSN portfolio represents a central scholarly contribution by the Rockefeller Foundation. If scholarship is defined as the creation, teaching, integration and application of knowledge, the portfolio crosses the spectrum handily. It represents a vibrant, diverse body of work which has created new knowledge in the application of networking to promote 'Smart' Global Health in developing countries, governance of sub-regional networks, elaboration and adoption of innovative IT tools for surveillance and response, the significance of a trusted collaborative social network in promoting transparency in disease surveillance and control, and new theory in One Health and global health diplomacy. Teaching has occurred in the traditional public health practice such as epidemiology and laboratory investigation as well as in the innovative areas of informatics. The application of learning through collaborative disease investigations and table top exercises has occurred. The integration of multidisciplinary approaches has been a guiding principle in the conception, design and execution of the portfolio across two regions and globally. Continuing development of systems level approaches to complex problems is by nature iterative; as different aspects take root and learning occurs it is worthwhile to reassess direction and priorities, strategically applying the Foundation's strengths most appropriately.

Two core observations of the Global Evaluation Team are: 1) The naming of the Initiative as the 'Disease Surveillance Network (DSN)' under represents the diversity and contribution of this body of work. It would more accurately be labeled "a Community of Practice in Transnational Public Health." In fact, evaluation of this work through standard disease surveillance assessment criteria would be inappropriate. 2) The winding down of funding for the Initiative may be premature, just as the value of the work is becoming widely recognized in global public health practice. Prior to withdrawing from this valuable body of work, the Foundation should invest in rigorously documenting the achievements in the improvement of population health metrics over time and in more fully integrating and analyzing the network mapping across levels.[6]

The Global Evaluation Team found the DSN Initiative to be a diverse and highly effective grant portfolio. The historical work of the Foundation was reflected in building increasingly relevant public health systems. The Foundation excels at taking a systemic view of complex problems such as disease transmission and surveillance, and contributed funding to practice areas to address existing inadequacies from the local to global levels.

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6   The Global Team has developed a protocol for such a study.

■ Conclusions and Recommendations

The Foundation and its grantees leveraged the reputation and convening power of the Foundation to accomplish tremendous work in networking, capacity building, tools development, and establishing new fields of practice in One Health and Global Health Diplomacy. The impact on peace, negotiation, and collaboration between networked partners cannot be overlooked. These networks have potential to solve complex diplomatic situations and global problems through the base of trust established by informal interaction.

Of note in terms of influence in policy and practice, the recent USAID Emerging Pandemic Threats ($400 million/5 years initiated 2009) is built directly on work of Foundation grantees, and it cites that work in the program and includes those grantees as current contractors. The Asia Development Bank has modeled its Greater Mekong investment closely along the lines of work pioneered by the Foundation. The One Health area is now invested in by numerous donors based on the early work of the DSN Initiative.

At a global level, the appreciation of the importance of peer-to-peer communities of practice to promote trust in global public health is only now catching up to the thinking which created the DSN Initiative. As a developed country top level official working in global disease control states, "When the big one hits, we have found (developing country counterparts) turn first to their informal networks." Working in stove piped government bureaucracies (as many ministry of health settings are) the responsible person can only consult "up" or "down" the chain of command in country. Informal community of practice networks provide a horizontal trusted alternative and trust building is evidenced throughout the networks in the portfolio. Cross country disease investigations epitomize this. When Hurricane Nargis hit Myanmar with the loss of over 135,000 lives, teams from MBDS were allowed into the country before other international experts based on the trust relationship built through the DSN Initiative.

WHO has used the term "network of networks" since 2001 to describe the Global Outbreak Alert and Response Network (GOARN) for global disease detection and response. That term, coined initially by the Asia Pacific Emerging Infections Network (APEC)/EINet in 2000 was based on the network model which is exemplified now as CHORDS. While CHORDS struggled with governance the group has now resolved to develop and set up an independent secretariat outside of the United States within three years. The general recognition of the importance of transnational communities of practice, their potential contribution and the communications technologies to realize them is only now becoming real.

■ Conclusions and Recommendations

In terms of health diplomacy, as mentioned earlier an examination of the work of the DSN Initiative (and other transnational initiatives) is soon to be published by Dr. William Long in his forthcoming book, *Pandemics and Peace* (publication pending, Peace Institute 2011), Dr. Long carefully sets the work of the MBDS, East African Integrated Disease Surveillance Network and CHORDS into the varied theoretical frameworks of foreign relations theory, and examines the value added within that context. He concludes, "Using the lens of political realism, we identify a shared compelling material interest in a transnational public good (protection from infectious diseases)." The foci within the DSN Initiative, especially the promotion of South-to-South informal collaboration and cooperation, are in line with the State Department emphasis on Smart Power and this theme is reflected in President Obama's Global Health Initiative (2011).

The following recommendations are made by the Global Evaluation Team:

5.1 Key Recommendations

[1] The Foundation should continue to invest in transnational strategies as well as country-by-country strategies, as the two are not mutually exclusive and with increasing globalization transnational investment is essential to successfully assure "smart" globalization.

[2] The DSN Initiative contributed to the development of network strategies in climate change resilience and other areas of the Foundation's work. Elements of existing DSN networks should be considered as valuable Foundation (and stakeholder) assets to be fostered through additional funding where needed, and to be extended to other portfolios of investment.

[3] Sustainability is the ultimate proof of added value, thus an exit strategy for Foundation investment is of central importance. In particular fostering thoughtful integration of key Mekong Basin Disease Surveillance network elements with other efforts, such as the Association of Southeast Asian Nations, Asia Pacific Strategy for Emerging Infectious Disease, United States Agency for International Development, Asia Development Bank and US Centers for Disease Control and Prevention, could help to assure population security in the region for the longer term.

[4] As investment in some outcome areas of the DSN Initiative portfolio continues, revisiting the portfolio for a definitive summative evaluation using the tools and metrics developed in this global evaluation will be of added value especially in the areas of One Health and global health diplomacy, the establishment of the South Asia network, the maturation and evolution of governance of Connecting Health Organizations for Regional Disease Surveillance, the transfer of informatics capacity, and the strategy for institutionalization and sustainability of the MBDS network.

■ Conclusions and Recommendations

[6] Given the South-South nature of collaborative networking efforts in the portfolio, a greater emphasis on bilateral South-South negotiations within the emerging realm of global health diplomacy, and a more robust effort at inclusion of diplomatic and scientific leaders from the South will enhance the utility of this new field.

[7] Encourage and support publishing and communicating the work of the DSN Initiative and grantees. While global health diplomacy has prolific publications, in other areas of the DSN Initiative increased publications from grantees both in the peer reviewed and non-peer reviewed literature would enhance the visibility and influence of the work.

[8] Landscaping for prospective Rockefeller Foundation initiatives should include detailed identification of stakeholders and indicators as well as a theory of change. In particular population health metrics should be identified and modeled to where impact is anticipated through investment.

[9] The Foundation should make explicit the expected synergies among grantees towards the common vision of the portfolio. Convening grantees is an important strategy in this regard. Experience with the DSN Initiative suggests MBDS convening with other grantees during their sessions and the initial Bellagio disease surveillance meeting was particularly fruitful in this regard. Specific prospective network mapping and indicators would assist this process.

[10] While Disease Surveillance Networks has served as the title of this portfolio, in fact the work has created Communities of Transnational Public Health Policy and Practice in two regions and globally. Re-branding this effort more accurately is worthy of consideration.

We would like to commend the Foundation's efforts at building evaluation capacity in developing countries, and internally at the Foundation. There are considerable strides being made within the Foundation that will address the challenges the DSN evaluators faced during the course of work, including improving accessibility to records and reports, formalizing learning mechanisms within the Foundation, operationalizing evaluation and learning, and establishing metrics to aid in ascertaining the impact of Foundation efforts.

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Annex A: Terms of Reference

Introduction

This document provides an overview of the Scope of the Global Evaluation of the Rockefeller Foundation's Disease Surveillance Networks (DSN) Initiative to be undertaken during the period of August 2009 through December 2011.

Purpose and Objectives of the Evaluation

The purposes of the evaluation are learning and accountability:

[1] Learning from the achievements and lessons of the DSN Initiative to inform the future work and strategies of the Foundation, it's initiatives, grantees, partners and stakeholders, and to contribute learning and knowledge to the fields of disease surveillance and public health.
[2] Accountability to the Board of Trustees of the Rockefeller Foundation for the funds invested in the DSN Initiative.

The main objectives of the global evaluation and its component studies are:

[1] To assess the relevance, effectiveness, efficiency, impact and sustainability of the Rockefeller Foundation's support to the Disease Surveillance Networks Initiative.
[2] Assess the underlying hypothesis of the Initiative that robust trans-boundary, multi-sectoral and cross-disciplinary collaborative networks lead to improved disease surveillance and response.
[3] Make forward looking recommendations to the Foundation on:

   a. The implications of the achievements, challenges and lessons from the DSN Initiative for the strategy and investments of the Rockefeller Foundation at a global and region level. This could include lessons for specific fields of work (health, urban, climate, etc.) as well as lessons for Initiatives and grantees that aspire to build and sustain networks, build capacity, and change policy globally, in Asia and in Africa.
   b. priority linkages and synergies for DSN learning to benefit the work of other initiatives, regional offices, and key partners.
   c. key priorities for funding and partnerships to sustain the gains made by the Foundation in the field of disease surveillance networks.
   d. other implications as identified.

The evaluation also aims to contribute to the field of philanthropy by demonstrating the use of evaluations in grant making, learning and knowledge management, and by informing the field of development evaluation about methods and models to measure complex networks.

Annex A: Terms of Reference

Components of the Evaluation (2009-2011)

[1] A summative and prospective evaluation of DSN Initiative work in the Mekong region (to be conducted by SEAMEO-TropMed) 2009-2010
[2] A summative and prospective evaluation of DSN Initiative work in Eastern and Southern Africa (grantee to be determined). Late 2010
[3] A summative and prospective global evaluation of the DSN Initiative (to be conducted by the Lead Evaluation Grantee). 2010–2011

Background Context for the Evaluation

In 2008, the Board of Trustees of the Rockefeller Foundation approved $21.3 million in support for the Disease Surveillance Networks Initiative with the aim of achieving the following objectives:

[1] Improve human resources for disease surveillance in developing countries, thus bolstering national capacity to monitor, report and respond to outbreaks;
[2] Support regional networks to promote collaboration in disease surveillance and response across countries; and
[3] Build bridges between regional and global monitoring efforts.

The intended outcomes of the Initiative are:

- ▶ Improved competencies (skills, capacities) in the Greater Mekong Sub-region and Eastern and Southern Africa to conduct disease surveillance and response efficiently and improve capabilities in trans-border collaboration across countries;
- ▶ Global collaboration and learning among regional disease surveillance networks worldwide; and
- ▶ Collaboration between regional disease surveillance networks and international agencies to increase the efficiency of global systems for disease surveillance and response.

Of the total $21.3 million, $6.2 million in grants were awarded during the development phase of the Initiative in 2007, and another $14.5 million in grants are to be awarded during the execution phase of the Initiative (2008–2011).

Audience and Users of the Evaluation

The Evaluation is commissioned by the President and Executive Team of the Rockefeller Foundation and managed by the Foundation's Evaluation Office.

Annex A: Terms of Reference

The primary audience for the evaluation (i.e. those who are expected to act on the findings and recommendations) is the President, the Board of Trustees of the Foundation, the Executive Management Team and the Managers of the DSN Initiative. Secondary audiences are the DSN grantees, partners and other funders in the field of disease surveillance.

Key Performance Areas—Evaluation Questions

The key performance areas and evaluation questions to be covered in the evaluation, including its regional evaluation components are outlined in detail in the Evaluation Matrix included in the Annexes (see Data Collection Annex). The main performance areas to be covered are:

[1] **Relevance**—including rationale, niche, role, comparative advantage and value added of the Initiative.

[2] **Effectiveness**—an assessment of the results of the Initiative, including:

- The quality and utility of the products and services planned and provided.
- The changes or outcomes that have occurred, as well as the impact the Initiative has had on people and systems.
- The extent to which the Initiative built capacity at the individual, institutional and network level,including an analysis of the extent to which the strategy of the Initiative contributed to better detection and management of disease outbreaks in the regions of focus.
- The degree of influence that the Initiative has had on policies, public discourse, and practices in the fields of public health, disease prevention and development.

[3] **Cost effectiveness/Efficiency**—an assessment of the use of resources to obtain results (time, funds, skills).

- The extent to which the Rockefeller Foundation is using best management and governance practices in DSN, and whether those practices providing good value for money? This area covers strategy and planning of the Initiative, management and leadership, relationship management with grantees, peers and partners.
- Management of the grant portfolio—picking the right grantees, assessing capacity, developing and supporting, delivering results, use of and accounting for resources, monitoring, evaluation and learning, and knowledge management (lessons learned, sharing of information, knowledge).

[4] **Impact**—an assessment of the impact that the Initiative has had on people and systems. Ideally (provided there is monitoring and baseline data) this will include:

- An assessment of the extent to which DSN has contributed to, or directly affected improvements in the lives of poor and vulnerable people within the broader population served by the work of grantees.

Annex A: Terms of Reference

    ▶ An assessment of the impact of DSN on the systems upon which poor and vulnerable people depend (environmental, social, economic, cultural, political, etc).

[5] **Sustainability**—the extent to which the Initiative has developed both financial and/or institutional supports to continue the work started by the Initiative. This will assess the extent to which:

    ▶ The efforts (outputs and outcomes) of the Initiative are embedded in ongoing practices of people, institutions and communities.
    ▶ The exit strategy for the Initiative creates a high probability of the main outcomes of the Initiative continuing beyond Rockefeller Foundation funding.
    ▶ Expanded partnerships exist for scaling up the work, and sustaining the Initiative beyond the Rockefeller Foundation's support.

Methodology

Mixed methods will be used to conduct the evaluation including grant portfolio reviews, interviews, field visits, surveys, desk studies, and focus groups.

[1] An analytical review of the Portfolio of the grants funded under the DSN Initiative in the Mekong region, Africa region and globally.
[2] Field visits to a purposeful sample of the DSN funded work of grantees.
[3] Stakeholder interviews with:

    ▶ disease surveillance leaders, policy makers and practitioners in the Mekong Region, Eastern and Southern Arica, and globally.
    ▶ partner organizations and other funders in Asia, Africa and globally.
    ▶ RF managers in Asia, Africa and RF New York.

[4] Desk Review of documents—including grant documentation, regional trip reports, workplans, conference reports, financial reporting, budgets, monitoring reports, etc.
[5] Other methods to be determined.

The sampling strategy for in-depth review of grants, desk review, and field visits will be determined in the planning phase of the evaluations with the grantees. However, in general, sampling will be purposeful, focusing on a selection of grants that explicitly state that they expect to contribute to the objectives and outcomes of the Initiative.

Management of the Evaluation—roles and responsibilities

The roles and responsibilities of the RF offices and grantees in managing and implementing the evaluation are as follows:

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The Lead Evaluation grantee will be responsible for:

▸ Ensuring qualified M&E grantees carry out the monitoring and evaluation work in the Mekong region and Eastern & Southern Africa, collaborating with the Foundation's Regional Offices).
▸ Developing the TOR for the Mekong region and Eastern & Southern Africa in consultation with the DSN Team, the Regional Offices and the Evaluation Office.
▸ Managing the workflow and activities of the evaluation components over the life of the grant.
▸ Delivering the agreed outputs in this TORs to a high level of quality and utility.
▸ Emphasizing capacity building, mentoring, coaching and learning in the approach to M&E with the DSN participants.
▸ The Lead Evaluation Grantee may also be asked to participate in reporting the results of the DSN Evaluation to the Executive Team of the Foundation and the Board of Trustees.

Regional Evaluation Grantees

▸ Participating in the design of the Mekong and Africa Evaluation with the Lead Evaluator, DSN Team, Asia and Africa Regional Offices.
▸ Providing skilled and experienced evaluators to fulfill all areas of the TOR and Evaluation Matrix (Note: Separate TOR and Evaluation Matrix will be developed for each regional evaluation grantee, with input from the evaluation grantee, the Lead Evaluator, the RF Regional Offices, the DSN Team, and oversight and sign-off by the RF's Evaluation Office).
▸ Conducting the evaluation according to high evaluation standards and ethics, including data collection, analysis and reporting. (OECD Evaluation standards are followed by the Foundation)
▸ Maintaining ongoing communication and liaison with the Lead Evaluation Grantee and RF Asia and Africa Offices respectively, and throughout the evaluation.
▸ Delivering evaluation products that are of high quality.
▸ Reporting on the evaluation findings and conclusions in a suitable format for the range of intended audiences.

The Evaluation Office will be responsible for:

▸ Setting the standards for the DSN monitoring and evaluation work, based on international best practice evaluation standards (OECD, international development evaluation).
▸ Overseeing the design of, and signing-off on, the TOR and Evaluation Matrix for the global evaluation, and the evaluations of the Mekong region and Eastern & Southern Africa.
▸ Reviewing and signing off on the quality of all M&E products provided by the Lead Evaluation Grantee and Regional Evaluation Grantees (matrices, workplans, evaluation methods, interview protocols, sampling strategy, etc.).

Annex A: Terms of Reference

► Reporting the results of the overall DSN Evaluation to the President, Executive Team and Board of Trustees of the Foundation, with the DSN Managing Director. The Lead Evaluation Grantee may also be asked to participate in this reporting.

The DSN Team and RF Asia and Africa Regional Offices will be responsible for:

► Providing input to the TOR and Evaluation Matrix for the evaluations in the Mekong region and Eastern & Southern Africa.
► Providing ongoing operational guidance to the Lead Evaluation Grantee and regional evaluation grantees.
► Providing administrative liaison for the global and regional evaluators with the DSN grantee(s), including coordination of meetings and travel for the evaluation work.

A small DSN Evaluation Advisory Committee may be appointed to review and advise on key global and evaluation products (methodology, workplan, data analysis and findings, draft and final reports). Members will be globally and regionally recognized DSN specialists and evaluators.

Qualifications of the Lead Evaluator and the Regional Evaluation Grantees

The Lead Evaluation Grantee will be a senior program evaluator with significant experience in: program evaluation and in the field of disease surveillance at global and regional levels, management of large complex evaluations, and communication with diverse global and regional evaluation audiences.

The Regional Evaluation Grantees will be organizations with significant experience in program evaluation and disease surveillance in the DSN countries of relevance in Asia and Africa respectively. Teams will comprise members with demonstrated experience in the use of qualitative and quantitative methods, survey techniques, inventory, observation and desk review, as well as experience in epidemiology, health diplomacy, veterinary public health, information technology, biostatistics and behavioral sciences. Regional grantees will assume responsibility for the quality, timeliness and accuracy of deliverables for the regional evaluations.

Annex A: Terms of Reference

Schedule

An initial schedule is presented below. The schedule will be further refined by the Lead Evaluation Grantee and the RF Evaluation Office in consultation with the RF New York and Regional Offices, and with the Regional Evaluation Grantees.

Date	Deliverables and Milestones
September 2009	▶ Lead Evaluation Grant awarded ▶ Initial Evaluation Matrix and Scope of Work refined for global evaluation
September 2009	▶ Mekong Evaluation Grant awarded
September to December 2009	▶ Initial planning for Mekong Evaluation ▶ Scope of Work refined, and Evaluation Matrix completed ▶ Evaluation team appointed.
January to June 2010	▶ Mekong region summative and prospective evaluation conducted and reported
June to December 2010	▶ Planning and conduct of East and Southern Africa DSN Evaluation
Through 2010	▶ Global evaluation conducted at intervals throughout the year with key players globally and at RF New York and Regional Offices
January to August 2011	▶ Complete global evaluation, synthesize regional findings and recommendations, report to RF at intervals
October to November 2011	▶ Final Evaluation Synthesis Report for Board reporting November 2011

Terms of Reference: DSN Evaluation Advisory Committee (EAC)

A global Evaluation Advisory Committee (EAC) for the Global Evaluation of the Rockefeller Foundation's DSN Initiative was established to advise the Foundation's Evaluation Office and the Lead Evaluation Grantee, the University of Washington, on the quality of the evaluation design.

The main objective of the EAC is to provide independent advice to ensure the objectivity of the global and regional DSN evaluation components.

Specifically, the EAC is expected to:

[1] Provide concise written reports on behalf of the Committee on the quality, credibility and appropriateness of the global and regional DSN Evaluation products and process in three major phases of the evaluation:

   a. Design phase—the methodology, workplan, and data collection strategy;

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b. Implementation—data quality, analysis, preliminary findings, and the process of the evaluation in relation to quality;

c. Reporting—draft and final reports of each component of the evaluation (Global, Asia, Africa).

[2] Identify:

a. gaps in the evaluation design and process in relation to the TORs for the evaluation pertaining to the field of disease surveillance and the broader strategic objectives of the Foundation; and

b. identify potential risks to the evaluation and/or to the Foundation resulting from evaluation work.

The Advisory Committee members are:

▶ Dr. Zenda Ofir, PhD, Evaluation Specialist; Eval Net, former Chair of the African Evaluation Association

▶ Dr. Gunael Rodier, Director of International Health Regulations, WHO (Now with WHO EURO office)

▶ Dr. Somsak Chunharas, Secretary General, National Health Foundation, Thailand

▶ Dr. Oyewole Tomori, Vice Chancellor, Redeemer's University, Redemption City, Nigeria

The Committee participated in two-day meetings in Bangkok with participants from the Foundation's offices in New York and Bangkok, the University of Washington, and SEAMEO teams on January 31–February 1, 2010 (with the exception of Dr. Tomori, who was unable to obtain a visa). In July 2010 the teams participated in individual conference calls with Zenda Ofir, in which they discussed the EAC's comments on evaluation design. The EAC continues to provide assistance through supplementary meetings using video conference, conference calls and emails.

Advisory Committee Terms of Reference: Objectives and Scope of Work of the Evaluation Advisory Committee

The main objective of the Evaluation Advisory Committee is to provide independent advice to the Lead Evaluation Grantee and the Rockefeller Evaluation Office to ensure the independence and objectivity of the global and regional DSN evaluation components.

Specifically the Evaluation Advisory Committee is expected to:

▶ Provide short written reports on behalf of the Committee on the quality, credibility and appropriateness of the global and regional DSN Evaluation products and process in three major phases of the evaluation:

a. Design phase—the methodology, workplan, data collection strategy;
b. Implementation—data quality, analysis, preliminary findings, and the process of the evaluation in relation to quality; and
c. Reporting—draft and final reports of each component of the evaluation (Global, Asia, Africa).

In doing so the Committee is asked to identify gaps in the evaluation design and process in relation to the TORs for the evaluation pertaining to the field of disease surveillance and the broader strategic objectives of the Foundation; and potential risks to the evaluation and/or to the Foundation resulting from the work of the evaluation.

Composition and Qualifications of the Advisory Committee

The Advisory Committee shall be comprised of senior professionals who are recognized experts in the following areas:

▶ Evaluation of complex regional programs and networks, specifically with experience in carrying outportfolio reviews, meta evaluation reviews, network evaluation, and quality assurance
▶ Assessment of disease surveillance systems, specifically in Asia and Africa
▶ Evaluation of the One Health approach
▶ Evaluation of health policy and health diplomacy globally and regionally
▶ Knowledge of development issues and trends.

Candidates must demonstrate:

▶ Commitment and availability to participate in meetings
▶ Extensive experience in evaluation in Asia and Africa, preferably in the Mekong countries and countries in East and Southern Africa
▶ Experience in program evaluation in the areas of public health, animal and human health, health policy, and development programs
▶ Free of conflict of interest—that is, candidates must not have current remuneration of any kind from the Disease Surveillance Initiative of the Rockefeller Foundation or any of its grantees.

In selecting candidates to join the Committee, there will be due consideration for the need for geographic representation from Asia and Africa, and gender balance. A program evaluation specialist will be the Chair of the Committee unless otherwise decided.

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Meetings

The Committee will be convened by the Managing Director for Evaluation. The Committee will hold an initial face to face meeting in Bangkok, January 31-February 1, and will confer after that primarily by video conference, phone conference calls and email to deliver the expected evaluation advice. Details of the most appropriate form of communication among the Committee members and with the Foundation and the Lead Grantee will be further developed at the first meeting of the Advisory Committee in Bangkok. The Committee together with the RF Evaluation Director, the Lead Global Evaluator and the Lead Evaluator for the Mekong Evaluation will discuss and agree a tentative schedule for the remainder of the work of the Committee throughout 2010–2011.

Communication and Reporting

The Evaluation Advisory Committee will provide considered, deliberative expert evaluation advice through the Chair of the Committee to the Director of Evaluation of the Rockefeller Foundation and to the Lead Evaluator. The Director of Evaluation and the Lead Evaluator will be responsible for sharing the advice of the Committee with the respective Mekong and Africa Evaluation Teams, and RF managers as appropriate.

To ensure clear communication lines, roles and responsibilities, questions from Committee members should be directed to the Lead Evaluator and the RF Evaluation Director.

In certain instances specific advice may be sought by the Lead Evaluator and the regional evaluation team leaders from individual Evaluation Advisory Committee members depending on the expertise of Committee members and the needs of the Global, Mekong and Africa Evaluation Teams. These arrangements will be agreed in advance in order to respect the limited time available of the Advisory Team members.

Documentation will be sent to the Committee at least a week before the meeting date. Time will be allocated at the meetings for the Committee to prepare their written comments and recommendations to be delivered at the end of the meeting itself. Other advice may be sought from the Committee between meetings.

Annex A: Terms of Reference

Deliverables of the Advisory Committee

The Advisory Committee will be expected to provide written comments and recommendations on the quality and adequacy of, and any necessary improvements to the:

[1] The products of the design phase—the methodology, workplan, data collection strategy;

[2] The products of the implementation phase—data quality, analysis, preliminary findings, and the process of the evaluation in relation to quality.

[3] The reporting products—draft and final reports of each component of the evaluation (Global, Asia, Africa).

[4] The overall synthesis report to President and the Board of Trustees of the Foundation.

In doing the Committee is asked to identify gaps in the evaluation design and process in relation to the TORs for the evaluation pertaining to the field of disease surveillance and the broader strategic objectives of the Foundation; and to identify potential risks to the evaluation and/or to the Foundation resulting from the work of the evaluation.

Internationally accepted evaluation quality review standards will be used by the Committee. (OECD, IOCE, Program Evaluation standards, meta review standards, etc.).

Prior to the first meeting of the Evaluation Advisory Committee the Committee will receive the design, workplan and methodology for the Global Evaluation, and the Mekong Evaluation. The Committee will be expected to provide comments on each of these products at this first meeting.

Remuneration and Performance

Members of the Evaluation Advisory Committee will be provided with an honorarium for serving on the Committee, provided they participate fully in the work of the Committee. Members will receive reimbursement for economy travel and related expenses by the Lead Evaluation Grantee, the University of Washington.

The participation and performance of members will be reviewed annually. Where performance and/or participation on the Committee do not meet the requirements of the TOR and the expectations of the Foundation and the Lead Grantee, members may be replaced at the discretion of the Foundation and the Lead Grantee.

Confidentiality

The Committee will be required to sign a commitment of confidentiality as part of the letter of agreement to serve on the Committee.

Annex B: DSN Evaluation Teams

DSN Global Evaluation Team Members—University of Washington

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Annex B: DSN Evaluation Teams

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Annex B: DSN Evaluation Teams

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