Networks in the Disaster Response and Global Health Domain:
A case study of The Partnership for Quality Medical Donation's response to the 2010 Haitian Earthquake

by

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ABSTRACT

The 2010 Haitian earthquake underscored the fact that disaster response is increasingly complex, multi-sectoral and multi-faceted in character. Nonetheless, disaster relief operations both globally and nationally tend to operate within a highly fragmented context in which potentially overwhelming human and infrastructure needs must be served by limited material and financial aid delivered by disparate humanitarian actors specializing in varying functional domains. Such a chaotic environment demands highly effective communication, collaboration and coordination among a variety of humanitarian actors if relief efforts are to be successful. Even though the coordination mechanisms of multi-organizational actors during disaster response have been studied in a variety of contexts, much less attention has been paid to how international non-governmental (INGOs) and private sector actors may be able to operate collaboratively in disaster settings.

This dissertation provides a case analysis of the efforts of one set of cross-sectoral humanitarian actors that worked through a network in response to the 2010 Haitian earthquake. This mixed methods case study incorporates interview, personal observation, and survey data from INGO field staff, headquarters personnel, and corporate donor representatives, all of whom were members of the cross-sectoral Partnership for Quality Medical Donation (PQMD) that responded to the 2010 Haitian earthquake. The inquiry explores what the coordination-related challenges to disaster response are for network members and then examines whether and in what ways a cross-sector network, PQMD in this instance, can effectively mitigate or overcome those obstacles. This study contributes to the body of disaster coordination and cross-sector network scholarship in two ways. First, the analysis reviews prevailing trends within the cross-sector network and disaster coordination-related literature concerning the requisites and challenges of coordination in humanitarian relief emergencies. Second, this study augments existing understanding of the extremely complex processes involved in coordinating INGO-business disaster response as part of efforts to mobilize multi-sectoral humanitarian action.

This research suggests that efforts to develop cross-sector networks prior to disaster events can build communication, collaboration and coordination pathways that later enhance coordinated INGO-business disaster response to crises. It argues that current theoretical horizons in both network and disaster coordination studies need to be broadened. Specifically, this inquiry highlights the importance of incorporating cross-sector networks (i.e., INGO and corporate actors) into all planning efforts aimed at enhancing collaboration and coordination practices in disaster relief.

DEDICATION

Hoy brindo por aquellos que hicieron este sueño realidad ~
Martha, Jaime, Fanos, Max, PQMD

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A special thanks to the people and nation of Haiti for allowing me a quick glance at life post-January 2010. Peace out Haiti.

The creation of this dissertation has been a wide-ranging collaborative and consultative process, engaging a considerable number of people around the world–too many to mention individually.

A Haitian Creole saying "*Men anpil, chay pa lou,"* which loosely translates to, "many hands will make the load lighter" inspired me to reflect on all the hands that supported my doctoral journey. Many hands exalted my path; some gently nudged it; some dried my tears, others yanked me from my places of fear, procrastination, inertia, some blocked the countless blows to my ego; some gave me comfort; some pulled me up or propelled me forward; some shook me into battle … and yet all the hands on this journey were filled with generous, patient and loving doses of inestimable support.

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GLOSSARY & ACRONYM LIST

ACCORD	Formerly AERDO (Association of Evangelical Relief and Development)
ACCP	Association of Corporate Contribution Professionals
ANSI	American National Standards Institute
BCLC	US Chamber of Commerce Business Civic Leadership Centre
BCtA	Business Call to Action
BD	Becton, Dickinson and Company
BI	Boehringer Ingelheim
BMS	Bristol-Myers Squibb
BSR	Business for Social Responsibility
CDAC	Communicating with Disaster Affected Communities - Haiti.
CSP	Cross sector partnership
CSR	Corporate Social Responsibility
ECHO	European Community Humanitarian Office
FBO	Faith-Based Organization
GIK	Gift in Kind
HDP	Health product donations
IASC	Inter-Agency Standing Committee
IGO	Intergovernmental organization
INGO	International Non-governmental Organization
ISDR	UN International Strategy for Disaster Risk Reduction
MOH	Ministry of Health
MOU	Memorandum of Understanding
NGO	Non-governmental Organization
PAHO	Pan American Health Organization
PROMESS	Programme de Médicaments Essentiels (Haiti)
PPP	Public-Private Partnership
PQMD	Partnership for Quality Medical Donations
UN	United Nations
OCHA	UN Office for the Coordination of Humanitarian Affairs
UNAHT	United Nations Advanced Humanitarian Team
UNDP	United Nations Development Programme
UNDRO	United Nations Office of Disaster Relief Coordinator
UNHCR	United Nations High Commissioner for Refugees
WBCSD	World Business Council for Sustainable Development
WEF	World Economic Forum
WHO	World Health Organization

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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This study examines the disaster response efforts of members of the Partnership for Quality Medical Donations (PQMD), a cross-sector network, in the aftermath of the 2010 Haitian earthquake. The inquiry seeks to understand better the coordination dynamics associated with cross-sector networks and to explore whether participation in such a collaborative during a disaster event can mitigate disaster coordination challenges. I sought to make sense of PQMD's crisis response experience in the context of the three primary disaster response challenges highlighted in the literature: communication, collaboration, and coordination, which I define in section 1.6 below (Drabek & McEntire, 2002; Rey, 1999; Zoraster, 2006). This study contends that the related challenges of communication and collaboration, both critical factors often linked to effectiveness, act as antecedents to coordination and/or coordinated action.

PQMD is unique in that it is the only cross-sector network organization comprised of both corporate (global healthcare companies) and international nongovernmental organizations (INGOs) committed to "raising medical donation standards, promoting effective donation practices, and informing policy makers and the general public on the donation process" (PQMD, n.d., para. 1). Specifically, I examined PQMD's network role vis-à-vis the disaster response challenges confronting both sectors of three network membership stakeholder groups as they sought to provide assistance: field INGO staff (on-the-ground implementers of PQMD member organizations), headquarters INGO staff (logistics, procurement, and administrative functions), and corporate donor personnel (representatives from global healthcare companies). In this study, the term 'cross-sector' refers to four forms of sectoral engagement: NGO/government,

government/for-profit, NGO/for-profit (the focus of this study), and government/NGO/for-profit (tri-sector). All four collaborative arrangements afford participants the potential for increased opportunities for communication, collaboration, and the possibility of coordination. As such, this study highlights the complexities of network interactions that influenced, encouraged, or hindered coordination among PQMD's component organizations in post-earthquake Haiti.

Coordinating multi-organizational, cross-sectoral humanitarian health interventions among disparate disaster relief actors is an imperative, albeit complex, undertaking. Increasingly, network mechanisms are employed to support global health initiatives, emergency aid, and health service delivery. In fact, various initiatives have called for greater cross-sectoral engagement in health programming and service delivery in the past dozen years. These include, but are not limited to, the 1992 World Business Council for Sustainable Development (WBCSD), United Nations' (UN) 2000 Millennium Development Goals (MDGs), 2000 Global Alliance for Vaccines and Immunisation (GAVI), 2001 UN Global Compact, 2005 UN Office for the Coordination of Humanitarian Affairs' (OCHA) Humanitarian Response Review (HRR) and that office's 2003 Good Humanitarian Donorship Initiative (GHDI), the joint World Economic Forum and OCHA's 2007 Guiding Principles for Philanthropic Private Sector Engagement in Humanitarian Action and the 2008 Business Call to Action (BCtA). The common denominator among these efforts is their call for increased cross-sector engagement to enhance resource mobilization for improved aid delivery. This broad interest suggests the need to investigate cross-sector network initiatives for their potential to support improved disaster response, enhancing (in the PQMD case) health resource mobilization in the process.

This research effort builds on Stephenson's (2006) argument that the root problems with coordination are that, "the structure of actors and the strategic and operating environments in

which humanitarian agents must work do not readily encourage broad and open cooperation" (p.42). Instead, he proposed examining network-based associations as a way of re-conceptualizing collaboration and coordination in disaster settings for "increased cross boundary organizational cooperation and trust" (p.55). In fact, in recent years, a number of scholars have written on the value of networks for improving cross-sectoral based associations (Binder 2007; Bryson, Crosby, & Stone, 2006; Selsky, 2005; Simo & Bies, 2007; Waddell & Khagram, 2007; Waddell, 2011), but none have specifically researched efforts in health goods provision in disaster settings. This effort extends and deepens our understanding of one network's role in a disaster response context by exploring PQMD's initiatives to provide health product donations following the Haitian earthquake.

The emergence of cross-sector networks for humanitarian relief can be traced in part to a practical response by professional communities adapting to the rapid changes wrought by a globalizing world (both economically and technologically), rising social global consciousness, and an escalating number of natural disasters. Consequently, NGO-business partnerships are an increasingly significant phenomenon in disaster mitigation and relief efforts (Austin, 2000a; Crane, 2000; Dahan, et al., 2010; Waddell, 2011). Existing scholarship concerning cross-sector partnerships has focused on a variety of issues with differing implications. For example, researchers have developed typologies of such partnerships (Seitanidi, 2010; Waddock, 1991; Wymer & Samu, 2003), examined their relative effectiveness in the health domain (Reich, 2002), defined and proposed global action networks (Waddell, 2011), investigated the question of identity within them (Balmer & Greyser, 2002; Balmer & Van Riel, 1997), explored their social benefit or value (Seitanidi, 2010; Waddock, 1988a), analyzed their capacity to create value for those served (Le Ber & Branzei, 2010), evaluated their limitations (Kanter, 1999), considered

them as social experiments (Widdus, 2001), proposed them as social development partnerships (Kolk et al., 2008; Seitanidi, Koufopoulos, & Palmer, 2011), and finally, called for increased business-civil society organizational collaborations for disaster response (Binder, 2007; Fritz Institute, 2005; Muller & Whiteman, 2009; Waddell, 2000; Weber, McEntire, & Robinson, 2002; White & Lang, 2012; Zhang, Rezaee, & Zhu, 2009; Zoraster, 2006). Despite the importance of these studies, I can find none that have systematically investigated a cross-sectoral network whose sole mission is to facilitate inter-sectoral partnerships, and whose members are actively engaged in efforts to improve the health practice related to donated medicines, medical supplies, and equipment globally. As noted above, the network I study here does so expressly via the provision of health product donations.

This work contributes to the literature at the nexus of network and disaster coordination studies—specifically, business and nongovernmental organization partners acting as humanitarian actors—by investigating the potential of such inter-organizational arrangements to mitigate communication, collaboration, and coordination challenges, and to expand the conceptualization of how collaboratives can help overcome the inertia created by otherwise functionally separate players operating in individual silos. I review and contextualize each of these research threads, or bodies of literature, in this analysis. This is particularly important since existing studies of networks have not focused on the coordination dynamics of NGO-business partnerships in disaster settings. Studying PQMD has the potential to contribute to the broader disaster response and cross-sector network literatures in a way that allows for transferable learning to improve and inform both theory and practice.

1.2 Background, Purpose, and Why PQMD

This study also builds on prior a work by Arroyave, Cooper, and Dilanian: *Key Barriers Faced by INGOs in Responding to International and Domestic Disasters* (Arroyave et al., 2006). That previous analysis provided a geographical comparison (i.e., international versus domestic) of the main challenges that headquarters INGO personnel typically face in responding to disasters—in that case, in response to the 2004 Indian Ocean tsunami and, a year later, to Hurricane Katrina along the U.S. Gulf Coast. The report provided only one viewpoint: the headquarters INGO perspective. That earlier research led to publication of the article *Administrative Failure and the International NGO Response to Hurricane Katrina* in Public Administration Review (Eikenberry, Arroyave, & Cooper, 2007). That analysis and the 'Key Barriers' report have continued to generate interest as a result of various conference presentations by its authors. The resulting dialogue prompted this study, and the onset of a disaster just south of the United States generated the relevant data required for the research.

The 2010 Haitian earthquake brought an important opportunity to broaden that earlier inquiry, especially since nearly 94%[i] of PQMD's INGO members with corporate donor support responded to that nation's disaster. PQMD's cross-sectoral membership provides a rich opportunity for research into the mechanisms and dynamics of relief response among donors, field implementers, and INGO administrative personnel.

1.3 Haiti Case Study: 12 January 2010 Earthquake

A massive earthquake struck the Caribbean nation of Haiti on January 12, 2010. The natural disaster affected more than 39% of the country's population, hitting with particular force in its capital city, Port-au-Prince. That single event made 2010 one of the deadliest years in two decades for natural disasters (Centre for Research on the Epidemiology of Disasters (CRED),

2011). The earthquake was not by any means the first such catastrophe to hit the island nation in recent years. Haiti suffered 20 natural disasters in the 20th century and has been beset by several major blows in the last decade alone (2010: Earthquake; 2008: Hurricanes Fay, Gustav, Hanna, Ike; 2007: Hurricanes Dean and Noel; 2004: Hurricane Jeanne). In contrast to previous crises, however, the 2010 earthquake and its numerous aftershocks created colossal destruction in Port-au-Prince and the surrounding towns. The calamity immediately overwhelmed the ability of government officials to respond—not only because the existing infrastructure was so badly damaged, but also because 17% of available public service personnel were killed in the event (Haiti Evaluation Task Force, 2010). Sbih (2010) adds that, "The MOH [Ministry of Health] building itself collapsed, killing more than 200 staff" and "of 49 hospitals in three affected regions, 30 were destroyed or seriously damaged" (Personal notes, AERDO GIK Summit, November 2010). The loss of government staff, physical office buildings, and resources—including computers, files, forms/documents, information retrieval/input availability, software/hardware, etc.—were emblematic of a limping national bureaucracy walloped by a colossal crisis. Similarly, the United Nations lost 116 of its Haiti Mission colleagues (UN Daily News, 2011). Other aid agencies based in the nation also lost offices, staff, and communication capacities and were unable to offer substantial support. Many of those killed might otherwise have been early responders.

Even when compared to the destruction wrought by the 2004 Indian Ocean tsunami and Hurricane Katrina in 2005, the levels of physical and human devastation in Haiti in 2010 were unprecedented. The earthquake impoverished millions of people and crippled Haiti's already weak infrastructure (Independent Evaluation Group, 2010). Substantial damage to schools, the port, businesses, the airport, libraries, and roads, as well as to countless dwellings only added to

the nation's terrible loss of human life. In fact, Haiti's already dismal health indicators (life expectancy, infant, and maternal mortality) and tenuous public health infrastructure prior to the earthquake only compounded the challenges that arose from the disaster (Watkins, 2007, p.232). In short, Haiti's primary healthcare services were already subpar pre-disaster, but the earthquake significantly degraded even those capacities. Cavallo, Powell and Becerra (2010) estimated an economic loss to Haiti of US $8.1 billion and the deaths of approximately 250,000 of its people (p. F298). The earthquake not only took an estimated quarter of a million lives, left a third of a million individuals seriously injured, and rendered nearly two million people homeless, but its aftermath also continues to threaten the economic viability and health security of the Caribbean nation (UN OCHA, 2010).

Haiti's terrible disaster necessitated massive assistance and the international community responded immediately. Within 24 hours of the quake, the flood of "too many inexperienced NGOs" into Haiti—although undoubtedly well intended—further sabotaged the government's ability to respond on its own (Zanotti, 2010, p. 1). The government's shattering losses resulted in an administrative capacity ill-equipped to cope with the onslaught of nearly 10,000 NGOs that descended upon Haiti post-earthquake (Barry-Shaw, 2008; Bill Clinton Foundation, 2010). Successfully addressing Haiti's ongoing health crises became even more challenging in light of the immediate needs of more than 300,000 injured Haitians and the nation's already compromised health infrastructure.

1.4 Research Goal

Through a review of current literature, survey results, interviews, documents analysis, field visits, and participant observation with PQMD network members—corporate donors, INGO headquarters staff, and field implementing INGOs and PQMD staff—this study explores how the

PQMD collaborative response compares to disaster coordination concerns raised in the literature. I am particularly interested in describing the nature of the interactions among network members during disaster response.

Network dynamics among PQMD members could theoretically be analyzed at the micro, meso, or macro scales. The macro scale of analysis focuses on societal level interactions, the meso level on organizational or sectoral interactions, while the micro level focuses on member interactions within the network (Subbiah, 2009). This dissertation focuses on the micro level of analysis. It studies the challenges faced by individuals functioning in organizational roles within the network as PQMD sought to respond to the evolving Haitian crisis. This analysis compares key intra-network coordination dynamics by membership category beginning first with the field INGO (program implementers), then turning to U.S. non-governmental headquarters personnel (logistics, procurement, and administrative staff), and then finally examining corporate donor experiences and views. In turn, comparison across membership categories permits investigation of the intra-network coordination dynamics arising in and across each, highlighting the different strategies needed to address them at various levels within the collaborative. Before considering the study's research goals, it is important to identify the questions that guided the study and understand better a host of terms employed in this inquiry.

1.5 Study Overview and Central Research Questions

This dissertation addresses two main questions:

Research Question 1:

Whether and in what ways does a cross-sector network, in this instance, PQMD, enhance coordination among its member organizations and improve disaster response efforts?

Research Question 2:

What challenges did PQMD's corporate, INGO headquarters, and field personnel experience as they sought to provide assistance in response to Haiti's 2010 earthquake?

To address these concerns, the study explores the micro-level coordination dynamics, communication (information sharing and gathering and decision-making processes), and collaboration (interactions among INGOs and corporate members as they relate to the network) processes among members of PQMD. In the same way, this study also explores how PQMD's field INGO members, presently not formally supported by the collaborative, might benefit by network involvement. This investigation examines in part whether PQMD offers mechanisms by which more effective coordination could occur across organizations in the collaborative.

The partnerships between INGOs and corporate members do not involve PQMD in the actual donation process (proposal, negotiation, logistics, dispensing, and follow-up). For these functions, corporate members and their preferred INGO partners work together directly when responding to an event, not under the auspices of PQMD. However, members rely on the network to catalyze communication and collaboration among themselves both internally (among members exclusively) and externally (PQMD issues press releases concerning member activities).

The central research questions place this dissertation into an existing discourse, thereby guiding the language I will use to discuss data and provide analysis. The language common to the discourse requires contextualization and a definition to establish conceptual commonality.

1.6 Terminology

This section provides a basic, but not exhaustive, overview of the key terms employed in this study. Its purpose is to facilitate a general understanding of their scope and function in the context of this research.

Global Health

The concept of "global health" has no single agreed upon definition. Koplan et al. (2009) have described the term as:

> An area of study, research, and practice that places a priority on improving health and achieving equity in health for all people worldwide. Global health emphasizes transnational health issues, determinants, and solutions; involves many disciplines within and beyond the health sciences and promotes interdisciplinary collaboration; and is a synthesis of population-based prevention with individual-level clinical care (p. 1995).

This definition suggests that global health entails addressing "the scope of problems, not their location," and must "embrace the full breadth of important health threats," as well as "encompass more complex transactions between societies" (Koplan et al., 2009, p.1994). Likewise, Beaglehole and Bonita (2010) have recently defined the concept to mean, "Collaborative trans-national research and action for promoting health for all" (p. 3). These authors contend that integrated multi-stakeholder collaboration should adopt more interdisciplinary approaches for achieving improved health delivery to populations in need around the world.

Networks

Networks, as employed in this study, are "any sustained effort around which different, autonomous organizations work in concert as equal partners in pursuit of a common social or civic purpose as a 'viable pattern of economic organization' ... to leverage trusted relationships … to extend limited resources and amplify on-the-ground results," in which risks and benefits are shared in pursuit of a shared goal (Powell, 1990; Vandeventer & Mandell, 2007, p. 5). For PQMD, a registered nonprofit organization, members work together principally to mobilize and

provide in-kind pharmaceutical, medical device, and equipment resources. The network's collaboration is "typified by reciprocal patterns of communication and exchange" and joint formulation and implementation of program plans for action (Powell, 1990).

Sector

The term sector in this study refers to the three prevailing social structures involved with humanitarian action:

- Government sector (states). Seitanidi (2010) has defined government's role as "welfare provision for its citizens," which includes providing "guidance and governance to and for societal actors" (p.2).
- Private sector (the market, for-profit entities). The private sector's role, according to Seitanidi (2010), is "the profitable production, distribution, and sale of … goods and services." This sector is considered best at "wealth and profit creation" (Cannon cited in Seitanidi, 1992:36).
- Civil society. Brown et al. (2000) define civil society as, "an area of association and action independent of the state and the market" (p. 7). Civil society agents, whether national, regional, or global, are most commonly called nongovernmental organizations (NGOs), international nongovernmental organizations (INGOs), community-based organizations (CBOs), private voluntary organizations (PVOs), civic associations, nonprofits, charitable organizations, or simply civil society organizations (CSOs).

Cross-sector Networks

Cross-sector networks are partnerships created by actors from different sectors. These collaborations have been characterized as non-traditional alliances due to their complexity (Kanter, 1999, p. 126; Kapucu, 2006b; Seitanidi, 2010, p. 36). While their specific arrangements and mandates vary, most have similar attributes: actors from at least two sectors voluntarily partnering to achieve something that neither can accomplish alone—an aspiration supported by Provan and Kenis' (2008) definition of network effectiveness. Cross-sector collaborations may be implemented formally (contractually) or informally.

This study defines cross-sector networks narrowly, focusing on partnerships between INGOs and global healthcare companies that have the following attributes:

- Are voluntary institutionalized initiatives (Vandeventer & Mandell, 2007);
- Fall "outside" the purview of formal hierarchical government structures (Uzzi, 1996);
- "Work together to achieve not only their own goals but also a collective goal" (Austin, Guitierrez, Ogliastri, & Reficco, 2006; Provan & Kenis, 2008, p. 231);
- Are dedicated to advancing global health objectives and 'societal betterment' through collective decision-making (Austin et al., 2006, p. 259; Buse & Harmer, 2007; Le Ber & Branzei, 2010, p. 601);
- Are "typified by reciprocal patterns of communication and exchange" (Powell, 1990);
- Share risks, costs, and benefits (Austin et al., 2006, p. 259; Buse & Harmer, 2007; Le Ber & Branzei, 2010, p. 601).

The term 'cross-sector humanitarian actors,' as employed in this study, refers to for-profit and INGO partners engaged together in humanitarian action. This definition takes into account the fact that INGO and business actors presently work in disaster response and in the global health landscape alongside, but not always necessarily in concert with, governments or public actors.

Nongovernmental Organizations - NGOs

The World Bank defines NGOs as, "private organizations that pursue activities to relieve suffering, promote the interests of the poor, protect the environment, provide basic social services, or undertake community development" (Malena, 1995, p. 7). In the *Encyclopedia of the United Nations* by Moore, & Pubantz, 2008, the authors illuminate NGOs' humanitarian functions:

> A non-governmental organization (NGO) is any non-profit, voluntary citizens' group, which is organized on a local, national, or international level. Task-oriented and driven by people with a common interest, NGOs perform a variety of services and humanitarian functions, bring citizens' concerns to governments, monitor policies, and encourage political participation at the community level (p. 311).

The literature generally distinguishes between NGOs and INGOs. NGOs commonly refer to non-governmental organizations based and practicing in one country and INGOs refers

to those practicing in countries beyond their nation-state (Stephenson, 2006, p.43). Further to the point, "INGOs typically serve developing countries and regions, frequently conducting work in areas related to development, humanitarian assistance, and advocacy" (Anheier 2005, as quoted in Eikenberry et al., 2007, p. 160). However, NGO is the common vernacular in the field. And for this work, both terms are used in line with the source of the material. Unless otherwise specified, both NGOs and INGOs refer to international NGOs hereafter.

Field INGO

Field INGO or INGO field personnel/staff, as employed in the study, are field-deployed representatives of the same organization represented by the headquarters INGO representative. In other words, both field and headquarters INGOs represent the same organization on PQMD's board, except that the headquarters INGO representative is the official board member for the organization attends all PQMD functions/meetings, and actively engages in PQMD committee work.

International Development

International development refers to the goal of improving the social and economic circumstances of the world's poorest and most vulnerable people in a sustainable manner (InterAction, n.d.).

Humanitarian Action

The primary objectives of humanitarian action are to save lives, alleviate suffering, and maintain human dignity while disregarding the race, ethnicity, religion, or political affiliation of those assisted (InterAction, n.d.).

Disaster

Disaster events have spawned a wide-ranging nomenclature describing the events themselves and responses to them. Disasters include both natural hazards and human-made

incidents. The study of disasters encompasses calamities related to geophysical, climatologic, political, administrative, social, psycho-social, technical, engineering, science-based, and economic factors (Dynes, 2002). Disasters include widespread disease outbreak, terrorism, cyber-terrorism, biological warfare, civil war, famine (slow or sudden onset), environmental and natural events (earthquakes, floods, tornados, volcanic eruptions, etc.), human-made (arson, armed conflict, etc.), and technological breakdowns (radiation leak at a nuclear power facility). However, Dynes (2004)[ii] has suggested that, "the existing research tradition is predominately Western, community-based, urban, and deals with sudden onset agents from 'natural' causes" (p.2). In short, there is no universally understood term to express the need for relief, but instead a whole host of words have been used to describe it.

The International Red Cross/Red Crescent has defined disaster as a "a sudden, calamitous event that seriously disrupts the functioning of a community or society and causes human, material, and economic or environmental losses that exceed the community's or society's ability to cope using its own resources" (International Federation of Red Cross, n.d.) The World Health Organization (WHO) views disasters as "a serious disruption of the functioning of a community or a society involving widespread human, material, economic, or environmental losses and impacts, which exceeds the ability of the affected community or society to cope using its own resources" (World Health Organization, n.d.). Sundnes and Birnbaum (2002) have suggested a health disaster, particularly, is, "a precipitous or gradual decline in the overall health status of a community for which the community is unable to cope without outside assistance" (p.149). All of these definitions have as fundamental descriptors disruption, loss, and the need for assistance to a society stricken by an event. Sundnes and Birnbaum (2002) offer two further clarifications as these crises pertain to health: "A health disaster encompasses impaired public health and

medical care to individual victims. A medical disaster relates to the healthcare or break in healthcare to individuals as a result of an event" (p. 33).

Disaster Response

The diversity and use of 'disaster response' strains any simple definition or classification. Generally speaking, as a term, 'disaster response' is frequently used interchangeably with humanitarian action, disaster/emergency management (consisting of mitigation, preparedness, response, and recovery), emergency relief, crisis response, emergency response, emergency services, disaster relief, humanitarian aid, disaster recovery, and other similar expressions. This study follows the nomenclature recommended by the International Federation of the Red Cross, which suggests that disaster response is "to alleviate human suffering amongst those least able to withstand the stress caused by disaster" (International Federation of Red Cross (IFRC), Code of Conduct, n.d., p.2).

Disaster Mitigation

Broder (2005) has defined disaster mitigation as, "sustained action that reduces or eliminates long-term risk to people and property from natural hazards and their effects" (p. 113). This definition suggests that identifying and then contextualizing "potential threats, consequences, and delivery modes" comprises the basis for mitigation planning (p.133).

Disaster Preparedness

Disaster preparedness implies planning with an eye towards bolstering disaster response capacity. OCHA defines such preparedness/readiness as, "increasing the capacity of all relevant actors, including potentially affected people, to respond in the event of a disaster situation, which includes the development/enhancement of an overall preparedness strategy, policy, institutional structure" (United Nations International Strategy for Disaster Reduction (ISDR), 2009). By way of example, Sundnes and Birnbaum suggest that the "stockpiling of medical supplies in case of

demand" and the "training of medical response personnel" function as a part of preparedness (2002, p. 52).

Disaster Assessment

Stephenson's 1994 Disaster Management Training Programme defined disaster assessment as, "the gathering and analysis of information pertinent to disasters and disaster response. The scope of the information required covers factual details of the hazard event causing the disaster, the needs of those affected, and the available resources for responding to those needs (p.7). As Stephenson (1994) contended, "Assessment is a critical activity and essential component on the disaster preparedness and management continuum. It is through a formal assessment process that information is gathered and provided to the responsible decision-makers" (p. 50).

INGO Access

In this study, INGO access includes factors influencing entry and accessibility to the disaster zone. I define health INGO access as any such organization's ability to provide services and product donations/provisions, which is a function of a) availability of personnel and supplies, b) ability to obtain necessary clearances in-country to operate as a medical provider (permits, registration), c) capacity to render support at a disaster or work site, and d) the ability—if desired—to operate within a larger array of humanitarian institutions on-the-ground.

Drug Donation

According to van Dijk, Dinant, and Jacobs (2011),

> Drug donations are donations of pharmaceuticals: (i) to less developed countries in acute emergency situations; (ii) in the context of development aid in non-emergency situations; or (iii) as disease-specific drug donation programmes for the control of communicable diseases, also referred to as corporate drug donations (e.g. the Mectizan Donations Programme for the control of river blindness). Drug donations can be made by corporations, non-governmental organizations (NGOs), governments, or individuals.

> Possible recipients of drug donations include governments, NGOs, health institutions, or individual healthcare workers (p.1).

Bero and colleagues (2010) have categorized drug donations as "pharmaceutical agents given to countries or health facilities at no cost by nongovernmental organizations (NGOs), other countries, private corporations, or groups of donors" (p. 922). The World Health Organization's 2010 Guidelines for Medicine Donations (previously known as Guidelines for Drug Donations 1996 and 1999 editions), hereafter referred to as Guidelines, adds that "medicine donations" are deployed for "emergency aid, long-term aid, or assistance to national health systems or to individual health facilities" (p.4). The Guidelines also dictate that "donations may come from pharmaceutical companies (directly or through private voluntary organizations), they may come in the form of aid from governments, or they may be donations aimed directly at single health-care facilities" (p.4).

Drug donations are also known as gifts-in-kind (GIK), corporate contributions-in-kind, in-kind donations, medical donations, and material or medical aid, with the terms often used synonymously. The most commonly employed terms are gifts-in-kind (GIK) or pharmaceutical donations. I propose a more inclusive definition of drug donations as health product donations next.

Health Product Donations

For the purposes of this study, I have defined the term health product donations as medicines, medical supplies, devices and equipment, nutritionals, personal and shelter care, and over the counter (OTC) products donated by global healthcare companies to international nongovernmental organizations in support of disaster relief efforts, long-term health development, global health interventions, disease-specific initiatives, national health systems, or individual health facilities nationally or internationally. However, I do not include donations

made by individuals, churches, governments, or bilateral aid organizations as health product donations. This distinction delineates the actors from the two sectors under investigation: non-profit (INGOs) and business (global healthcare companies) collaboratives. Furthermore, the definition highlights the gifts made exclusively in the form of health product donations.

In the United States, donations most often occur between a healthcare manufacturer and a U.S.-based INGO under an allowance codified in Section 170(e) (3) of the Internal Revenue Code, which affords firms a tax incentive for providing goods for charitable use as long as they are designated for the "ill, needy, or infants." In contrast to the U.S. tax system, Europe's tax policy involving taxation/exemption of health product or charitable donations is mostly decided by the 27 individual member states of the European Union (EU). And non-EU countries employ individual tax regimes unconstrained by EU law.[iii]

Disaster Collaboration, Coordination, and Cooperation

It is important to note that the terms collaboration, coordination, and cooperation tend to be used interchangeably in the disaster response literature (Russell, 2005, p. 45). All three words describe the act of working together. However, the Merriam-Webster Online Dictionary (2013) defines these concepts differently as follows:

- Coordination: the harmonious functioning of parts for effective results;
- Cooperation: to act together or in compliance for mutual benefit;
- Collaboration: a) to work together jointly, especially in an intellectual endeavor; b) cooperating with or willingly in assisting an enemy of one's country, especially an occupying force.

Synonymous use of the above terms leads to further confusion in the disaster response coordination literature, which is replete with examples of who, how, why, and when disaster coordination failed. The literature typically examines probable causes, such as governance, sovereignty, sociological/cultural factors, logistical issues, sectoral differences, the presence or

absence of a central authoritative body, and several agents responsible for coordination (or lack thereof); the agents can be INGOs, government, military, private firms, or church groups.

Rebecca Waugh (2011), training specialist at the National Evaluation and Technical Assistance Center, has developed a toolkit on communication, cooperation, and collaboration and suggested, "The fundamental difference between collaboration and cooperation is the level of formality in the relationships between agencies or stakeholders." She characterizes cooperation as an "informal arrangement" when agencies come together, "fundamentally changing their individual approaches to a goal to allow for the sharing of resources and responsibilities" (para. 3). In turn, collaboration can and does apply in her view to cross-sectoral organizational ties. The thought of collaborating with market organizations was probably a foreign one for both governments and INGOs until fairly recently. In fact, the notion of for-profit sector actors agreeing to work together in a non-hierarchical network governance structure with not only major competitors, but INGOs, is as mentioned before, a burgeoning phenomenon. Coordination, meanwhile, requires an operative congruity of performance and functionality for its attainment and tacitly implies collaboration (formal) or cooperation (informal) as a precursor. In other words, stakeholders could decide severally and separately whether to collaborate (share a goal, share information, and resources/responsibilities) and coordinate (joint action/outcomes versus individual action towards a shared goal).

For the sake of simplicity, in this study, I use the terms collaborate (rather than cooperate) and coordinate exclusively given that PQMD operates within the context of a formal arrangement. And, when I use the term collaboration, I mean a voluntary association among organizations to work together for 'mutual benefit.' However, I distinguish between collaboration and coordination, arguing that collaboration is a precursor to effective

coordination/coordinated action and that one does not necessarily imply the other. Indeed, as mentioned in the introduction, I view both communication and collaboration as antecedents to coordination. In other words, just because members within a network communicate and/or collaborate does not mean that 1) their respective actions are coordinated, 2) coordination will necessarily ensue from their communication/collaboration, or that 3) those collaborating seek coordination or to be coordinated.

1.7 Outline of Dissertation

This chapter has provided an overview of the research presented in this effort. It has outlined the central purposes of this study, sketched the nature and severity of Haiti's 2010 earthquake, and described the effort's principal research questions. Chapters 2 and 3 contain a focused review of the relevant literature on networks and disaster coordination. Chapter 4 describes the research design and methodology employed for the study. Chapter 5 provides the reader an overview of PQMD's history, composition, structure, and membership. Chapter 6 details the investigation's findings, which highlight the complex and challenging environment cross-sectoral humanitarian actors face in crisis relief response and coordination. The analysis reviews survey data, interview findings from PQMD members—corporate donors, international non-governmental organizations (INGO) headquarters staff, and field deployed INGO staff—comparing information derived from these three sets of respondents in the context of PQMD's network role, as well as participant observation of field operations and the collaborative's board member meetings. Chapter 7 discusses the study within the context of the literature review. Chapter 8 offers my conclusions and recommendations. Finally, Appendices contain Institutional Review Board (IRB) approval letters and copies of the survey and interview instruments employed in the research.

CHAPTER TWO

NETWORKS in DISASTER RESPONSE

2.1 Introduction

This research draws on scholarship in network theory and disaster response and uses the ideas derived to frame analysis of PQMD's cross-sector network disaster response to the Haitian 2010 earthquake. This chapter reviews the relevant literature on analytic approaches to networks.

2.2 Limitations of this Literature Review

This review of the literature concerning networks is by no means comprehensive, as the scholarship on the topic is complex, multi-faceted, and multidisciplinary. Additionally, the quantity and diversity of the literature on networks makes it difficult to review concisely. Disciplines addressing networks include public administration, information systems, health sciences, management, and sociology. Cross-sectoral networks, cross-sectoral partnerships, and INGO-business networks proved helpful search terms for identifying literature for this review. This assessment focuses explicitly on networks operating in the disaster relief domain focusing on health concerns.

The remainder of this chapter is divided into six sections:

- Section 2.3 background on disasters and humanitarian response;
- Section 2.4 defines networks;
- Section 2.5 reviews network theory and attributes;
- Section 2.6 discusses the network domain of this study;
- Section 2.7 examines global health and networks, reviews the actors pertinent to this study–INGOs and global healthcare leaders;
- Section 2.8 summarizes the chapter.

2.3 Disaster Response: Are networks a Possible Solution?

This section provides a big picture view of the disaster relief and response domain, as well as orients the reader to how cross-sector networks are situated within that landscape. Much evidence suggests humanitarian relief efforts suffer from high levels of confusion, miscommunication, inefficiency, redundancy, and poor collaboration and coordination. The disaster coordination literature, which I review more fully in chapter 3, postulates that increasing communication and collaboration among humanitarian relief actors is key to improving the overall quality of their crisis response. For instance, in a study comparing barriers to response for the 2004 Indian Ocean tsunami and Hurricane Katrina in 2005, the authors concluded that, "the most common barriers to response in both contexts related to coordination and communication" (Arroyave et al., 2006, p. 3). Low levels of coordination and communication in relief efforts are common enough to represent a significant impediment to disaster response effectiveness.

In a disaster, host governments are vital actors expected to respond and provide necessary aid. In fact, most scholars consider "emergency management [as] the quintessential government role" (Waugh, 2000, p. 3). However, in reality and especially in resource-limited developing countries, governments do not have the resources/capacity to respond to their populations' needs and this is exacerbated in a disaster scenario (Ozerdem & Jacoby, 2006; Sobel & Leeson, 2006). And while host governments often control important assets, such as transportation (air, port, land accessibility), fuel reserves, local knowledge of infrastructure and resources, and national access (entry/passport visa, custom clearances, organizational permits, etc.), their lack of capacity can and often does constrain the operational effectiveness of aid delivery. The 2010 Haitian earthquake is a perfect example of this scenario in which the earthquake destabilized in-country

health infrastructure, impairing government action due to a heavy loss of personnel and government facilities. In all disasters, humanitarian organizations fill the void when governments lack capacity to respond to crises. Likewise, the United Nations Office of Coordination for Humanitarian Action (OCHA) attempts to

> mobilize and coordinate effective and principled humanitarian action in partnership with national and international actors in order to a) alleviate human suffering in disasters and emergencies; b) advocate the rights of people in need; c) promote preparedness and prevention; d) facilitate sustainable solutions" (UN OCHA, 2010, p.3).

They have done so with varying degrees of success. In most disaster scenarios, as evidenced by the 2004 Indian Ocean tsunami, Hurricane Katrina in 2005, and the 2010 Haitian earthquake, whether or not the host government has the capacity or resources to respond, the affected national governments often play secondary roles (if any) when it comes to the distribution of individual INGO aid.

Multiple types of humanitarian organizations provide assistance in disaster situations. These actors include NGOs, IGOs, corporations, foreign governments, bilateral and multilateral aid organizations, churches, foundations, celebrities, citizens, and spontaneous volunteers (skilled and unskilled). Each of these participants organizes its response on its own initiative and with its individual resources or funding stream. Houghton (2011) remarks, "It is perhaps not surprising, therefore, that working in partnership in emergency contexts is challenging, particularly as values such as speed and independence are prized" (p. 2). Each participant is animated by different incentives, missions, and accountability claims. And, for example, Anderson (2011) has observed that a notable constraint in responding in Haiti was, "having to navigate the bureaucracy of the government and the roughly 10,000 NGOs with a presence in the country—all of which worked on separate, small projects, with varying objectives ranging from healthcare to shelter to feeding the hungry" (Anderson, Fall 2011,para. 9). This situation can and

often does lead to confusion, duplication of efforts, poor resource allocation relative to population needs, competition for beneficiaries, redundancy of services, and a focus on less imperative concerns.

For instance, NGOs and INGOs are often first-tier responders and rarely cede coordination to other entities. Their imperative is threefold: 1) to help people in need as quickly as possible; 2) to bolster their organizational mission, legitimacy, and funding; and 3) to be accountable to their donors and to any networks in which they actively participate. Meanwhile, for-profit actors in disaster response are motivated by a combination of a desire to assist and to satisfy employee expectations. They must also uphold standards related to corporate social responsibility, public image, their status in the industry relative to other corporations, the networks in which they participate actively, disaster relief beneficiaries, tax incentives for charitable giving, and distributing surplus inventory prior to expiration date. As a publicly traded company they are also ultimately accountable to shareholders.

Generally speaking, disaster situations are characterized by poor coordination. McEntire (1997) found crisis scenario coordination particularly challenging, suggesting, "There is no single organization which has the exclusive right and responsibility to direct international relief operations" (p. 224). Sadly, poor coordination typically makes it more difficult to ensure the needs of survivors are effectively addressed. Moreover, communication among humanitarian actors in disaster response is usually limited and ad hoc in character constraining collaboration. Efforts to create and implement partnerships to coordinate activities are almost impossible when responders do not have the mechanisms to connect (responders are often not even aware of who else is responding and those actors' capacities/resources).

Having a pre-established mechanism for communication and collaboration potentially increases disaster coordination (Simo & Bies, 2007; Stephenson, 2006; Waddell, 2000, 2011). Stephenson & Schnizter (2006) explain,

> Humanitarian aid implementation is better conceived as a network of actors enmeshed, in part, within a set of pre-existing relationships, brought together by an emergency, but with no natural lines of authority existing among them. This suggests that coordination takes place within a relational network of more or less independent organizations (at least from one another) (p. 31).

Additionally, various authors have suggested the necessity of having a network body to facilitate communication in disaster events (Auf der Heide, 1989; Drabek & McEntire, 2002; Kapucu, 2006b). Functioning as this intermediary, networks become vital facilitators of sector-specific information (hubs for 'information transactions') and collaboration (like-minded humanitarian actors with goal consensus), thereby minimizing uncertainty for improved decision-making processes and response. This pre-established mechanism can provide the platform that humanitarian responders can use to coordinate activities. Such collaborative platforms are often networks and will be explored in the next section.

2.4 What is a Network?

I argue that cross-sectoral collaborations are best represented in the scholarly literature as networks, with their attendant benefits and challenges. These associations often achieve strength by representing different sectors; in this case, they represent the for-profit and civil society sectors, lending legitimacy, authority, influence, and resources that participating organizations would not possess alone.

Networks, according to Vandeventer and Mandel (2007), are "any sustained effort around which different, autonomous organizations work in concert as equal partners in pursuit of a common social or civic purpose" (p. 5). Cross-sectoral networks are characterized by the

voluntary association of "loosely coupled members" from differing sectors that share a common purpose (Weick, 1976). At their core, networks are "a set of actors or nodes, with relationships between nodes" (Provan & Kenis, 2008, p. 233) that constitute collaborative hubs in non-hierarchical structures (Alter & Hage, 1993). They may operate at varying levels of scale—individual, intra-organizational, inter-organizational, regional, national, and international.

Beyond these similarities, scholars from multiple disciplines have offered different conceptions of network origins, functions, and contributions. Some have suggested networks develop in response to social complexities (Austin, 2000b; Austin et al., 2006; Brown, 2007; Chisholm, 1996; Stephenson Jr., 2006; Waddell, 2000, 2011; Waddock, 1988b). Other authors have argued networks emerge in light of the centrifugal tendencies of socioeconomic neo-liberalism (Castells, 2000; Habermas, 1989; Harvey, 2005; Yergin & Stanislaw, 1998). Still others have contended this organizational form is a prerequisite for organization-scale efficiency, effectiveness, and accountability in many strategic environments (Berlinger, 1997; Ebrahim, 2004; Milward & Provan, 2006; Nelson, 2010; Waddell & Khagram, 2007). Given the variety of situations in which networks can be investigated, I have targeted the understudied phenomenon of cross-sectoral networks operating in disaster settings for examination (Binder, 2007; Maon, Lindgreen, & Vanhamme, 2009; Sayegh, 2004; Sharma, Gupta & Gupta, 2002).

2.5 Network Theory

I turn now to review a share of the extensive body of literature that examines the increasing prominence of networks in a number of research traditions. Scholars have made strides in better understanding the trend toward widespread adoption of networks. As a result, an interesting literature describing network forms, variations, and practices has emerged.

Given the prominence of networks in the academic and practitioner spheres, scholars have suggested that these organizational forms expand existing partnership infrastructures to supplement markets and hierarchies, align activities, minimize duplicative efforts, help identify gaps in services and delivery, and enhance resource allocation (Gulati, Lavie, & Madhavan, 2011; Lipnack & Stamps, 1994; Powell, 1990; Vandeventer & Mandell, 2007; Waddell, 2011; World Business Council for Sustainable Development (WBCSD, 2010). Analysts have also suggested that networks advance norms, innovate outside of their respective institutional constraints, and achieve economies of scale—they perform these roles while simultaneously building social capital (Agranoff, 2007; Kapucu, 2006b; O'Toole, 1997; Powell, 1990). Along these lines, Agranoff (2006) has argued networks constitute, "important vehicles for resource pooling, mutual exploration, and knowledge creation" (p.6).

In the governmental and non-governmental sectors, networks are known for generating collective responses to complex problems by advancing cross-boundary action (Stephenson Jr. & Schnitzer, 2006). Cross-boundary action in public administration has been described as a movement "toward theories of cooperation, networking, governance, and institution building and maintenance" (Frederickson, 1999, p. 702). Castells (2004) has broadly contended that, "power does not reside in institutions, not even the state or large corporations. It [power] is located in the networks that structure society" (p.224). Kapucu (2006b) regards networks as, "a new institutional arrangement through which to deal with a variety of key societal concerns" (p. 208). Bloom (2007) has further noted that networks are, "the manner in which governments, the private sector, and civil society make and implement decisions to promote and protect global health" (p. 32). These and other authors have contended overall that networks are a prevailing way to galvanize organizational and/or sectoral actors and resources to combat global concerns,

suggesting that the sum is often larger than either its individual parts or the simple agglomeration of those constituent units. It appears appropriate to examine network attributes, both to understand the incentives that underpin action within them as well as to determine under what circumstances they succeed in adding value to the participating individuals or organizations that comprise them.

2.5.1 Network Attributes

Networks have many benefits for humanitarian action. A key advantage of the collaborative form is its flexibility while creating conditions in which its members can develop and pursue shared aims (Agranoff & McGuire, 2003; Ashman, 2001; Powell, 1990). A network's attributes shape the way it pursues and achieves these shared aspirations. Implicitly, a collaborative's characteristics contribute to an increased measure of efficiency and effectiveness to enable its members to meet their shared goals. These include committed resources and appropriate competencies for action, communication, leadership, management, participation, and evaluation (Ashman, 2001; Scharpf, 1993). These capacities can help secure partner/members' aims as well as help ensure stakeholder satisfaction with network efforts (Ashman, 2001). Scharpf (1993) has argued that networks must manifest a relatively equal distribution of power—in which all members add value and share aspirations—if they are to serve as vehicles for achieving the personal and collective goals and aims of their individual members. Table 1 presents the primary attributes of networks as outlined in the relevant literature.

Table 1: Network Attributes

Feature	Description	Authors
Shared aspiration, collaboration	Working toward a common purpose collaboratively, in interactive fashion, or in alliance against a common objective	Austin, 2000a, Austin, 2000b; Behera, 2002; Bryson et al., 2006; Crane, 2000; Gulati et al., 2011; Heap, 2000; Kamensky & Burlin, 2004; Kapucu, 2006a; Maon, Lindgreen, & Vanhamme, 2009; Mays, Halverson, & Kaluzny, 1998; Simo & Bies, 2007; Stephenson Jr., 2005; Waugh & Streib, 2006; Zadek & Radovich, 2006
Social capital, trust	Reciprocity, mutual respect	Baron, Field, & Schuller, 2000; Dynes, 2002; Fu, 2004; Fukuyama, 2001; Gittell & Vidal, 1998; Kapucu, 2003; Putnam, 2000; Stephenson Jr. & Schnitzer, 2006; Szreter & Woolcock, 2004
Knowledge, learning, communication, innovation, creativity,	Learning from its own activities	Alter & Hage, 1993; Austin, 2000a; Caines et al., 2004; Chisholm, 1998; Daboub and Calton, 2002; Ebrahim, 2005; Gray, 1989; Hamel, 1991; Harrald, 2006; Harris, Coles, & Dickenson, 2000; Kapucu, 2003; Kolk, van Tulder, & Kostwinder, 2008; Lukas & Andrews, n.d.; McGuire & Agranoff, 2007; Nooteboom, 2004; Powell, Koput, &Smith-Doerr, 1996; Samii, Van Wassenhove, & Bhattacharya, 2002; Seitanidi & Ryan, 2007; Stephenson Jr., 2006; Waddock, 1988a; Vandeventer & Mandell, 2007
Non-hierarchical and self-regulating governance structure, agile	Operational flexibility, self-governing autonomous entities rooted in equality of participation	Austin, 2000a; Austin, 2000b; Caines et al., 2004; Chisholm, 1998; Damlamian, 2006; Drabek & McEntire, 2002; Gray, 1989; Harrald, 2006; Kapucu, 2003; Kolk, van Tulder, & Kostwinder, 2008; Lukas & Andrews, n.d.; Podolny & Page, 1998; Stephenson Jr., 2006; Vandeventer & Mandell, 2007; Waddock, 1988a
Leveraging resources, legitimacy, best practices	Resources in terms of social, expertise, financial, or political capital	Austin, 2000a; Chisholm, 1998; Gulati et al., 2011; Lipnack & Stamps, 1994; Provan, 2004; Provan & Milward, 2001; Seitanidi, 2010; Seitanidi, Koufopoulos, & Palmer, 2011; Vandeventer & Mandell, 2007

Effective networks and partnerships in disaster settings have been linked closely with the following factors: social capital and trust, learning, and structure and improved governance (as described in Table 1) (Comfort & Kapucu, 2006; Dynes, 2002; Kapucu & Van Wart, 2006; Maon et al., 2009; Slagle-Pipes, 2007; White & Lang, 2012). Each of these attributes is treated below.

2.5.1.1 Social Capital and Trust

Growing empirical evidence suggests that social capital and trust contribute significantly to network development (Uzzi, 1997). These twin concepts are often used interchangeably. However, social capital tends to be more closely associated with organizational or institutional effectiveness, or goal attainment, and refers to, "features of social life—networks, norms, and trust—that enable participants to act together more effectively to pursue shared objectives" (Putnam, in Baron, Field & Schuller, 2000, p. 9). Coleman's (1990) work on social capital distinguished social from human capital by suggesting that, "Unlike other forms of capital, social capital inheres in the structure of relations between persons and among persons" (p. 302). Coleman argued further that social structure and social capital are joined when collaborators attain common purpose (p. 305).

The roles of social capital, trust, and interdependence are integral to the creation of network linkages (Rogers, 1995; Stephenson, 2005). Networks create new patterns of relationships that go beyond members' primary affiliations. Thus, they serve as effective mechanisms to integrate otherwise isolated capacities for a common purpose or purposes (Noteboom, 2004). Provan and Kenis (2008) maintain that, "a common theme is the need to build trust through collaboration for networks" (p.242). This point suggests that if a network's

members are motivated by similar ties, such as a common objective, long-standing institutional relationships, political and philanthropic credo, and nature of task (Gazley, 2008; Kapucu, 2006a; Kapucu 2006b; Provan & Kenis, 2008), their ensuing collaborative will more easily develop social capital and trust than would otherwise be the case (Stephenson & Schnitzer, 2006). These conditions are potentially enhanced by continued successful network member exchanges, which can encourage members to develop shared norms, disclose information, and expand their ability to respond to change or problems with greater capacity, resilience, and deeper understanding of other partner's needs. Networks and partnerships often arise on the basis of the social capital developed between groups of people and organizations that share a history of working together.

Dynes (2002) has characterized social capital in disaster response as, "a term that encompasses the norms and networks that facilitate collective action," distinguishing it from human capital, which he defines as, "how educated, trained, and healthy individuals create effective economic growth" (Dynes, 2002, p. 2). In particular, trustworthiness and social capital can play important roles in "extreme events within which there is no clear policy or guidelines available to the participant organizations and individuals" (Axelrod & Cohen, 1999). Kapucu (2006b) has also contended that, from a public administration perspective, "The value creation process of public and nonprofit partnerships in emergencies can generate incremental social capital, not only to the partners and members, but also to society as a whole" (p. 209). Bryson et al. (2006) have echoed this point suggesting that, when in turmoil, brokering agents play a critical role in facilitating collaboration. This point is especially true of cross-sectoral INGO-business partnerships. Trust is an essential component for securing collaboration in uncertain environments. As Stephenson and Schnitzer (2006) have argued, trust is a precondition to

coordination and boundary-spanning between organizations. Such bridging behavior is essential to effective inter-organizational coordination.

Kapucu, too, has suggested that trust is particularly important in fostering effective disaster response: "trust is crucial in the uncertain situations caused by an extreme event," in part, because "communication is critical to the process of self-organization and collective action" (2006b, p. 209). Donors often rely on nonprofit organizations to provide services in post-disaster situations—trust and social capital are essential to make those relationships effective. Granovetter (1995) has pointed out that when high levels of trust exist, "trustworthy behavior can be expected, normative standards understood, and opportunism foregone" (as cited in Podolny, 2008, p. 180); or, as Powell et al. (1996) put it, "competition is no longer seen as a zero-sum outcome" (p. 143) because trust instills "community-level mutualism" (p. 143). Without trust, communication and collaboration are neither likely nor sustainable and, thus, will not result in coordination.

Social capital inheres in relationships: "Collaborating across organizations with different cultures and rules always places a huge emphasis on personal relationships" (Linden, 2002, p. 48). In his report post Katrina *Weathering the Storm* (2006) report, Pipa examined the role of pre-existing relationships in crisis response, suggesting that, "Personal and pre-existing relationships among local nonprofit, foundation, and religious leaders played a significant role in their ability to assess the situation quickly and to act flexibly to fill human service needs in the midst of a chaotic situation" (p. 41). These types of linkages confer benefits, "because they not only connect groups to one another but also give members in any one group access to the larger world outside their social circle through a chain of affiliations" (Lang & Hornburg, 1998, p. 4). Established relationships—predicated upon trust—maximize communication, collaboration, joint

problem-solving, and partnership. Additionally, pre-existing relationships reduce redundancy and duplication of work, equipment, space, and resources among partnering agencies. Essentially, they ease communication challenges while integrating response efforts and roles in disaster situations (Kapucu, 2006a; Pipa, 2006).

Trust and social capital are the glue that binds network member relationships. Kamensky and Burlin, (2004) have observed that, "successful collaborative ventures are premised on the existence of trust, a mutual obligation to succeed, and the ability to build consensus" (p.12). In fact, it is, "widely acknowledged that trust can lead to cooperative behavior among individuals, groups, and organizations" (Jones & George, 1998, p. 531). Networks are animated and held together by "shared purpose and social capital," which imply "mutual respect or trust" (Kamensky & Burlin, 2004, p. 85). Podolny and Page (1998), citing Powell (1990), have suggested the "underlying principle of network forms of organization is a norm of reciprocity," which propagates obligation and trust, rather than competition or exploitation (p.60), and assists with "building and sustaining effective personal relationships" with diverse organizational actors (Williams, 2002, p. 115). Also, ongoing collaboration, predictability of the network coordinator, and norm cohesion increase trust because they serve as the "lubricant[s] of networks" (McCarthy, 2006, p.47). As Slagle-Pipes (2007) has noted, "The more cohesive the group is, the more productive it is" (p. 312). In consequence of these realities, network members tend to coordinate with other participants and organizations with which they have either already worked or which they know, trust, and respect for other reasons.

2.5.1.2 Learning

Learning is innate to new systems and is often linked to boundary spanning and knowledge acquisition (Williams, 2002). Davenport and Prusak (2000) have defined knowledge

as, “a fluid mix of framed experience, values, contextual information, and expert insight that provides a framework for evaluating and incorporating new experiences and information” (p. 5). In other words, knowledge is a product of dialogue, reflection, interaction, and sense making. Podolny and Page (1998) have argued that, “network forms of organization foster learning because they preserve greater diversity of search routines than hierarchies and they convey richer, more complex information than the market” (p.62). Network organizational members often benefit from joint assessment of processes and structures, diverse approaches, programs and activities, and new participants as membership changes. Conflicts and problems within a system give network members opportunities for learning; processing information; understanding differing views, values, and perspectives; and offer the potential for improving governance systems and impacts.

Networks are fundamentally boundary-spanning entities as they facilitate knowledge translation and create “strategic alliances, joint working arrangements … partnerships and many other forms of collaboration across organizational boundaries” (Williams, 2002, p. 103). Knowledge acquisition and processing efforts shape the extent and willingness of a system to learn. Manev and Stevenson (2001) have defined boundary spanning as, “extensive communications carried out through individual ties crossing the organizational boundary and connecting organization members with members of external organizations” (p.185). Granot (1997) has argued that boundary-spanning constitutes a way to “contribute to emergency coordination” (p.308). Additionally, Landau (1991) has suggested that networks are, “adaptive, creative, and quite congenial to innovation … pragmatic, goal searching and problem-oriented” (p. 7). Creativity, adaptability, innovation, and pragmatism are vital elements for humanitarian actors in disaster settings and thus crucial attributes for networks to develop. Through their

ability to span boundaries, facilitate knowledge, share information, and build relationships, cross-sectoral networks can encourage learning in humanitarian action for disaster response.

2.5.1.3 Network Governance and Structure

Networks permeate all levels of the institutional frameworks within which humanitarian action is implemented. Taylor (2007) has equated network structure and governance to the, "ways and means (coordination, facilitating, arranging, pre-positioning, using existing support systems)" a network is characterized (p. 74). Participating organizations design network structures and processes to address their desired functions (Duncan, 1973; March & Simon, 1958). Waddell and Khagram (2007) have contended that network "structure should follow strategy" (p. 8). O'Toole (1997) has highlighted interdependence and shared aspirations, or 'strategy,' as a bonding agent for networks:

> Networks are structures of interdependence involving multiple organizations or parts thereof, where one unit is not merely the formal subordinate of the other in some larger hierarchical arrangement. Networks exhibit some structural stability but extend beyond formal established linkages and policy legitimated ties. The notion of networks excludes more formal hierarchies and perfect markets, but includes a wide range of structures in between. The institutional glue congealing networked ties may include authority bonds, exchange relations and coalitions based on common interest, all within a single multiunit structure (p. 45).

The interdependence to which O'Toole alludes suggests there are advantages to safeguarding exchanges and coordination with trusted agents. Rosenau (2000) has observed that, "to achieve governance over worldwide problems [is] likely to be piecemeal and partial," but goes on to note, "since complex adaptive systems tend to acquire emergent properties, it may just be that at least some collectivities will be able to converge around common endeavours" (p. 179). Humanitarian action may well be an example of one such collectivity. The challenge for cross-sector networks, in disaster settings in particular, is adjusting to the varying functions,

accountability structures, and imperatives of the multiplicity of stakeholder claims within which they function and in which they seek to serve.

This research is grounded in the view that cross-sectoral partners constitute collaborative information processing systems (Galbraith, 1977; March & Simon, 1958). Networks, by their very nature, cross boundaries; their members value the information diversity intrinsic to their construction. Seitanidi et al. (2010) have suggested that collaborations build "on the capabilities, resources, and expertise of each partner organization" (p. 139). Disaster response challenges both affect network members and simultaneously shape the character and dynamics of their collaboration. With each new crisis, the network and its members repeat and refine their interactions and relationships. These ongoing exchanges help to reinforce the social integration processes between members, establishing perfected pathways for communication and collaboration.

Recent network theory has expanded the concept of network governance with helpful implications for understanding cross-sectoral collaboration. Using this theoretical framing as a point of departure, Provan and Kenis have offered three structurally distinct types of "networks as a form of governance," shared governance, lead organization, and network administrative organization (2008, p. 234). All three forms, outlined in Figure 1, are contingent on what are largely self-determined factors. Provan and Kenis (2008) characterize these factors as, "key structural and relational contingencies, trust, size (number of participants), goal consensus, and the nature of the task (specifically, the need for network-level competencies)" (p. 237, see Figure 1).

Figure 1: Key Predictors of Effectiveness of Network Governance Forms

(*Source: Provan and Kenis, 2008, p.237, Journal of Public Administration Research & Theory*)

Table 1
Key Predictors of Effectiveness of Network Governance Forms

Governance Forms	Trust	Number of Participants	Goal Consensus	Need for Network-Level Competencies
Shared governance	High density	Few	High	Low
Lead organization	Low density, highly centralized	Moderate number	Moderately low	Moderate
Network administrative organization	Moderate density, NAO monitored by members	Moderate to many	Moderately high	High

Provan and Kenis (2008) have sketched three overarching issues that all forms of networks encounter in their operation:

- Efficiency versus inclusiveness—the tension between administrative efficiency and inclusive decision-making.
  - The authors define network effectiveness as the attainment of positive network-level outcomes that could not normally be achieved by individual organizational participants acting independently (p. 230).
  - Efficiency, a measure of outputs over inputs (p.242).
- Internal versus external legitimacy—establishing equity and legitimizing interactions between members internally such that members can be responsive to external claims and expectations. This can be especially important for a network engaged in policy and/or advocacy or advancing the professionalization of practice, standardization of procedures, or the issuance of guidance or certifications.
- Flexibility versus stability—flexibility is defined as a non-hierarchical structure. The delicate balance of being nimble, or "light on your feet," with enough formality to have stability, which is associated with administrative efficiency (p. 244).

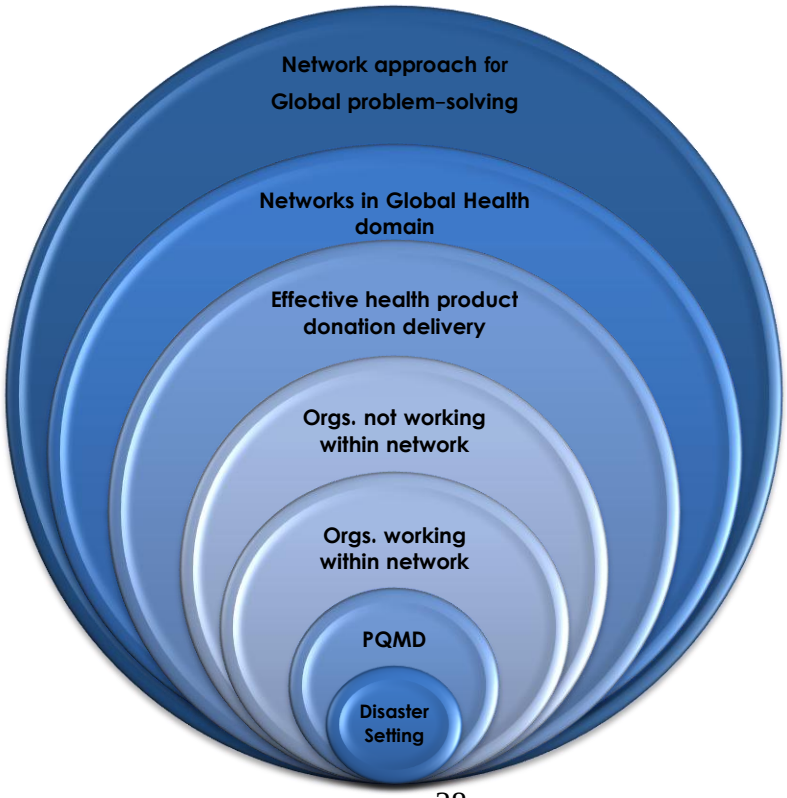
The tensions above involve trade-offs. Networks may toggle among different forms of governance in order to accomplish tasks, depending on what members value and the importance of the goal. The next chapter discusses PQMD in light of Provan and Kenis (2008) network structure and governance forms to explore whether the Partnership is an example of shared

governance, a lead organization, or a network administrative organization (NAO) or is instead some combination of these.

2.6 The Network Domain of this Study

This section sketches the network landscape on which this study focuses. The largest circle depicted in Figure 2 below emphasizes the notion that networks have increasingly become mechanisms for global problem-solving and service delivery, while attracting a fast-developing community of researchers and educators (Hamel, 1991; Powell, 1990; Seitanidi, 2010; Uzzi, 1997; Waddell, 2011). This group with shared interests includes all forms of networks and configurations that address a multitude of global concerns. In the recognition that networks have become an important topic in global problem-solving, I then situate PQMD within the global health domain characterized by its narrowly-defined mission to improve the delivery of health product donations.

Figure 2: Networks for Global Problem-Solving



The development of an effective health product donation delivery "movement" to improve health product donations, a discrete arena within the global health domain, was motivated by troubling accounts of inappropriate medical product donations; i.e., unsorted/unsolicited, excessive, and/or expired drug donations that began to surface in the late 1970s. A 2002 World Bank study entitled, *Drug Donations in Post-Emergency Situations*, chronicled instances of inappropriate donations in Guatemala 1976, Armenia 1988, Rwanda 1994, former Yugoslavia (1991+), Bosnia and Herzegovina (1992-1995), and others (Autier et al., 2002, p.3). This topic will be reviewed more fully in Chapter 5.

Figure 3: Networks in Global Health Domain

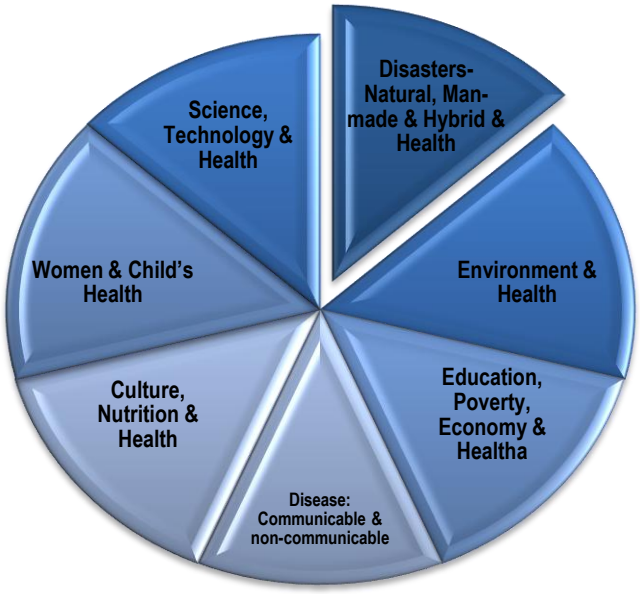


Figure 3, above, expands the "networks in global health domain" circle from Figure 2. Networks in the global health domain are "actively constructed, planned, governed, and maintained. They are 'manufactured' by social actors, formed, and coined by their interests, motives, and values" (Bozorgmehr, 2010, p.10). This domain denotes the various network interfaces and features that compose global health, of which natural disasters is one small

portion. When PQMD responds to a disaster, its members initiate their response by bridging many of the other health intersections in the health landscape outlined above.

In summary, the domains depicted as interconnecting circles in the figures above stress their interrelationship and integration to the broader global health context, displaying the networked approach as one mechanism by which humanitarian actors may communicate, collaborate, and seek to coordinate action. Understanding holistic global health action requires assessing sectors and their corresponding collaboratives (where those exist) because they represent interrelated facets of network development for health delivery, research, and study.

2.7 Global Health and Networks

The 1978 International Conference on Primary Health (Alma-Ata) represented the beginnings of the many cross-sectoral initiatives and networks that now populate the global health and disaster relief landscape. Alma-Ata proclaimed that, "all governments, all health and development workers, and the world community [must] protect and promote the health of all the people of the world" by the year 2000 (World Health Organization, 1978, p. Article V). Probably most important, the Declaration's decree served as a precursor to the term *global health*, used broadly by health professionals and international multi-stakeholder and cross-sector initiatives today.

By the mid-1990s, it was apparent that a rapid rise in cross-sectoral collaborations was emerging in response to global health challenges and would continue to be an important feature of the world's health services delivery landscape (Austin, 2000b; Reich, 2002; Waddell, 2000; Waddock, 1988b). In fact, the proliferation of global health initiatives by way of multi-stakeholder and/or cross-sector collaboratives or networks in this domain has taken a number of discrete forms, described by scholars in the field as follows:

- Public-private partnerships (PPPs) are the preferred approach in international public health over the last decade to, "harness complementary contributions from the commercial and public sectors and use them toward a common goal" (Curtis, Garbrah-Aidoo, & Scott, 2007, p. 19) for "tackling large, complicated, and expensive public health problems" in innovative ways (Reich, 2002, p. 1).
- Cross-sector social partnerships (CSSPs) are, ''cross sector projects formed explicitly to address social issues and causes that actively engage the partners on an ongoing basis," (Selsky, 2010, p. 22) or 'social problem solving mechanisms' (Waddock, 1989, p. 79) via any of three conduits, whether integrative, developmental, or transactional (Austin, 2000b; Clarke & Fuller, 2011; Selsky, 2010; Wymer & Samu, 2003).
- Global health partnerships (GHPs) defined as, "collaborative relationships among pharmaceutical companies in partnership with UN-based organizations, developing country governments and public and private foundations to ensure efficient product development, healthcare delivery, and technical support for the implementation of national disease programs" (Ngoasong, 2009, p. 949). More on GHPs (Buse & Harmer, 2007; Buse & Walt, 2000a; Buse & Walt, 2000b)
- Global Action Networks (GANs) are, "multi-stakeholder, inter-organizational change networks addressing challenges of global scale and complexity" (Waddell, 2011, pp. xiv,1).
- A community of practice is, "a tightly knit group of members engaged in a shared practice who know each other and work together, typically meet face-to-face, and continually negotiate, communicate, and coordinate with each other directly in the course of their work" (Brown & Duguid, 2000, p. 143). Typically, the bond that motivates their engagement is learning and sharing knowledge to attain more effective use of resources and improved programmatic outcomes.
- Cause-based partnerships (CBPs), typically, "partnerships between a corporation and one or more nonprofit organizations that address a specific social meta-problem, such as environmental sustainability or social-justice challenges" (Parker, 2004, p. 458).
- Collaborative governance, "A governing arrangement where one or more public agencies directly engage non-state stakeholders in a collective decision-making process that is formal, consensus-oriented, and deliberative and that aims to make or implement public policy or manage public programs or assets" (Ansell & Gash, 2008, p. 544).

The above synthesizes disparate collaborative typologies, with particular attention to global health development models that have prompted cross-sectoral engagement. The cross-sectoral movement was fueled in part by the emerging neo-liberal development ideology of the 1970s, 1980s, and 1990s, which advanced the, "conception of 'the market'—the mechanisms of

which, if allowed to operate unfettered, purportedly would lead to optimal outcomes for society as a whole" (Shakow & Irwin, 2000, p. 52-53). In short, cross-sector action became embedded within the larger social, political, and economic environment shaping the future "architecture" for global health.

The involvement of for-profit sector organizations in disaster response, alongside the often waning role of the state, has been due in part to a profound economic and political restructuring movement known as neo-liberalism (Kotz, 2003). Neo-liberalism has changed government spending priorities while emphasizing de-regulation as a mechanism to encourage competition, global trade, investment, and the free movement of goods (Castells, 2000; Harvey, 2005). In fact, Heap (2000) has asserted the consequence has been a, "perceived reduction in the powers of the nation-state to affect development and a rise in the powers of the business community" (p. 556). He argues that INGO-business relationships therefore are "humanizing capitalism" (p.558) in a situation in which fewer human needs would otherwise be addressed except via the lens of the profit motive. The social void created by state inaction and withdrawal under the sway of a neo-liberal philosophy has encouraged civil society and some for-profit actors to rally round the needs of citizens (Kotz, 2003).

The shift from government to governance (Peters & Pierre, 1998; Rhodes, 1996) refers to a fundamentally non-hierarchical mode of coordination that has arisen in good measure from neo-liberalism's call for shared public-private responsibility for public service provision on the view that such would improve government efficiency. With neo-liberal governance, public actors do not exercise regulatory authority in classic command-and-control fashion. Instead, those involved in such organizational arrangements, including corporate and non-profit organizations (and even private citizens directly), make decisions, at least nominally,

consensually. These actors not only participate in public policy implementation, but often in its formulation (Börzel, 2010, p. 113; Mayntz, 2003, 2006). Central to the shift from government to governance is a new role for civil society as a far more ubiquitous agent for public service delivery. Some INGOs, for example, "are acting increasingly like government agencies, issuing a new generation of de facto regulations in the form of standards, guidelines, and certifications. Additionally, some INGOs are shifting to "market-based approaches and cooperating with business in order to effect change" (Nalinakumari & MacLean, 2005, p. g. 2).

Neo-liberalism's shift from direct government service provision to initiatives involving a broader range of actors, including civil society organizations and for-profit corporations, is fueling development of a cross-sectoral culture in the humanitarian aid sector (Binder, 2007; Muller & Whiteman, 2009). In tandem with this sea change, disaster response has emerged as an important element of global healthcare companies' corporate social responsibility mandate, a resource tapped by health-focused INGOs in addressing their missions. Cross-sectoral partnerships represent humanitarian actors' mechanism by which to address a more pluralistic governance and service delivery structure. With such an approach, however, comes a host of demands for network participants linked to securing continued common purpose, facilitative communication, ongoing collaboration, and effective coordination of activities.

2.8 Summary

This chapter has provided background on the views of networks in the literature and in practice, suggesting that these organizational forms are increasingly employed as vehicles by which society is seeking global change. And while networks composed of actors from two or more sectors might be characterized as "non-traditional alliances" due to their "complexity" (Kanter, 1999, p. 126; Kapucu, 2006b; Seitanidi, 2010, p. 36), their emergence as primary

organizing mechanisms for social and political action has been encouraged by neo-liberalism, globalization, and by expanding societal expectations of corporations.

As a part of this broader constellation of trends, INGO-corporation collaboratives in disaster response have grown markedly in the last three decades especially (Binder, 2007; Kapucu, 2006b; Sharma & Gupta, 2002; Simo & Bies, 2007; Zhang et al., 2009). The range of their involvement in relief and post-crisis efforts has also evolved significantly. However, as with all organizing mechanisms, there are shortcomings and contradictions involved with cross-sector networks. Such partnerships require significant investments of will, reputation, time, resources, and a cohesive framework and agenda. These collaborations fall apart without compelling shared aims, trust, reciprocity norms, learning, and self-regulating governance. In consequence, building mechanisms to ensure necessary communication and cooperation are ongoing concerns of those working within these structures. In short, the advantages that may accrue as a consequence of network collaboration are by no means automatic and instead rest on pre-conditions that must both be attained and maintained as interactions among a collaborative's members proceed.

The next chapter will provide an overview of the literature on disaster response, as well as an overview of the interaction constraints associated with humanitarian action.

CHAPTER THREE

DISASTER RESPONSE

3.1 Introduction

This chapter provides an overview of the extensive body of literature highlighting disaster response and the complexities that typify operations during crises at overlapping and varying scales of action. The scholarship addressing disaster response is much too large to be given comprehensive treatment here. Instead, this chapter summarizes a number of foundational challenges to coordination and places them in the context of networks facilitating disaster response. Specifically, I summarize the literature on disaster response focused on the related challenges of communication, collaboration, and the potential for coordination of INGO-corporation collaboratives.

3.2 Disaster Response

McEntire has suggested, "one of the major purposes of theory is to clarify terms by providing sound academic definitions" (2004, p.2). However, the study of disaster response is "undergoing a massive transformation" (McEntire, 2004, p.14) even as it "lacks theoretical development" (Quarantelli, 1995). I argue that an overarching lack of agreement on relevant definitions and a lack of substantial theoretical development have limited scholarship's capacity to make advances in disaster response as a defined field of study. Nonetheless, the literature does offer critical insights into the dynamic complexity of communication, collaboration, and coordination among multiple-stakeholders responding to disaster events.

3.3 Disaster Response Challenges

Every disaster confronts humanitarian actors with response challenges. Disaster response "by its very nature implies chaos" (Quarantelli, 1995), and that reality intrinsically hampers

humanitarian action. Van Rooyan et al. (2001) have aptly argued that, "despite efforts to standardize and coordinate humanitarian activities, the relief community remains an intricate mosaic of people, capabilities, and allegiances. As this mosaic recreates itself with every new major emergency, there are a number of recurrent incongruities that emerge" (p. 216). In other words, there is nothing systematic about responding to disasters or about the humanitarian actors that respond. According to McEntire (1997), "Although the international relief community is frequently referred to as a 'system,' this statement is an inaccurate depiction of those agencies and organizations which provide relief" (p. 224). In fact, the humanitarian relief system is comprised of a prodigious number of actors, which often change with each disaster and embody a multitude of interests. Consequently, disaster response operations are often fragmented, incoherent, and unpredictable. Such an environment necessitates the contribution and coordination of a variety of humanitarian actors amidst high social expectations. That is, the complexity of disaster response needs implies great challenges. Auf der Heide (1989, p.36) has observed that disasters also imply changes in known protocols including some or all of the following:

- Disasters may put demands on organizations, requiring them to make internal changes in structure and in the delegation of responsibilities.
- Disasters may create demands that exceed the capacities of single organizations, requiring them to share tasks and resources with other organizations that use unfamiliar procedures.
- Disasters may attract the participation of organizations and individual volunteers who usually do not respond to emergencies.
- Disasters may cross jurisdictional boundaries, overlapping responsibilities among multiple organizations and organizational structures.
- Disasters may create new tasks for which no organization has traditional responsibility.
- Disasters may render unusable the normal tools and facilities used in emergency response.
- Disasters may result in the spontaneous formation of new organizations that did not exist before.

The scholarship on disaster response suggests that effectively addressing such concerns involves tackling the three most frequently cited impediments to more effective relief efforts: communication, collaboration, and coordination (Balcik et al., 2010; Drabek & McEntire, 2002; Harrald, 2006; United Nations Office for the Coordination of Humanitarian Affairs (OCHA), 2012; Zoraster, 2006). The following sections treat each of these concerns in turn.

3.3.1 Communication

A need for dynamic information exchange characterizes all disaster relief efforts. Auf der Heide (1989) has suggested the need for information exchange is primarily a function of, "an ongoing assessment of what the disaster situation is and an ongoing determination of what resources are needed"(p. 53), so as to determine how resources might be allocated, scheduled, and delivered for optimal support (Slagle-Pipes, 2007).

Slagle-Pipes (2007), quoting Shannon and Weaver (1948), has suggested that, "information is the reduction of uncertainty" (p.8). Thus, in order to increase certainty in response to disaster events, humanitarian actors attempt—with varying degrees of success and methods—to gather, process, analyze, and share large volumes of current information in a streamlined and reliable fashion. They must perform these informational tasks amidst chaos, media frenzy, and the demand of innumerable news sources seeking comments. That is to say, "where sources of data and/or decisions are high volume, encompassing a large geographic area and covering a gamut of organizational entities, information gathering and fusing can be daunting" (Bui et al., 2000, p. 427).

According to Reindorp and Wiles (2001), "there is universal consensus that information sharing is the sine qua non of coordination activity" (p. viii). Disaster response needs are such that, "information must be shared by organizations and activities and must be coordinated within

and across organizational boundaries" (Kapucu, 2006a, p. 221). Bui et al. (2000) has contended that during a disaster, obtaining, "timely and pertinent information is essential to prevent avoidable loss of lives and properties" and emphasizes that, "in a closed system with limited boundary scanning, information handling is a fairly manageable task (p.427). However, how is this best accomplished? The same author has suggested that network mechanisms, a loosely coupled system, might offer a useful means by which to facilitate communication exchange (Bui, 2000). Jones, Hesterly and Borgatti (1997) have observed that network cross-sectoral collaboration is most beneficial in, "uncertain and/or competitive environments," where speed is of the essence and thus serves to "resolve problems of adapting, coordinating, and safeguarding exchanges" (p.911-912). These authors refer to the coordination of complex tasks under intense time constraints as "task complexity," which in their view, "heightens the need for coordinating activities and interdependence;" such pressure encourages "information sharing" and "facilitates integrating multiple autonomous, diversely skilled parties" toward task fulfillment and efficiency (p.921).

Communications within a network facilitate expertise exchange by brokering knowledge, maintaining coherence, and refining individual organizational initiatives. In a network, valid and timely information gathering fosters members' ability to respond and further fosters participants' ability to practice shared decision-making (at both the individual and network level). Several authors have indeed suggested that networks can play key roles in facilitating communication in disaster events (Auf der Heide, 1989; Drabek & McEntire, 2002; Kapucu, 2006b). As Kapucu (2006b) has argued, disaster response information is needed in real-time, increasing the need for integrated communications that provide both a horizontal and vertical flow of information. Furthermore, Kapucu's (2006a) study "indicate[d] the importance of establishing

communications with other organizations before disasters occur to know proper contact points and to communicate effectively at the time of a disaster;" this factor also implies that a network infrastructure might encourage necessary relationships (p.221). This is corroborated and builds on the insights of Stephenson (2005), Minear (1992), Auf der Heide (1989), Drabek & McEntire (2002), White & Lang (2012), Wymer & Samu (2003), Zadek & Radovich, (2006). Kamensky and Burlin (2004) have added that, "Because partnerships often involve frontline service delivery agents, the pipeline is shortened between service providers and recipients – and partnerships also improve decision-making by taking advantage of the street-level knowledge of partners" (p.12).

In short, networks become vital facilitators of domain and sector-specific information, serving as a hub for information transactions that diminish uncertainty by providing domain-specific needs assessment for improved choice processes. This case study explores communication needs at the corporate donor, INGO headquarters, and field staff levels in an inter-sectoral health services network.

3.3.2 Collaboration

Collaboration is the creation of space for the purpose of establishing or affirming a shared aim, establishing interaction, joint dialogue, recognizing problem solving opportunities, and developing new understandings. This type of interaction is not merely working together. In disaster situations, the need for collaboration is heightened by the urgency to save lives and provide humanitarian assistance. According to Schrage (1990), collaboration may be defined as the following:

> … the process of shared creation: two or more individuals with complementary skills interacting to create a shared understanding that none had previously possessed or could have come to on their own. Collaboration creates a shared meaning about a process, a product, or an event. In this sense, there is nothing routine about it. Something is there that wasn't there before (p.140).

Analysts agree that "efficient and effective [collaboration] is crucial in that it promotes the achievement of the goals of disaster relief: a reduction in the loss of life and prevention of human suffering" (McEntire, 1997, p. 223). Williams has contended that collaboration is the best way to cope with "complex and interrelated problems that cross … administrative and jurisdictional" boundaries (Williams, 2002, p. 120). Yet that process is seldom straightforward, and the reality is that collaboration "has been and remains a significant barrier in emergency management" (Balcik et al., 2010; Bharosa2009; Granot, 1997; McEntire, 2002; Rey, 1999). While scholars allege that collaboration promotes more efficient and effective relief efforts in crises, "the degree of [collaboration] by the many international governmental and non-governmental organizations is not sufficient to effectively meet the needs of disaster victims" (McEntire, 1997, p. 223; McEntire, 1998, p. 2).

Stephenson and Kehler (2004) have suggested the root problem is that, "the structure of actors and the operating environments in which humanitarian agents must work do not readily encourage broad and open cooperation among them" (p.2). Linden (2002) has argued that the three principal hurdles to collaboration are, "communication problems and value differences at the interpersonal level, distrust at the organizational level, and systemic problems such as the fragmentation of responsibility" (p.35). These factors act as strong incentives for NGOs to work alone. Minear has supported such claims, arguing there should be, "greater respect for those agencies that, for reasons of sound policy and practice, choose to operate on their own" (Minear, 2002a, p. 124). Still, the push for greater collaboration has created tensions among INGOs, OCHA, bi-lateral donors and recipient governments operating in the humanitarian domain. According to Currion and Hedlund (2011),

> There is a continual drive on the part of governmental and inter-governmental bodies for a unified and hierarchical coordination structure, on the assumption that such a structure

> will be more effective and efficient than any alternatives, while non-governmental organisations tend to prefer a non-hierarchical system that preserves their independence. The tension between these two drives is one of the main reasons why NGO coordination by external bodies is consistently problematic, and the cluster system [OCHA] can be seen as an ongoing attempt to balance the two (p.4).

While many humanitarian relief scholars would agree with the above (McEntire, 2002; Weber et al., 2002), OCHA asserts that the UN Cluster system creates a 'win-win' situation for all participants and an opportunity for all involved parties to take ownership of the in-country coordination process. Weber (1998) has insisted that, "the collaborative game is about sharing power and emphasizing a greater degree of discretion and flexibility" among humanitarian actors at the organizational scale (p.9). Notably, flexibility and autonomy are vital for INGO participation in collaborative structures, as well as for building the sector's capacity and participation. Networks, horizontal structures by their very nature, and in some cases created by INGOs themselves, hold the potential to catalyze effective collaboration.

Achieving collaboration, however, can be a time intensive process. Unfortunately, according to Ian Smillie (2001), realities of this sort are not an anomaly in disaster situations: "Good intentions notwithstanding, outside organizations appear to have great difficulty working effectively with local organizations during humanitarian emergencies" (p. 1). Collaboration, in and of itself, is complicated—a disaster amplifies the complexities of collaboration (Stephenson Jr. & Schnitzer, 2006; Van de Ven & Walker, 1984). Stephenson and Kehler (2004) argued that inter-organizational competition, media, and funding influence the ability and willingness of humanitarian actors to coordinate across organizational lines, which can actually decrease the likelihood of collaboration (p.7). All of these factors lead to an extremely complex environment for disaster response and relief efforts. According to the literature, that environment is further complicated by competition, chiefly for support. Unfortunately, for many responding agencies,

"securing new funding is an ever-expanding part of [their] function, pushing other concerns – such as ethics, project efficacy, or self-criticism – to the margins" (Cooley & Ron, 2002, p. 16). The ever-present need for operating funds can create further perverse consequences, such as emotional marketing, efforts to circumvent collaboration structures, the race for organizational recognition, and media salience (Walkup, 2002). Walkup (1997) has suggested that inter-organizational competition among NGOs is fueled by such factors as,

> … donor obsessions with accountability; the often confrontational negotiations with host governments; the unpredictable tide of donor support and fatigue; the powerful influence of the media; the heated competition for funds and access; and the international exercise of political and ideological power between states and within international organizations (p. 38).

Securing funding can be an incentive or disincentive for collaboration, depending on 1) how donors earmark funds, 2) the organization's need for field distinction and "brand" niche, and 3) the perceived costs and benefits associated with collaboration. These factors ensure that securing resources and support occurs in a fraught environment. According to Ross (2004b), media coverage creates competitive advantages for organizations: "favorable and even neutral coverage can lead to more funding, more cooperation with host governments, and higher staff morale" (p.25). And, unfortunately, "Rivalry is not foreign to emergency services, where response agencies are under great pressure to prove themselves and in many communities, resources for emergency response are particularly short" (Granot, 1997, p. 305). This competitiveness often leads to inefficiencies, increased human suffering, and "turf wars" (Van Brabant, 1999, p. 3). When taken to extremes, these inefficiencies cause dysfunction. For example, "Project implementation has often been delayed or halted as a result of … INGO competition" (Cooley & Ron, 2002, p. 22). Sadly, competitiveness is "built into the system" (Cooley & Ron, 2002, p. 13). In short, factors endemic to the disaster relief theater foster

hesitancy or even unwillingness to collaborate, resulting in a response that is often delayed and less effective than it might otherwise have been, which increases the potential for post-event suffering.

3.3.3 Coordination

Coordination is one of the most discussed solutions in the literature for mitigating and/or eliminating operational disaster response impediments, but few texts have actually defined disaster coordination with any measurable success. Seitanidi et al. (2010) have suggested collaborations build "on the capabilities, resources, and expertise of each partner organization" (p. 139). Currion and Hedlund (2011) conducted a meta-analysis of calls for coordination from the 1990s to 2005 in an effort to pin down a definition. They concluded that a definition for disaster coordination remains elusive and that the focus has been on characterizing the activities and actions that constitute its realization. In constructing their argument they point to attempts offered by Donini (1996), Minear et al. (1992), Van Brabant (1999), the Inter-Agency Standing Committee (IASC) 1998 review of the Great Lakes crisis of the 1990s, and, finally, the seminal OCHA 2005 Humanitarian Response Review, which, they observed, "did not even provide a working definition of coordination in its comprehensive assessment of the UN's coordination mechanisms" (p.4). Minear's et al. (1992) definition as a functionally operative description of disaster coordination:

> The systematic utilization of policy instruments to deliver humanitarian assistance in a cohesive and effective manner. Such instruments include: (1) strategic planning; (2) gathering data and managing information; (3) mobilizing resources and assuring accountability; (4) orchestrating a functional division of labor in the field; (5) negotiating and maintaining a serviceable framework with host political authorities; and (6) providing leadership (p. 6).

The definition quagmire is a neat metaphor for the activities and actions constituting coordination that, in the end, attempts to match resources with needs at multiple levels of scale. Coordination focuses on the efficiency and effectiveness of synchronized action by disparate humanitarian actors, whereby 'good' coordination means fewer gaps and overlaps in the "use of an organization's resources" (McEntire, 1998, p. 7) that "can produce synergistic outcomes" (Williams, 2002, p. 120). Coordination can be summed up as, "Not only is no one in charge, but there are no mutually agreed-on measure of success" (Beiser, 2010, para. 12).

As complex as disaster response is, the United Nation's Office of Coordination of Humanitarian Affairs guided by the Inter-Agency Standing Committee (IASC), established in 1992, is charged with the mission, "to formulate humanitarian policy to ensure coordinated and effective humanitarian response to both complex emergencies and to natural disasters" (UN General Assembly Resolutions 46/182 (1991) and 48/57 (1993)). In particular, UN Resolution 46/182 (1991) focused on the "need to strengthen further and make more effective the collective efforts of the international community, in particular the United Nations system, in providing humanitarian assistance" (para. 4).

In 2005, the UN's Inter-Agency Standing Committee (IASC) established nine clusters (two were added later) to coordinate disaster response to emergencies in developing countries. The cluster system was designed to create a space to convene UN, INGO, and aid agencies around a sector or service during a disaster event. Longstanding and pre-established networks were used as a mechanism for pursuing coordination between INGOs and OCHA in the specific case of the 2010 Haiti event. In Haiti, the OCHA system is said to have

> tried to strengthen coordination with NGO partners, particularly during the first months of the response, through the NGO Coordination Support Office, supported by InterAction and the International Council of Voluntary Agencies (ICVA), to facilitate better communication among NGOs, create linkages and partnerships with local Haitian

> organisations unfamiliar with the international humanitarian system, and to ensure that key NGO issues of concern were communicated and taken into account in the response (Bhattacharjee & Lossio, 2011, p. 24)

And yet, OCHA's cluster system in practice lacks global endorsement and INGO support (Steets et al., 2010). All of these factors lead to an extremely complicated environment in which coordination is routinely found to be a significant challenge to humanitarian relief delivery/operations, despite a nominally inclusive collaborative structure and INGO community buy-in and understanding.

Harrald (2006) has identified three themes from the organizational and emergency management literature that, in his view, "describe the essential elements of organizing for and coordinating" disaster response:

- There is a trade-off between command and control requirements necessary for mobilizing and managing a large organization and the need to ensure broad coordination and communication.
- Diverse organizations must achieve technical and organizational interoperability requiring common structure and process while absorbing and interacting with thousands of spontaneous volunteers and emergent organizations.
- Extreme events present unforeseen conditions and problems, requiring a need for adaptation, creativity, and improvisation while demanding efficient and rapid delivery of services under extreme conditions (p.257).

Harrald has argued that the conceptualization of these elements should be viewed not as trade-offs, but rather structural considerations in the development of coordination strategy that incorporates, "discipline (structure, doctrine, and process) and agility (creativity, improvisation, and adaptability)" (p.257). Kapucu (2006b) has noted the need for discipline may be unrealistic, observing that, "in extreme events, standard procedures cannot be followed." He instead favors the need for agility: "such events require a dynamic system to adapt to unanticipated and rapidly changing conditions" (p. 210). Thus, development of a coordination strategy must take into account various organizational considerations that express differing needs, variable mandates,

sectoral differences, and different target audiences. Taken together, these require differing degrees of agility and discipline. That said, it is useful to recall that INGOs, UN agencies, donors, and military entities all have different incentives for engagement, operating principles and processes, training, and degrees of agility and discipline.

Finally, Van Brabant has (1999) identified several coordination barriers, including different mandates, an emphasis on speed of response, and the desire by most INGOs to retain 'authority' without getting caught up in the 'bureaucracy" (p. 16). He argued the biggest problems with coordination are the costs associated with doing it. For instance, NGO involvement in the UN Cluster System consumes limited resources of time, money, and capacity (Van Brabant, 1999). This is further compounded by the fact that OCHA itself, "has a highly complex organigram, with overlapping functions split between GVA [Geneva] and NY [New York] which has a tendency to cause delays and unclear locus of responsibility, not geared to efficient and timely decisions" (Bhattacharjee & Lossio, 2011, p. 61). Perhaps symptomatically, few INGOs have organizational policy directives on inter-agency collaboration (how-to guides for collaborating with other INGOs and UN/government agencies in-country) (Van Brabant, 1999). Van Brabant has insisted that, "damage-control and wastage avoided through coordination are difficult to calculate such that 'coordination,' even from a financial point of view, is hard to justify as 'cost-saving'" (p.16). The question for all humanitarian actors comes down to a cost-benefit calculus of "minimizing the costs and maximizing the benefits of coordination" (Currion & Hedlund, 2011, p. 7). Despite outside calls for greater coordination, the field reality is that it can take more time, money, and staff resources to coordinate than "going it alone" consumes.

Based on his research in Afghanistan, Stockton (2002) concluded that coordination efforts, "generate dysfunctional interagency transaction costs, especially with regard to the integration of humanitarian and political objectives" (p. 2). Further, they create, "inter-agency gridlock in coordination processes, to the detriment of all concerned and probably at some cost to public welfare objectives" (p. 2). In practice, most INGOs have implementation and program guides focusing on intra-organizational objectives. For example, with regard to health donations, guides include indicators for 'getting the job done,' products delivered, and medicines dispensed. In the same vein, INGO staff (headquarters versus field implementers) within the same organization often face confusion about who possesses the authority to make organizational commitments without headquarters approval or sanctioning. This ambiguity further hinders field-level willingness or capacity to coordinate with other entities. This disconnect is what Van Brabant (1999) refers to as "operational (field) versus strategic (headquarters) coordination" (p.31).

Coordination remains a normative aspiration supported in principle, if not in practice, by all sectoral actors. Thomas Tighe, Executive Director of Direct Relief International, speaking at PQMD's February 2010 educational forum, summarized the coordination paradox: "Everybody wants more effective coordination, but nobody wants to be coordinated" (Personal notes, PQMD conference, February 2010). This is partly because each humanitarian actor understands disaster response coordination differently, and the number of participants active in crisis situations increases with each disaster. Studying the 1994 Rwandan crisis, Antonio Donini (1996) found that disaster response actors had, "no clear or common understanding of what 'coordination' meant," and that "coordination relied very much on flexibility and improvisation, which in itself is not necessarily a bad thing, provided the ground rules are understood by all"

(p.9). According to Donini (1996), the problem is not solely that all actors understand the process differently, but that the differing understandings breed distrust, misunderstanding, and miscommunication. What is more, Donini considered the premise that everyone wants coordination presumptive. These divergent understandings lead to different courses of action or misalignments in disaster response and do not take into account the differing accountability streams at play.

3.4 Summary

A significant reformulation of humanitarian action observes a shift in the services that actors contribute to disaster response efforts. This review has framed the fundamental issues confronting humanitarian actors and sought to capture the multiple challenges that typically occur in disaster response. These challenges include the terminological quagmire that plagues the study of disaster phenomena more broadly. I have highlighted the fact that humanitarian actors are beleaguered by political, social, economic, logistical, and inter- and intra-organizational impediments, which operationally translate into challenges of communication, collaboration, and coordination. Growing disaster response needs highlight the importance of creating mechanisms for leveraging INGO and corporate donor engagement to address these concerns effectively.

3.5 Disaster Coordination and Cross-Sector Networks: A Gap in the Literature

This literature review has highlighted the relative absence of scholarship on cross-sectoral humanitarian collaboratives operating within the disaster response environment. Notably, there are few analytical works that contextualize and expand understanding of the challenges confronted by cross-sector humanitarian actors in the delivery of health products and services in disaster settings within a network. Both the disaster coordination and cross-sectoral

network literatures scantly discuss whether networks are able to mitigate the communication, collaboration, and coordination challenges to disaster response, despite the suggestion that networks broker complex multi-stakeholder/multi-sector partnerships more effectively. This study focuses on one such example in the delivery of health product donations in the context of disaster relief. Examining the dynamics of cross-sector collaborations has analytical implications that can assist INGOs, funders, and other public and private stakeholders understand network mechanisms more fully in the context of disaster settings.

CHAPTER FOUR

RESEARCH DESIGN

4.1 Introduction

This chapter describes the research design employed in this study. I adopted a mixed-method case study research design. This methodology allowed me to examine PQMD member experiences while responding to Haiti's 2010 earthquake iteratively by integrating both quantitative and qualitative methods. It generated a more textured investigation of the dimensions and character of that response than either methodological approach would offer alone (Feagin, Orum, & Sjoberg, 1991; Scholz & Tietje, 2002; Yin, 2003). The retrospective nature of this study allowed PQMD members to reflect on and evaluate their organizational response challenges, as well as the network's role in their responses following the earthquake.

I gathered data from field visits to Haiti (May and August 2010), participation and observations recorded during PQMD's Haiti Assembly (August 2010), involvement in two PQMD Emergency Calls (EC) (via teleconference) (February 2010), analysis of responses to a survey administered to PQMD Haiti Assembly participants in August 2010, semi-structured interviews of network members, participation at four (I presented at two) PQMD board meetings that addressed the crisis, and study of relevant documents and organization and member websites.

4.2 Case Study Research Design

This dissertation employed a case study design informed by quantitative and qualitative analysis. Feagin et al. (1991), consider case studies as the best research form when a holistic, in-depth investigation is needed. This research design provided an expedient way to address the two main questions that guided this study.

Carrying out disaster relief research focusing specifically on health product donations made by a network of humanitarian actors in the for-profit and NGO sectors proved a challenge. Difficulty arose mainly in capturing the dynamics and interconnectedness of a network composed of actors from two major sectors representing 31 separate member organizations. The complexity of the study's object was compounded by the fact that organizations and individuals necessarily respond quickly to rapidly evolving disaster conditions. Disaster events (and particularly those of the magnitude of the 2010 Haitian earthquake) require a number of disparate organizations to respond with rapidity and agility depending on the type of event (e.g., earthquake, hurricane, tornado, floods, war, mudslide), location, established presence in-country, media, and funding stream. PQMD's membership represented a single functional network with some unique response capabilities. Case analysis allowed me to make sense of, "the meanings people have constructed, that is, how they make sense of their world and the experiences they have in the world" (Merriam, 1998, p. 6). In short, a single case study design proved an appropriate instrument for gathering and examining data over the relatively limited period of time in which members administered relief following the earthquake. The disaster provided an environment loaded with variables that helped me richly describe and contextualize the narratives offered by PQMD stakeholders concerning what they experienced in responding to the Haitian crisis (Marshall & Rossman, 1995; Maxwell, 1996).

Mixed-methods frameworks are commonly used in social sciences to examine under-researched social phenomena (Johnson & Onwuegbuzie, 2004). Such analyses have shown that integrating these traditions within the same study can be complementary and mutually elucidating (Greene & Caracelli, 1997). Proponents of mixed research contend that a combination of quantitative and qualitative methods, when carefully employed, can increase

validity and reliability in both describing and explaining social phenomena, ultimately establishing a more pragmatic opportunity for data collection within a single research endeavor (Creswell, 2003; Greene & Caracelli, 1997; Tashakkori & Teddlie, 2003). Additionally, the mixed-method approach emphasizing "converging lines of inquiry"—a vigorous triangulation of data—diminishes the opportunities for bias to ensure greater trustworthiness of findings (Berg, 2001, p. 5; Yin, 2009).

Merriam has argued that case analysis best facilitates the study of a "bounded phenomenon" (Merriam, 1998, p. xiii). My case was bound by several factors: the disaster event in Haiti, the humanitarian actors themselves, their experiences as disaster responders within a specific sector, and the confines of the PQMD network. This analysis examines the dynamics of a single cross-sector network dedicated to the delivery of health product donations "to under-served people and disaster victims around the world," in order to determine how that collaboration's role helps address coordination issues among members in response to the 2010 Haiti earthquake (PQMD, n.d., para. 1).

Kotzab and his colleagues have contended that, "the strength of [the] case study [method] is in its ability to capture conceptual developments while not immediately proposing broad theories" or conclusions (Kotzab, Seuring, Müller, & Reiner, 2005, p. 238). Nonetheless, there is a long-standing debate concerning the efficacy of single case study inquiry (Patton, 1990). The most frequently cited drawbacks of single case studies are their "limited control on threats to validity" and "a lack of generality of obtained effects" (Nock, Michel, & Photos, 2008, p. 348). Since PQMD is the only network of its kind, replicating this study using different study settings, conditions, or populations in an effort to establish generalizable findings would be difficult (Nock et al., 2008, p. 348). That said, the single case study design is particularly useful when the

intent of the research is to investigate social processes as opposed to providing probabilities and predictions concerning under-researched trends or entities (Creswell, 2003, p. 22).

I began this undertaking with the view that challenges associated with delivering health product donations during disasters were likely to differ by network membership category among PQMD's three stakeholder groups: INGO field-deployed members (field implementers), INGO headquarters personnel (administrative INGO members), and corporate members (donors). This premise was informed by my public health training, past association with PQMD, prior experience in disaster relief response, international health development work, and previous research findings in this area of study. This analysis was also informed and underpinned by several additional assumptions. Chief among these was my view that there is no single or simple answer to the inherent coordination complexities that disaster relief response actors face when dealing with a large-scale humanitarian event. Nonetheless, I entered this work believing that networks could enable a measure of coordination among members not otherwise attainable in these complex scenarios. This belief is further supported by a body of theoretical work that emphasizes the subjective nature of human inquiry.

Interpretive-constructivist and post-modern scholars have significantly influenced my research perspective. I share Lincoln and Guba (1985), Maxwell's (2005), and Merriam (1988) views that social reality is invariably multi-faceted, complex, inter-subjective, and constantly shifting. Thus, I fully acknowledge that this inquiry is interpretive in character and makes no pretense to generalize about a population. I was primarily interested in gaining a greater understanding of the topic under scrutiny, not necessarily in identifying a single "truth" resulting from this specific humanitarian disaster relief response by cross-sector partners. Nevertheless, the construction of meaning for those researching a comparable topic does not necessarily ensure

mutual understanding. I am also keenly aware of my responsibility in the creation of "knowledge," and how such learning may further mediate/create power. In short, while not claiming to represent "truth," and very much aware of its potential implications for social power dynamics, this analysis does make validity claims based on careful adherence to rigorous analytical methods, including procedures designed to corroborate evidence, minimize bias, and support a continuously self-reflective research stance. The next section discusses my qualifications as a researcher.

4.3 Researcher Qualifications

I would not have undertaken this study had I felt unqualified to conduct the research necessary to synthesize the results of the investigation. I worked for more than eight years in medical procurement and logistics for several global humanitarian relief organizations involved in disaster relief response. This included providing medical support for mega-disasters such as the 2001 Gujarat earthquake, 2001 El Salvador earthquake, 2004 Asian Tsunami, 2005 Hurricane Katrina, and 2005 Kashmir earthquake as part of my role with MAP International. Additionally, my role with MAP included supporting long-term health development programs for the INGO's global health programs. I also supported Project HOPE and Medical Teams International in a consulting capacity for the development of similar programs from 2006-2008. Prior to my role with MAP International, I was a senior program manager for MEASURE Evaluation, USAID Global Health Bureau's primary vehicle for supporting improvements in monitoring and evaluation in population, health, and nutrition worldwide. With this organization, I gained research experience in program evaluations for district health services in Zomba and Machinga, Malawi.

In the same vein, I served on PQMD's board in varying capacities from 2000 to 2005 as the representative of MAP International, where I functioned as the Director of Corporate Relations and Medical Procurement and Logistics. Because of my standing in the PQMD community and the fact that most actors knew me, I garnered a level of network/member access for this study unattainable for other researchers. The associated risk with such "insider" experience is, of course, potential compromise of the investigator's objectivity. However, I argue that my former experiences provided me with unprecedented entry and credibility into an ongoing relief situation that inspired the trust, candor, and inclusive participation of PQMD's network members. I also had full site-visit access in Haiti during relief health service delivery efforts, an option not always available to researchers in times of disaster.

Nevertheless, my research approach required me to interpret how informants built meaning from and made sense of their experiences (Denzin & Lincoln, 2005). I was acutely aware of my dual identity as a practitioner and a researcher, and I made systematic efforts to codify safeguards to avoid bias. In designing my research I was concerned with a number of issues, one of which was the sensitivity and chaotic nature of disaster settings, where patients were often present during my visits. The other issue emerged in maintaining objectivity during the data collection process. While observing the PQMD Emergency Calls via teleconference, I remained silent and did not interact with participants. I simply took notes on member participation. Likewise, when planning my field data collection in Haiti, I attempted to gather data with minimum disruption to patient care and purposefully for brief intervals, often no longer than 30 minutes. In these instances, I let the field INGO informants determine the flow and topic of the conversation (Charmaz, 2004). I did not use an interview guide or have pre-set interview questions (like those used for headquarter INGO and corporate staff). Instead, I simply asked

field members to provide feedback on their field experience in Haiti in the delivery of health product donations and health services. Interlocutors provided ample information on what gaps limited their work routines. The data gathered from field visits formed the basis of the survey instrument design, which together then formed the basis for the interview guides. I attempted, with as much objectivity and balance as possible, to let the data guide the questions, rather than the questions the data. The next section discusses the study population associated with this analysis.

4.4 Study Population

In light of PQMD's membership, which includes corporate donors, INGO field implementers and headquarters-level personnel, the collaboration's cross-sector organizational structure provided a rich opportunity for research into the challenges and mechanisms of relief response among various organization stakeholder/staff members. In the case of Haiti, most PQMD-member INGOs had field representatives deployed in-country prior to, during, and post-disaster. This research purposefully sought to identify and reach out to the sub-population of field-deployed representatives of PQMD INGO members to include and integrate their field perspectives into the analysis.

4.5 Data Collection

Using quantitative and qualitative methods, this study employed multiple sources of data: relevant literature, survey data, interview results, organizational documents, website review/analysis, participant observation and field notes. Quantitative methods enabled me to determine the challenges experienced by field-deployed INGO representatives working in Haiti (obtained during PQMD's Haiti Assembly in Port-au-Prince). I then complemented those survey findings with key informant interviews and documents analysis to facilitate a fuller

understanding of cross-sectoral network dynamics in the disaster context I examined. As noted, the study population included INGO field-deployed representatives, INGO headquarters personnel, and corporate global healthcare donors/representatives. The following sections briefly summarize data collection by study population and methodology/format.

4.5.1 PQMD Emergency Teleconferences

I participated via teleconference in two PQMD Emergency Calls during 2010 (February 3rd & 12th) at the invitation of PQMD's executive director. Each conversation lasted approximately 60-70 minutes. My role was exclusively one of listening to PQMD's members—speaking in alphabetical order—describe their disaster response efforts, organizational field needs, and challenges. I took notes for the sole purpose of evaluating whether PQMD's Haiti disaster response efforts warranted further study based on my experience with the "Key Barriers" report noted in Chapter 1. I explored the possibility of an inquiry with PQMD's executive director more fully following the second call in order to devise a potential research plan.

4.5.2 Haiti Visit May 2010 (eight days): Direct Observation, Participant Data, Field Notes

I conducted an eight-day field visit to Haiti four months after the earthquake, a time when a comprehensive analysis of the full scale of humanitarian need had not yet been completed. During this period, I visited five PQMD member organizations and 13 facilities in Haiti[iv] (e.g., health product distribution warehouses, program offices, health service delivery facilities). Accompanied by PQMD's executive director, I also attended meetings with staff from the World Health Organization (WHO) and InterNews in Port-au-Prince. During this and a subsequent visit, I took extensive observational field notes that later became part of the data for this study. I recorded approximately 50 pages of field notes altogether. Later, I systematically reviewed that

material and identified emergent themes that helped shape the development of the interview protocols I used for this research.

My second visit to Haiti consisted of six INGO site visits (three previously visited U.S INGO sites, one new U.S INGO site (Centre de Nutrition et de Sante Rosalie Rendu, Cite Soleil), and two French INGOs (ALIMA and Aide Medicale Internationale), followed by participation in PQMD's Haiti Assembly (25 August 2010) entitled, "Reflect, Reconnect, Rebuild," and held in Port-au-Prince. The Partnership's board and executive director designed this meeting to bring together field-deployed INGO representatives of PQMD board member affiliates. Twenty-nine people attended the event: one corporate member, 24 INGO field representatives, two PQMD staff members, one meeting facilitator, and one researcher (me). Twelve INGOs were represented at the Assembly, during which a half-day was allocated to PQMD INGO member site visits, followed by a half-day meeting at the Le Plaza Hotel in Port-au-Prince. Additionally, PQMD arranged transportation (along with in-country protection) to the following four PQMD member field programs: Heart to Heart, BelAire site, Port-au-Prince; Catholic Medical Mission Board (CMMB), Centre de Nutrition et de Sante Rosalie Rendu, Cite Soleil; International Medical Corps (IMC), Petionville tent city; and AmeriCares, program offices, distribution center, and warehouse facility, Port-au-Prince. Time constraints due to logistical challenges prevented a fifth visit to MediSend's in-country partner, Grace Children's Hospital.

I took observational notes during the Assembly, recorded notes during the INGO field visits, transcribed flipchart information, provided a summary of my observations for the PQMD meeting, and analyzed the survey PQMD administered to meeting attendees at that gathering (discussed below in detail). Interview and survey responses are reviewed in Chapter 6.

4.5.3 Interview Data: INGO Headquarters Personnel and Corporate Donors, January through May 2011

Thirty-five individuals agreed to my request to participate in semi-structured telephone interviews. Two INGO field-deployed representatives responded directly to my interview request via e-mail rather than by telephone, due to field communication challenges. I employed a semi-structured interview guide for corporate and headquarters INGO telephone interviews (see appendices E and F) to elicit participant views as well as to assure continuity and to compare information gathered. The interview protocols consisted of general questions and probes relevant to the study's research aims. Each participant received the interview guide in advance of the scheduled teleconference along with the consent form. For the field INGO interviews, I did not use an interview guide; rather, I asked about general field conditions and organizational work. I address interview administration and data collection more fully in section 4.6.2. I examine interview responses in Chapter 6.

4.6 Strategies of Inquiry

4.6.1 Survey Instrument: Administration, Data Collection, and Analysis (Secondary Analysis)

I obtained 19 completed surveys administered during PQMD's one-day Haiti Assembly, translating to a 79% response rate of event participants. The questionnaire consisted of 20 multiple choice, true/false, and open-ended questions (Appendix D) that aimed to acquire baseline data related to 1) field challenges, 2) perceptions of PQMD's mission, 3) a catalog of any active field partnerships, 4) identification of other INGO field networks, and 5) the functional gaps PQMD might be able to fill. The survey included responses from all PQMD-member organization INGO field relief workers in Haiti. Survey respondents, assured of confidentiality, participated voluntarily. The survey, administered to 24 field INGO participants

at the end of the one-day Haiti Assembly meeting, did not include PQMD staff, corporate attendees, the network board chair, or the meeting facilitator. I employed standard data analysis methods to examine survey results (Fink, 2003; Neuman, 2006).

PQMD granted me permission to use the information collected in the survey as a part of my dissertation research. I submitted an Amendment to IRB project no. 11-045 to include the survey findings in my research. Questionnaire results informed the development of the semi-structured interview protocol for that portion of my study. Chapter 6 presents my analysis of questionnaire responses.

4.6.2 Semi-structured Interviews: Administration, Data collection, and Analysis

Administration and Data Collection

In May 2010 the PQMD Board of Directors Executive Committee agreed to allow me to interview representatives of its member organizations in response to my request for permission to conduct the study. Once I received approval from PQMD and The Institutional Review Board at Virginia Tech (Project No. 11-045, obtained 24 January 2011), I sent a "recruitment" e-mail note to describe the study and to invite PQMD representatives to participate. A study consent form outlining the specifics of the study, including its potential risks (none or minimal), possible benefits, extent of confidentiality, participant responsibilities, and participant rights accompanied the recruitment note. I then individually e-mailed each PQMD member at INGO headquarters and corporate headquarters to ask if he/she wished to participate. Once I received participation information from INGO headquarters members, I asked them if they would put me in contact with their organization's field staff for participation as well. I received a positive reply to my invitation from seven INGO representatives with contact information for field staff. Most

corporate members requested a copy of the interview questions before agreeing to contribute to the study in order to secure internal legal/departmental clearance for their participation.

As detailed in the next section, I conducted semi-structured interviews with 35 individuals from three different groups from PQMD's participating organizations: INGO field-deployed staffers, headquarters INGO staff, and corporate donors. All but two interviews were carried out by telephone, digitally recorded, and transcribed verbatim. Two INGO field members responded to my questions by e-mail since telephone communications were difficult. I included their responses as part of the 35 total interviews conducted. To encourage participants to speak candidly, I assured each confidentiality. I obtained written informed consent from all interviewees prior to conducting the interviews, which took place between January and May 2011. I also received an IRB amendment, granted in May 2011, to include field and observational notes taken during travel to Haiti in May and August 2010. Following interview protocol, I took notes during and after each interview to contextualize the setting and my conception of how each session went. Before beginning every interview, I read aloud a statement about the purpose of the study and reminded the participant that all comments would remain confidential. For all interviews conducted, I obtained permission for a possible follow-up at the time of the interview. In five instances, I did contact respondents again to ask them additional questions.

As noted above, I sought participants who could represent three segments of PQMD's membership. I also purposefully selected a sample of operations staff knowledgeable about their organizations' on-the-ground humanitarian efforts in Haiti. In most cases, the interviewed HQ INGO or corporate staff member also acted as a PQMD board member.

- **PQMD Corporate Members**: The PQMD governing board included 16 corporate members as of April 2011. I conducted telephone interviews with 17 corporate members (two interviews were conducted with one company with representatives from two geographic locations—U.S. and Europe), all of whom were knowledgeable about their organizations' response efforts (medical donations, corporate volunteers, cash donations, or any combination of these) in the Haitian 2010 crisis. All participants provided written informed consent to participate in the research. I conducted interviews with these individuals from January to May 2011.
- **PQMD INGO Headquarter Members**: Sixteen INGOs were members of PQMD at the time of my interviews. I conducted telephone interviews with 10 INGO organizational representatives that worked on Haitian 2010 relief efforts. All participants provided written informed consent. I conducted interviews with these organizational representatives from January to May 2011.
- **PQMD INGO Member Field-Deployed Representatives**: Although several INGOs deployed staff to Haiti to work in a health-related capacity, not all PQMD member entities that responded to that nation's crisis did so via on-site personnel. For those that did, I took extensive field observation notes while visiting their work sites and when meeting with organizational representatives during the May to August 2010 period. I conducted telephone interviews with five INGO field-deployed representatives and received two detailed e-mail responses to the interview questions from representatives actively involved in their organizations' response efforts (medical delivery, program implementation, health delivery)—for a total of seven responses. I obtained written informed consent from all participants for this study.

- **PQMD Staff Member:** PQMD employs one full-time staff member permanently, whom I interviewed for this study. I obtained an informed consent form for that interview.

4.7 Data Analysis

I organized, coded, and analyzed all interviews and companion field notes using NVIVO 9.0 software (QSR International Pty Ltd, Doncaster, Victoria, Australia), which I purchased. I employed Maxwell's (Maxwell, 1998, p. 90) process of iteratively contextualizing and categorizing data to identify themes found in the interviews and documents, as well as the notes I took for each. To begin coding, I catalogued themes identified from the interviews and then broke interview responses down by question with the goal of categorizing responses according to either (a) question or (b) membership category (corporate, HQ INGO, field INGO). I then endeavored "to develop tentative ideas about categories and relationships" (Maxwell, 1996, p. 78), which led to recoding and then aggregating new groupings of information, while at the same time allowing for, "patterns, themes, and categories of analysis [to] emerge rather than being imposed on them prior to data collection and analysis" (Patton, 1990, p. 390). I employed a form of triangulation using my observational data, survey findings, document analysis, results, and interview questions to gain a more comprehensive understanding of the concerns I was studying. Specifically, this triangulation of information tested validity (Berg, 2001, p. 5) through the examination of multiple sources; i.e., interview findings, documents analysis, and field notes/memos. I further validated the data and findings to test my emerging insights and analysis with others knowledgeable on my topic by presenting my preliminary research findings at two PQMD board meetings in 2011 (Creswell, 1998, p. 202).

4.7.1 Document Analysis: Data Collection and Analysis

I evaluated the following documents and websites: PQMD's by-laws and 2010-2012 Strategic Plan (confidential), the PQMD website, PQMD, INGO and corporate members' websites, World Health Organization Drug Donation Guidelines for 1999 and 2011, and a review (using Guidestar) of PQMD member INGO organizations' 2009 (available in 2010) 990 forms (The 990 form is an annual IRS report filed by federally tax-exempt organizations which provides information on the organizations' missions, programs, and finances). Additional materials I examined included press releases, websites, and other documents written about Haiti relief efforts. I found and gathered resources through Google, Google Scholar, PubMed, the World Health Organization's website, United Nation's One Response website, JSTOR, and similar article database searches conducted via Virginia Tech library resources. I also obtained various documents/articles relating to inappropriate drug donations associated with past disaster situations dating from 1980 to 2000 by way of Interlibrary Loan. Insights gained during participant observation and secondary analysis of PQMD's August 2010 survey informed the design and structure of the qualitative portion of the study and semi-structured question guide. I participated in three PQMD board meetings prior to beginning data collection (February 2010, June 2010, and October 2010). The log of evidence below summarizes the types of information I collected and analyzed.

Table 2: Log of Evidence Collected

Sources of Evidence	Descriptive Log

35 Interviews	• *Corporate Interviews (semi-structured, digitally recorded, written consent received by all participants):*
	  • Seventeen individual interviews (25-180 minutes each) involving individuals employed by 15 different companies
	• *INGO Headquarters Interviews (semi-structured, digitally recorded, written consent):*
	  • Ten individual interviews (one to two hours each) with INGO staff members
	• *INGO Field Interviews: (five digitally recorded, two participants e-mailed responses, written consent):*
	  • Seven total participants with staff involved in field operations (25 minutes to one and a half hours each)
	• *PQMD Staff Member:*
	  • One interview (25 minutes)

Direct Observation and Participant Observation	*Observation (logged in separate field notes for each case)*:
	• *February 2010—Researcher participated, via teleconference, in two PQMD Emergency calls (February 3rd & 12th – approximately 60-70 minutes each)*
	• *May 2010—Thirteen PQMD member INGO site visits; data gathered via field notes in Haiti (signed consent by PQMD's executive director for use as secondary data analysis)*
	• *August 2010—Three additional site visits to PQMD member INGO sites; field notes*
	• *Total of 16 site visits—I visited many of these twice*
	• *Participation in PQMD's Haiti Assembly (25 August 2010)—signed consent by PQMD's executive director*
	• *Attendance at PQMD board meetings: February 2010, June 2010, October 2010, February 2011: (All observations logged in field notes)*
	  • Shared meals
	  • Whole group and board meeting activities

Documents and Archival Records	• *PQMD's Bylaws and 2010-2012 Strategic Plan (confidential)* • *Guiding Principles for Public-Private Collaboration for Humanitarian Action (OCHA-WEF) published December 2007 by United Nations* • *2001 Global Compact*

	• *Corporate PQMD member website search of press releases specifically related to Haiti response from January 12, 2010 to January 12, 2011* • *INGO PQMD member website search of press releases specifically related to Haiti response (that mentioned PQMD) from January 12, 2010 to January 12, 2011 (within one year of earthquake)* • *Review of U.S. INGOs' 2009 990s as they appeared on www.guidestar.com* • *World Health Organization Guidelines of Drug Donations 1999, 2011* • *PQMD Haiti Assembly Survey conducted August 2010—19 surveys* • *PQMD spreadsheets of Haiti activities* • *Literature review—relevant articles, books, reports, press releases*

4.7.2 Case Study Data

I constructed a database that included original survey response sheets, along with all documents generated in the process of analysis (including tabulation logs, comparative tables, and Excel spreadsheet graphs), interview transcripts, and documents. NVIVO functioned as a vault for all digital files associated with this research. I stored all notes, flipcharts, and Assembly evaluation results in hard copy in a locked file. I digitally recorded interviews, transcribed them, and stored them in NVIVO on my personal computer in a password-protected file and on an external hard-drive (for backup purposes), along with transcribed interviews for which I performed the same safeguards. Moreover, I recorded handwritten field notes in one notebook for every membership category (corporate or INGO). These notebooks were logged and retained in the study database. The NVIVO database also included all document evidence gathered from PQMD members (or their websites).

4.8 Limitations, Validity, and Reliability

4.8.1 Limitations

The most notable limitation associated with this study is that it captures a snapshot of the efforts of those I studied in reaction to one disaster event—although a significant and complex one—examined through the perspectives of members of a single cross-sector organization. Interviewing PQMD members and staff—and field-deployed INGO professionals—provided specific information about the experiences of one set of cross-sector humanitarian actors working in the health domain. However, because PQMD is the only cross-sector partnership network of its kind, it should not be considered representative of all, or even many, cross-sector INGO/business partnerships. In other words, this study's findings cannot be universally applied to other cross-sector networks or partnerships. However, the empirical contributions offer analytical generalizability and holds potential research assays in the areas of network theory, cross-sector partnerships and disaster coordination in the global health domain.

Some scholars would argue that a single case study is in and of itself a limitation. However, this analysis relied on multiple sources of evidence and a framework for making theoretical inferences. The PQMD case study provided a systematic way of investigating a complex event with multiple variables and stakeholders. This study would be difficult to replicate in light of the many unique characteristics associated with the Haiti 2010 earthquake—or any natural disaster observed in isolation—such as the country and context, the available technology and resources, accessibility to network members, and the effectiveness of particular disaster coordination efforts. Nevertheless, this case study offers analytical generalizability, defined as the degree to which the findings can be generalized from the study sample to the entire population (Polit & Hungler, 1991, p. 645). Yin (2009) has argued, "case studies are

generalizable to theoretical propositions, not to populations or to universes" (p. 15). Flyvbjerg (2005) has suggested a, "case study is ideal for generalizing using the type of test that Karl Popper called 'falsification' which in social science forms part of critical reflexivity. Falsification is one of the most rigorous tests to which a scientific proposition can be subjected: If just one observation does not fit with the proposition, it is considered not valid generally and must therefore be either revised or rejected" (p.228). And while the work of PQMD as a network, the work of its individual members, and the dynamic partnerships it represents are not generalizable to the entire field, my intent was to discover meaning and associations to expand theoretical understanding of the phenomenon I considered. This is opposed to verifying truth or predicting outcomes and suggests limited utility for statistical inference. Moreover, the findings reported here do not fit neatly into one body of literature or area of study, yet the case analysis has general significance and provides the opportunity to stimulate further investigations. In short, the results provide a rich and holistic account of the phenomenon and open up new avenues for research and theory building that can affect and perhaps even improve practice.

Another obvious limitation of this case study is its U.S.-centric perspective. Of the 35 interviews conducted, only four were with non-U.S. representatives: two were with European corporations and two with a European INGO.[v] While the U.S. and European perspectives do differ, particularly in their funding structures, operations, and deployment methods, American respondents nonetheless dominated this study. A final limitation involves the researcher's long-standing and multifaceted relationship with PQMD network members, a difficult position to replicate by an analyst less familiar with the organization. Again, I argue that my knowledge of the organization and its actors enhanced, rather than limited, this study's findings. For most study participants, I was a trusted colleague and friend with whom many had worked previously,

both from an organizational standpoint and as a PQMD board member. At the field level, my service-delivery familiarity in Haiti and my previous relationships with some implementers allowed me rapid entry to field sites, as well as an elevated level of comfort once on site.

4.8.2 Construct Validity, Internal/External Validity, and Reliability

Table 3: Validity and Reliability Measures

Criteria	Measures Applied in Case Study Research
Construct Validity	• *Rich, thick descriptive data* • *Triangulation of data* I used multiple data sources from a range of individuals and settings to validate my interpretation of the phenomena under investigation (Denzin & Lincoln, 2005). Multiple sources of data leading to "converging lines of inquiry" (Yin, 2009). • *Used of Multiple sources of evidence* • Relevant literature • Interviews of three network membership stakeholder groups • Observation and field notes • Analysis of surveys • Organizational documents • Website reviews/analysis • *Established chain of evidence* • Study references and relevant data from database • Database maintained for future inspection • Data collection followed procedures from protocol • Protocol linked to research questions asked and addressed. • *Review of Survey Instrument & Interview Guide* • Two field INGO representatives reviewed and offered comments on the survey and I revised it in light of their suggestions, before administering it (Interviewees # 28 & 22). One corporate and one INGO headquarter staff person reviewed the interview guides and provided input prior to IRB submission (Interviewees # 3 & 1). • My research advisor also reviewed the interview guides prior to their submission for IRB approval.
Internal Validity	• *Specification of Unit of Analysis* Internal validity is supported by the specification of a unit of analysis. I developed theories, data collection and analysis to test the relevant literature reviewed.

	• *Explanation Building*
	  • The analysis generally conforms to Yin's (2009) description of explanation-building by stipulating a presumed set of causal links, based upon existing theory, for the observed phenomenon
	  • Established through triangulation of various forms of evidence.

External Validity	• *Use of Rival Theories within Single Cases* Not used because of exploratory nature of research and limited existing theory in the context of cross-sector networks in disaster response • *Use of Theoretical Relationships* Historically, the external validity or generalizability of case studies has often been criticized based either their "single shot" character or relatively few informants. This interpretative case study employed multiple sources of evidence (see above), numerous expert informants (35 interviews and 19 surveys logged) to test theoretical relationships and propositions (Yin, 2009, p.15).
Reliability	• *Developed a Case Study Protocol* I created and submitted a research protocol for review by both my advisor and Virginia Tech's IRB. This process involved a full description of data collection/analysis methods. • *Development of Case Study Database* I created and maintained a comprehensive database of field notes, surveys, documents, and links to online websites reviewed, interview transcriptions, participant observation notes and analyses of them. • *Use of Several Expert Informants* I collected data through field visits, surveys and in-depth interviews with the most knowledgeable representatives (informants) in the health product donation domain for a total of 35 interviews and 19 surveys. PQMD is the only cross-sectional network working specifically to improve the practice of medical donations, thus adding to the reliability of the study's findings.

4.8.3 Validity and Reliability

The adoption of a mixed-method approach enhanced this study's validity and reliability. Combining quantitative and qualitative data enabled me to triangulate my findings and provided a more comprehensive understanding of the challenges confronting cross-sector humanitarian actors in disaster relief response. The qualitative lens allowed for a more exploratory and nuanced approach to my research concerns. The quantitative research portion provided an initial view of PQMD's disaster response as seen through the eyes of field implementers. While the

current study is neither fully quantitative nor fully qualitative, each form of analysis provided complementary information and insights. Ultimately, tradeoffs emerged as much from circumstance (evolution of the disaster) as from design. In other words, the opportunity to conduct analysis of the PQMD August 2010 survey represented an important opportunity to inform the study's overall design. The results of that analysis generally underscored the validity of the original hypothesis, which posited that perceived challenges to relief response would differ according to PQMD membership category. Two INGO member organizations were unable to attend the Haiti Assembly, and, therefore, there is no way to know whether non-participating members could have significantly altered the survey's results in light of the relatively small sample (n=19). My working assumption is that such information would not have materially altered the study's results.

4.8.4 Member Checking

Research design and methods scholars consider member checking an, "important way of identifying the researcher's biases and affords the possibility for collecting additional important data" (Maxwell, 1996). PQMD members received ample opportunities for feedback and input throughout the data collection and analysis process of this research. For example, I presented my preliminary field notes and survey findings resulting from my May and August 2010 trips to Haiti at PQMD's October 2010 annual Educational Forum in New Brunswick, NJ. Additionally, at PQMD's February 2011 closed board meeting (St. Simons Island, GA), I presented emerging themes surfacing from corporate and INGO headquarter interviews. Both presentations resulted in energetic question-and-answer sessions.

I solicited input from PQMD's executive director during the fall of 2011 for the development of the PQMD chapter (see Chapter 4). This individual completed a general review

and verification of the facts I presented concerning PQMD's description, history, and structure. I then asked three prominent PQMD founding representatives (no longer serving on the board) to review Chapter 5 and provide relevant feedback: (1) Jim Russo, PQMD's founding executive director; (2) Brenda Colatrella, PQMD's first Chairman of the Board, and currently Executive Director of Merck's Office of Corporate Responsibility; and (3) Conrad Person, now Director of Corporate Contributions at Johnson and Johnson. All three individuals agreed to assist me and provided invaluable comments as I prepared the chapter. Additionally, I had two corporate interview participants (Interviewees 7 and 30) and one INGO HQ (Interviewee 31) provide reviews of the corporate and INGO HQ findings, respectively, and provide feedback in March 2013. This research benefitted from the generous feedback of these and many other individuals associated with PQMD. None, however, were responsible for my interpretations.

4.9 IRB Approval and Protection of Participants

The Virginia Tech Institutional Review Board approved this research in January 2011. As noted above, I prepared a research amendment in April 2011 (received 3 May 2011) to include field notes and survey data collected in 2010. I informed all participants of the voluntary nature of contributing to the study. I also reminded each of his or her right to refuse to participate or withdraw from the research for any reason. Additionally, I made known that they could request to make comments off the record at any time during the interview. Interview participants granted me written permission to record our interview conversations. I changed the names of participants and corresponding organizations to protect the confidentiality of participants. Nonetheless, it is still possible that descriptive elements in the analysis could reveal details that would allow participants to be identified by a reader who is familiar with PQMD's membership.

For this reason, I carefully avoided reporting data that might be considered sensitive and/or unduly revealing of a specific company or organization's practices.

CHAPTER FIVE

THE HEALTH PRODUCT DONATION ARENA and PQMD

5.1 Introduction

This chapter provides an overview of the health product donation arena, introduces the key players in this cross-sector humanitarian relief domain, and situates PQMD's role in that context based on website information, by-laws, and strategic planning document review. It describes PQMD as a cross-sectoral network and describes the history of health product donations and the network's relationship to the World Health Organization. Finally, the chapter summarizes PQMD's membership, structure, and governance as context for the remainder of the study.

5.2 Cross-sectoral Humanitarian Actors

Global health and sustainable development initiatives such as the Millennium Development Goals and the Global Compact have prompted an increase in corporate social responsibility among global healthcare manufacturers (Lesinger, 2005: Nelson & Prescott, 2003; Reich, 2002). In fact, these firms have faced increasing pressure in recent decades to act responsibly, protect the environment, and engage stockholders and stakeholders. Such considerations have encouraged major health product corporations to embrace and support international development aspirations. Concurrently, international nongovernmental organizations such as Greenpeace, Environmental Defense Fund, Corp*Watch*, and the Nature Conservancy have campaigned for more sustainable business practices. Taken together with the widespread embrace of neo-liberal tenets by leading western nations, these trends have broadened the scope of INGO and business relationships, as well as encouraged new pathways for cross-sectoral engagement.

5.2.1 International Non-Governmental Organizations (INGOS)

Today, NGOs play increasingly important roles as implementing partners in health delivery in both long-term initiatives and in providing humanitarian aid in disaster events. These civil society institutions support, advocate, or provide service delivery in global disaster scenarios as a part of their organizational mandates. Moreover, these INGOs are vital conduits of intervention, channeling material aid, expertise and mobilizing corporate sector resources in disaster response efforts across the globe.

Fitzduff (2004) contends that NGO influence has grown broadly such that, "in the U.S., business was not alone at the top of the pyramid of influence. Now, companies must communicate with multiple stakeholders, especially NGOs, with speed, transparency, and an offer of interactivity" (p. 2). INGOs are influencing government policy, the structure of political institutions, and corporate activities (Batliwala & Brown, 2006). This phenomenon has led some scholars to contend NGOs increasingly provide services that are changing 'business as usual' in disaster response and in the international service delivery landscape in general (Kaldor, 1999, p. 4).

5.2.2 Global Healthcare Company Donors

The 2004 Indian Ocean tsunami marked a decisive moment in for-profit sector engagement in disaster response and relief efforts (Thomas & Fritz, 2006). The UN publicly acknowledged that corporate firms played an "unprecedented" role in provision of "financial aid, food and medicine, and other supplies and services" in response to that crisis (UN Global Compact Office, 2005, p. 1). Furthermore, global healthcare companies have been active participants in recent decades in several international health initiatives in the disaster domain, including the 2002 Earth Summit, 2003 Humanitarian Donorship Initiative (GHDI), 2004

Business Roundtable Partnership for Disaster Response, 2004 World Economic Forum's Global Corporate Citizenship Initiative (GCCI), 2005 The Paris Declaration on Aid Effectiveness, among others, that have encouraged the formation of cross-sector partnerships with civil society and public organizations. These initiatives provide an important backdrop for this analysis.

Disaster response is an expanding component of medical device/equipment, medical supply and pharmaceutical corporations' social responsibility dossier as well. Many global healthcare companies work through long-standing, trusted partnerships, or are actively forming new collaborations with INGOs to deliver donated medicines, medical supplies, and equipment to nations confronting crises. They also initiate development projects where they would otherwise be scarce or unavailable. In the U.S., healthcare manufacturers donate medical products to international non-governmental organizations that then route those items to clinics, hospitals, and health systems in developing countries, or distribute them via their own programs in the developing world. This form of corporate philanthropic giving in the interest of the "public good" has benefited from an accelerated tax incentive under IRS Section 170, if donated to a 501(c)(3) organization, "solely for the care of the ill, the needy, or infants" (26 U.S.C. 170 - Charitable, 2010 edition).[vi] At least initially, IRS Section 170 encouraged INGO-business partnerships, not only by a philanthropic motivation, but also by tax incentives that provide mutual benefits for INGOs and corporate donors in the United States.

Corporate social responsibility involving health product donations has evolved into co-created solutions that leverage the discrete competencies of the partners. Maon et al. (2009) Porter and Kramer (2002) and Seitanidi (2010) have emphasized the strategic nature of corporate social giving. These authors are part of a burgeoning scholarship on corporate social responsibility (CSR) that provides strong arguments for why and how for-profit firms today

engage civically. Increasingly, corporations are evaluated on the basis of a new 'quadruple bottom line mission' of financial, social, environmental, and now corporate contributions and engagement performance. For instance, "Corporations are being asked to play a more active role in addressing social problems that were once thought to be the exclusive responsibility of government and civil society" (Keefe, 2002, para. 1).

Albeit limited, what is known concerning business collaboration in disaster response suggests that corporate engagement is motivated in part by CSR factors, including:

- Expanding societal expectations, a need for more socially conscious stakeholder/stockholder management, a concern to secure positive corporate reputation and brand comparative advantage (Bird, 2007; Cooper, 2004; Keefe, 2002; Kourula, 2010; Nelson & Prescott, 2005; van Huijstee, 2010; Waddell, 2000; Waddock & Graves, 1997; Werther & Chandler, 2006);
- A broadening conceptualization of corporate social responsibility to include active engagement in social crises (Ariyabandu & Hulangamuwa, 2002; Austin, 2000a; Balcik et al., 2010; Binder, 2007; Dahan et al., 2010; Damlamian, 2006; Maon et al., 2009; Muller & Whiteman, 2009; Sharma, 2002; Sinha et al., 2008; White & Lang, 2012; Zhang et al., 2009);
- Growing global and environmental consciousness (Haigh, 2006);
- An emphasis on managing talent, employee job satisfaction, staff morale, recruitment, and retention among corporate employees (Alperson & Conference Board, 1995; Austin, 2000b, p. 76; Balcik et al., 2010, p. 27; Bartlett & Ghoshal, 2002; Binder, 2007, p. 4; Brinkerhoff, 2002; Collier & Esteban, 2007; Karl, 1983; Keefe, 2002; Lewin, 1991; O'Connell, 1997);
- Support for workplace giving campaigns and corporate voluntarism programs that,
    - Support employees in "making a difference,"
    - Allow employees to make charitable contributions before taxes are withheld,
    - Leverage giving by company-matching fund programs,
    - Build teamwork, employee cohesion, trust, a community spirit, and social capital, all while on company time (Lewin, 1991);
- Networking, supporting existing NGO partnerships, and an overall partnership trend (Agranoff, 2007; Buse & Harmer, 2007; O'Toole, 1997; Provan & Milward, 1995; Reich, 2002; Samii et al., 2002; Waddell, 2011; Waddock, 1988b, 1991);
- Increasing consumer purchasing power that favors companies that are responsive global citizens, both socially and environmentally (Vogel, 2005).

In summary, the past three decades have witnessed an expanded role for private sector involvement in efforts to address public social problems linked to health and healthcare (Karl, 1983). In this new environment, the corporate community considers its potential social commitments from the standpoint of its roles as employer, as analyst of emerging market potential, and as socially responsible citizen. This has been especially true for global healthcare companies whose missions, corporate identities, and donations focus on saving lives and improving health.

5.3 The Partnership for Quality Medical Donations

In 1996, an informal group of INGOs, pharmaceutical companies, and global healthcare manufacturers met to discuss the key components of the World Health Organization's *Guidelines for Drug Donations*, first published in 1996 and later revised in 1999 and 2010 (World Health Organization, 2010)—hereafter referred to as the *Guidelines* and discussed in detail in Section 5.4.2 below. The primary goal of this loose assembly, initially called the Product Donations Steering Committee, was to document, disseminate, and leverage best corporate and INGO health product donation practices. Also in 1996, the Steering Committee commissioned the first systematic review of U.S. pharmaceutical donations. This analysis outlined policy recommendations to improve the donation process and increase the positive impact of health product donations. Michael Reich of the Harvard School of Public Health led the effort and, based on the findings, edited a volume entitled, *An Assessment of US Pharmaceutical Donations: Players, Processes, and Products.* Three years later, in 1999, the group founded as a 501(c)(3) nonprofit The Partnership for Quality Medical Donations (PQMD).

From its inception, the network has been composed of leading U.S. and European health and medical manufacturers and an equal number of nonprofit relief and development agencies.

PQMD member efforts are grounded in a shared commitment to humanitarian relief, international development, and corporate social responsibility undertaken primarily through product and cash donations, volunteer efforts, training, and other services to support a wide range of global health programs (PQMD, n.d.). The network provides a venue for these entities to work collaboratively in disaster response, to pursue disease reduction and elimination, to build the capacity of healthcare institutions, and to fill gaps in local health-related services, principally in developing nations in the form of product donations. Moreover, PQMD seeks to identify and highlight its member organizations' best practices yearly to present at its annual gold standards meeting in October.

5.4 The History of Health Product Donations

This section identifies the major players in efforts aimed at securing improved health product donations. The chronology of global health milestones that follows provides a context in which to understand the factors that led to sustained efforts to improve the quality and effectiveness of medical donations, ultimately resulting in the establishment of PQMD.

5.4.1 Health Product Donations

Health product donations (HPDs) provide a bridge to assist communities through catastrophic circumstances that have adversely affected government health facilities, health supply chains, non-governmental hospitals and clinics, long-term sustainable health programs, and equally important—already-existing health development investments. By health development investments I mean donations, training and education, and in-kind contributions made throughout the year in developing nations by INGOs and foreign aid entities. Often, however, when a disaster occurs, development "investments" are wiped away. Moreover, during crisis events, the likelihood of inappropriate donations increases exponentially. The negative

impacts of unsuitable drug donations can negate their benefits. Consequently, the practice of health product donations is not without its troubles and critics.

HPDs usually consist of prescription medicines, medical and hospital supplies, and medical equipment with high black-market value, which makes transporting, managing, and dispensing these items a risky business. In disaster situations—during which chaos is the norm—donations have the potential to burden already weak distribution systems, thereby imposing costs on recipients, generating waste, and causing confusion (Reich, 1999, preface). Such donations may create hazardous waste problems if donors/recipients neglect drug expiration dates or impose destruction costs on healthcare recipients, who too often lack capacities to do so in an environmentally responsible way. In addition, HDPs may also de facto require better-trained aid personnel, the lack of which could result in inappropriate use of drugs or related products. In summary, circumstances associated with inappropriate donations include the following:

- Storing (climate controlled facility),
- Warehousing (space utilization and/or securing facility),
- Sorting time (the time it takes to sort consolidated/bulk lots of medicines/supplies), and
- Destruction/waste disposal costs.

In other words, the "disruption of local public and private drug supply networks, creation of black markets, environmental degradation, and human morbidity and mortality resulting from the use of inappropriate drugs" are common criticisms of health product donations and health product donation process (Autier et al., 2002, p.1).

Despite the millions of individuals who benefit from health product donations in times of catastrophe opponents have focused on their potential drawbacks and with some justification. Published accounts of unsuitable medical product donations—i.e., unsorted/unsolicited, excessive and/or expired drug donations—began to surface in the late 1970s (Ali, Homeida, &

Abdeen, 1988; Autier et al., 1990; Berckmans et al., 1997; Cohen, 1990; Offerhaus, 1992; Saunders, 1999; UN Department of Humanitarian Affairs, 1996; Van Der Heide, 1995; Zeballos 1986). Public awareness of the problems encountered by inappropriate donations of health products by governments, bilateral aid agencies, and non-governmental organizations led to the 1988 publication of the *Guidelines for Donors and Recipients of Pharmaceutical Donations* by the Christian Medical Commission (now the Ecumenical Pharmaceutical Network, see Appendix A), followed by the 1994 publication of *GIK Standards* (gift-in-kind) by the Association of Evangelical Relief and Development Organizations (now ACCORD network),[vii] which then brought about the 1996 publication of the *Guidelines for Drug Donations* by the World Health Organization (subsequently revised in 1999 and 2010).

5.4.2 History of Health Product Donations

The World Health Organization (WHO) has justifiably argued that medicines can "save lives, reduce suffering, and improve health" (World Health Organization, 2000, p. 1). WHO has defined essential pharmaceuticals as, "drugs that satisfy the healthcare needs of the majority of the population; they should therefore be available at all times in the adequate amounts, and in the appropriate dosage forms, and at a price that individuals and the community can afford" (World Health Organization, 2000, p. 1). Despite the known importance of such drugs, at least "2 billion people today still lack access to essential medicines" (World Health Organization, 2004, p. 109). Such a deficit points to the significance of health product donations, including critical drugs, medical devices, equipment, and supplies in providing critical assistance to underserved or resource-limited settings that often lack the financial means or infrastructure to obtain them.

A charged debate surfaced in the late 1970s concerning whether and/or how product donations could build public health infrastructure and capacity in developing countries. In

response, the World Health Assembly (WHA) in its Resolution 28.66 (1975) began to lay the foundation for coupling national drug policy with procurement standards for essential primary healthcare medicines for member states. Specifically, WHA 28.66 proposed that developing countries formulate a national drug policy tied to their population's primary healthcare needs to ensure more appropriate channeling of donated medicines and supplies. In 1977, WHO published the first draft of what is now commonly referred to as the Essential Drugs List (EDL), or more formally, as WHO Model Lists of Essential Medicines (WHO, Adult/Pediatric, 2011). The EDL is often used as a template and adapted by nations as part of their drug policy and procurement protocol. WHO's EDL soon began to guide national drug policy development for both procured and donated medicines around the world. Not long after, in 1981, the World Council of Churches[viii] formed a Pharmaceutical Advisory Board, which in 1988 developed *Guidelines for Donors and Recipients of Pharmaceutical Donations* for affiliated faith-based organizations (FBOs) (see Appendix A) (Reich, 1999). In 1985, the Conference of Experts on the Rational Use of Drugs ratified the term "rational drug use (RDU)" (interventions to improve drug prescribing)[ix] to advance "drug information systems" focusing on quality, equity, and access to essential medicines. WHO maintains rational drug use "requires that patients receive medications appropriate to their clinical needs, in doses that meet their own individual requirements for an adequate period of time, and the lowest cost to them and their community" (World Health Organization, 1985). Subsequently, from 1994 to 1996, the staff of WHO's Action Programme on Essential Drugs (DAP) began assembling information "motivated by instances of inappropriate or excessive donations," with the aim of securing primary healthcare standards for "ensuring quality of medicines both on the open market and for donation as international aid" as a part of its mandate (World Health Assembly, WHA49.14). That study

resulted in *Guidelines for Drug Donations* (May, 1996; revised in 1999 and 2010) and reflected a consensus on these concerns among a handful of the most significant European-based international agencies active in emergency relief operations.

WHO suggested that four core principles should underpin donation efforts (WHO *Guidelines*, p.1):

1. Maximum benefit(s) for the recipient;
2. Respect for the wishes and authority of the recipient;
3. No double standards in quality;
4. Effective communication between donors and recipients.

The *Guidelines* embodied these four foundational principles and represented the first formal globally recognized standards of practice for the management of donated drugs and medical supplies. The new guidance was intended to accomplish a number of goals:

- To establish "Good Donation Practice" (World Health Organization, 1999b, p. 2);
- To improve the quality of drug donations, not hinder them (p. 1);
- To ensure that drug donations "comply with national drug policies and essential drugs programs" (p.7);
- To serve as the "basis for national or institutional guidelines, to be reviewed, adapted, and implemented by governments and organizations dealing with drug donations" (p. 1);
- To maximize the positive impact of donations while at the same time minimizing "unsolicited and/or unnecessary" (p.5) gifts to recipient countries and yet not impose "international regulation" (p. 5).

According to Hans Hogerzeil, a lead author of the original *Guidelines*, "the idea [was] not to adapt the *Guidelines* to practice, rather it [was] to adapt practice to the *Guidelines*" (Drug Donations, n.d.). The WHO *Guidelines* sought to advance appropriate drug donation program practices—whether offered by states, corporate donors, or INGOs—by aligning in-kind resources with ongoing local development goals (Reich, 1999). The UN health agency document offered counsel in five different scenarios: acute emergencies, development aid in

nonemergency situations, corporate donations, governmental aid, and single health facility donations (Reich, 1999).

Interestingly, even though WHO officials asserted that the *Guidelines* reflected, "a consensus between the major international agencies active in humanitarian emergency relief" (p. xx), the organization solicited little, if any, input from U.S.-based donor companies or non-governmental organizations involved in large-scale delivery of health product donations. WHO officials did not consult any of the group of INGOs that would join PQMD either, despite the fact that nearly 60% of them were founded prior to the 1980s, and managed large-scale product gift programs. Indeed, none of the current PQMD corporate members were consulted in the development of the original 1996 *Guidelines,* despite their long-standing medical donation programs. Some of the existing complementary initiatives that could have been investigated in the development of the *Guidelines* included,

- Merck Pharmaceutical's Mectizan Donation Program (1987) for the treatment of river blindness,
- Merck's Annual Allotment Program whereby NGOs could choose needed products for donation up to a stipulated sum,
- Johnson & Johnson's Medical Mission Pack Program (1990s), and
- Smith Kline Beecham's (now GlaxoSmithKline) "Produce to Give Program" (1995).

For those actively working to deliver drug donations, the *Guidelines* raised several practical concerns, the principal one being that contributions of much-needed medical products might either be reduced or discouraged by nation-states unfamiliar with the donation practices outlined in the health agency's guidance.

In the wake of the publication of the *Guidelines* in 1996, an international group of representatives of about a dozen corporate donors and INGOs gathered to consider their implications for existing donation programs. That group (initially called the Product Donations

Steering Committee, as noted above) recommended that WHO consider explicitly the benefits of donations in its subsequent modifications of the *Guidelines*. The initial informal gathering led to other meetings that paved the way for participants to cooperate more formally—it was against this backdrop that PQMD was born. That is, the Partnership was created in part to foster collaboration among its members and provide cross-sectoral feedback concerning policy development affecting donated health and drug products. PQMD's suggested changes to the *Guidelines* set the stage for the organization's formal endorsement of the 1999 revision of the WHO document. PQMD was the first U.S. cross-sector network both to contribute to and become a signatory of the revised 1999 and 2010 editions of the WHO *Guidelines*.

Health product donations and corporate social responsibility practices have evolved as a result of the World Health Organization's increasing role and leadership on global health matters. For example, in 2001, PQMD (in partnership with Temple University), pursuant to WHO's articulated aims, developed a document known as *The Seven Key Components in the Comprehensive Management of Medical Product Donations*, which in 2010 was renamed PQMD's *Principles and Standards for the Comprehensive Management of Medical Product Donations* (PQMD, 2005-2006).

5.5 PQMD Membership

PQMD membership is available only by invitation (PQMD Bylaws review, 2010). Growth has reflected the network's commitment to parity; i.e., maintaining a balance between corporate and INGO perspectives at all times (PQMD Bylaws review, 2010). All board members have equal voting power—one organization, one vote—regardless of differences in number of employees, revenue, or global presence. As of July 2011, PQMD's organizational structure consisted of staff, board members, an executive committee, and ten standing

subcommittees, each of which has a chairperson selected by the board from among its membership. The board chair serves a two-year term. The incumbent is selected alternately from a corporate member or an INGO, typically chosen from the executive committee (PQMD Bylaws review, 2010).

Table 4 lists PQMD's membership as of January 2013.

Table 4: PQMD Membership as of January 2013

Membership Type	Members
Sixteen (16) Corporate member representatives (alphabetized) Note: *Only 15 members were part of the Haiti study –including Genzyme, not including AstraZeneca & Takeda*	Abbott Laboratories; Alcon Laboratories, Inc.; *AstraZeneca (joined 2011-not part of the study);* Baxter Healthcare Corporation; Becton Dickinson; Boehringer Ingelheim (Germany); Bristol-Myers Squibb Co.; Eli Lilly and Company; *Genzyme (participated in the study, but no longer a PQMD member as of 2012;* GlaxoSmithKline (United Kingdom); Henry Schein, Inc.; Hospira, Inc.; Johnson & Johnson; Merck & Co. Inc.; Pfizer Inc.; Sanofi US (based out of France); *Takeda Pharmaceuticals U.S.A. Inc. (joined 2012-not part of the study)*
Sixteen (16) INGO member representatives	AmeriCares; Catholic Medical Mission Board; Direct Relief International; Heart to Heart International; International Health Partners (UK); IMA World Health; International Medical Corps; MAP International; Medical Teams International; MediSend International;

	Mercy Ships; National Cancer Coalition; Project HOPE, Tulipe (France); U.S. Fund for UNICEF; World Vision
Administrative Staff	Lori Warrens, Executive Director, full-time employee; Sara Christopherson, Communications Director, part-time staff; and Jessica Warrens, Events Coordinator, part-time staff

Table 5: PQMD Governing Board Committees and Associated Mandates as of July 2012

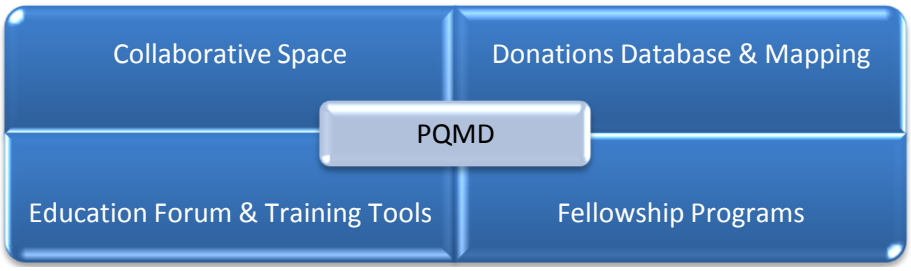
Executive Committee	Comprised of the Chairman of the Board and standing committee chairpersons
Standing Committees	
Communications	Improves external and internal communications and demonstrates value of PQMD membership by maximizing corporate and NGO communication channels
Standards	Increases recognition and adherence to PQMD's donation standards and WHO Guidelines in the practice of health product donations globally
Program	Plans bi-annual meetings (tri-annual prior to February 2012)
Research	Researches and establishes standards regarding pharmaceuticals, medical machinery and medical devices to be delivered to targeted populations
Finance and Audit	Ensures prudent fiscal management and oversight
Membership	Manages and reviews applications for PQMD membership
Emergency	Convenes members and gathers/shares response information across membership during major disaster situations. This committee began informally following the 2004 Indian Ocean tsunami and convened officially during PQMD's October 2005 board meeting
Nominations	Manages nominations for committee and executive committee for the organization

All committees are voluntary and comprised of board members, each of whom oversees at least one committee. Standing committees meet regularly throughout the year, either via teleconference or in person; they are typically led by a chairperson and vice chairperson—often one INGO member and one corporate participant. Committees provide reports at scheduled

board meetings hosted by member organizations on a rotating volunteer basis. This practice allows members to tour other participants' headquarters and facilities, and gain experience working with other partnership organizations' staff and executive leadership. Historically, PQMD has held three board meetings yearly, typically in February, June, and October. In November 2011, the network's board decided instead to convene twice per year. Membership dues defray PQMD operating costs, with INGO members paying 40 percent of the sum paid by corporate members (PQMD Bylaws review, 2010).

Figure 4 represents the ways PQMD engages its cross-sector members. The network unites members at four core points of engagement: collaborative space, education forum and training tools, donations database and mapping, and fellowship programs. A synopsis of the activities entailed in each of these partnership functions follows.

Figure 4: How PQMD Engages its Cross-Sector Members



(Graphic and text below provided by PQMD with permission to copy, 4 April 2012)

Text provided by PQMD 4 April 2012:

1. Collaborative space refers to the occasions (committee work, board meetings, teleconferences) when PQMD members are engaged and working together towards common strategic efforts.
2. PQMD's annual Education Forum has been held every fall since 2004 with world-renowned panel speakers, continuing education topics, and professional networking opportunities. Attendance goes beyond PQMD's board and includes global healthcare leaders, non-member INGOs, and development professionals with an interest in improving global health via cross-sector partnerships. Training tools include PQMD's GIS MAPPING database, which tracks donations by region/country/member organization.

3. In partnership with Loma Linda University, PQMD offers research fellowships to developing country nationals with the aim of "understanding the current medical donation practices in targeted countries and ways to advance medical donation practices" (www.pqmd.org).

Additionally, network members work together to raise medical donation standards, not only by improving their own effectiveness and practices, but also by leveraging and sharing best practices and conducting research and disseminating knowledge intended to improve the practice of global health actors (www.pqmd.org). Figure 4 above suggests that PQMD has been able to move beyond donations to provide both (1) a shared collaborative space for its members to learn and grow and (2) to develop tools that can increase member donation/aid program effectiveness. Furthermore, in 2011 the American National Standards Institute (ANSI)[x] accredited PQMD as a Standards Development Organization (SDO). With a focus on advancing global health policy, PQMD considers the ANSI accreditation will, "provide a solid foundation for advancing medical donation standards so that only needed and appropriate products reach the people who need them" (PQMD Principles and Standards, 2011).

5.6 PQMD Structure

As noted earlier, PQMD members work with multilateral organizations, national governments, sub-national governments, private corporations, NGOs, and INGOs to provide disaster relief services, pursue disease elimination, develop healthcare infrastructure, build the capacity of in-country healthcare workers, and fill gaps in local health services. Network members are individual autonomous institutions that build and sustain partnerships and organizational alliances. Half are INGOs working in international health delivery, disaster relief, education, and training (see Appendix B for more specifics), while the other half are major manufacturers of medicines, vaccines, medical supplies, devices, and equipment. Participants have diverse missions (principally associated with their profit versus nonprofit status), financial

capacities, institutional structures, modus operandi, and humanitarian goals. In many cases, INGOs and corporate donors were in partnership for many years prior to PQMD's founding. For instance, MAP International, a global health development and humanitarian organization, had partnered with Johnson & Johnson and Schering-Plough (recently acquired by Merck) since 1948 and 1950, respectively, in the delivery of medicines to the developing world. This partnership existed long before PQMD's creation, and such was the case for a majority of other PQMD members as well. In fact, trusted bi-lateral partnerships helped facilitate the establishment of the Partnership in the first place.

All corporate donor members of the network are research-based companies that provide contributions (cash, health product donations, or volunteers) as a part of their broader social responsibility initiatives. Three participating corporations are based in Europe: GlaxoSmithKline, Sanofi, and Boehringer Ingelheim. The remaining member firms are headquartered in the U.S. with various global/transnational offices, plants, and manufacturing sites. Two PQMD INGO members were founded and are centered in Europe: Tulipe and International Health Partners. All others are headquartered in the U.S., although most have offices and affiliates globally. The INGO members are both faith-based (six) and secular (nine) in character, but with similar relief and humanitarian missions (www.guidestar.com). They range in size from 3 to 1,469 employees (not counting volunteers); with annual revenues from under $2.4 million USD to $1 billion USD per 2009 IRS 990 filings (see Appendix B). Thus, collaboration within PQMD happens at various levels between this diverse network of members. Yet, all are formally, "committed to raising medical donation standards, promoting effective donation practices, and informing policy makers and the general public on the donation process" (PQMD website, *About us*, 2010).

All of the entities examined in this study were members of PQMD. Below are three examples that describe how these interactions occur within the network:

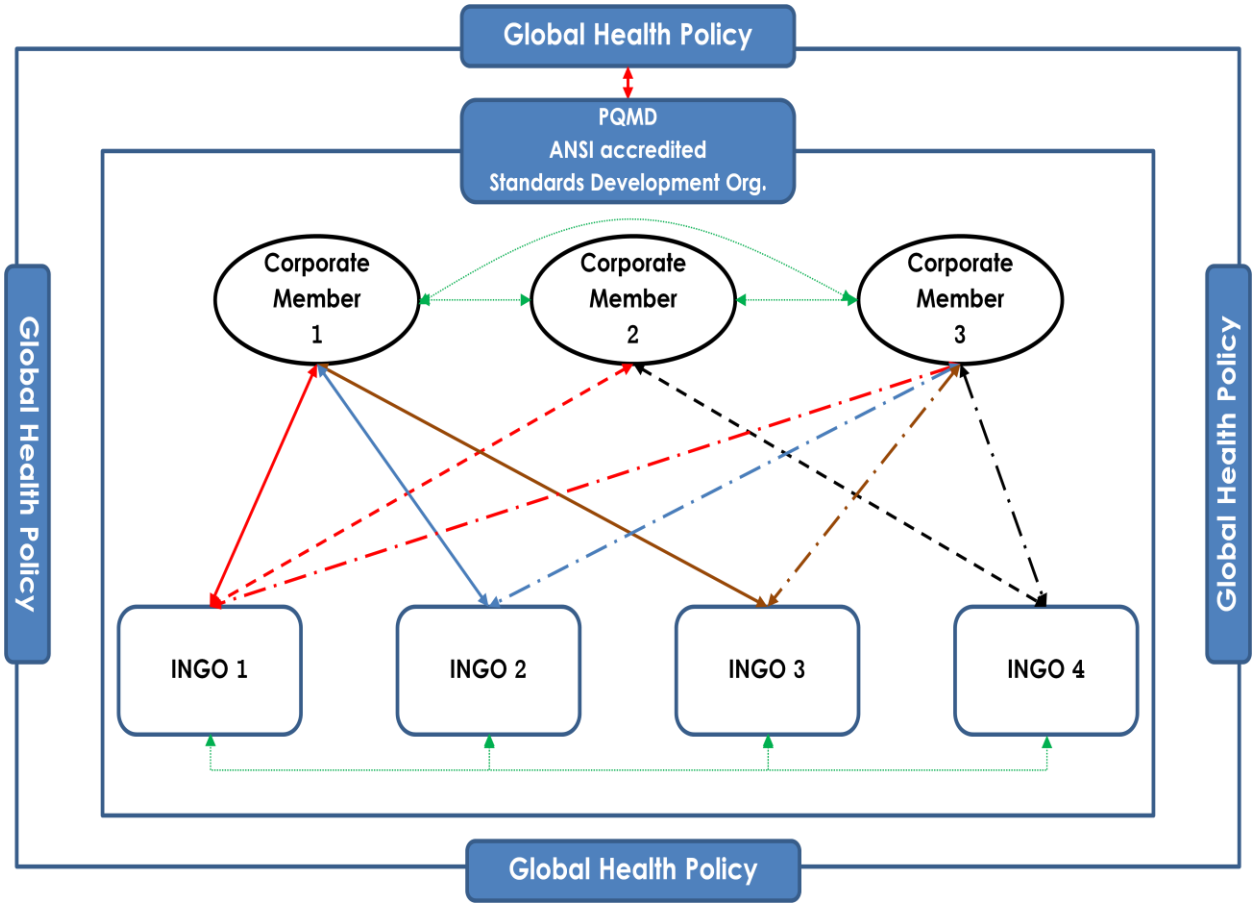
- PQMD members work directly with each other. For example, Company #1 works with INGO #1 or Company #1 works with Company #2—or any combination of members work directly with each other. These interactions may not necessarily involve PQMD as an active participant.
- PQMD members work through PQMD with other PQMD members. For example, Company #3 works with INGO#5 on a PQMD project, either INGO-business or INGO-INGO or corporate-corporate. Much of PQMD's committee work is done in this manner.
- PQMD members work with PQMD, via its staff, directly. For example, Company #7 or INGO #7 works directly with or on behalf of PQMD (which is itself an INGO) on a project.

Both corporate and INGO PQMD members partner with NGOs, international and government entities and global healthcare manufacturers outside of the network. For example, many of the INGO members of PQMD cooperate with other healthcare companies, such as generic pharmaceutical companies, medical technology, biotechnology, and healthcare research corporations that do not belong to the collaborative. Meanwhile, for their part, many corporate members are members of other public-private partnerships with governments, UN entities, and are also active in other professional networks and alliances.

Figure 5 below illustrates how network involvement benefits PQMD's members. The links represent organizational affiliations at the national and global levels that provide opportunities to build coalitions in ways that increase access to cash, products, and services. As mentioned, many of PQMD's members were partners prior to its formation, so with or without the network, for example, corporate member 1 and INGO 1 would still be cross-sector partners. However, PQMD has allowed for expanded communication and relationship building of INGO-to-INGO and corporate-to-corporate organizations. For instance,

- As a result of PQMD, Corporate member 1, 2, and 3 and INGO 1, 2 and 3 now communicate and collaborate. They are now member colleagues, attend bi-annual meetings/weekly teleconferences, participate in PQMD committees and jointly work on affirming and developing product donation standards.
- As a result of PQMD, Health Corp 1, 2, and 3 now have new alliances with INGOs in the network. And if they decide to add new INGOs to their giving circle, most likely, they would first include PQMD members before non-members.
- As a result of PQMD, INGOs 1, 2, and 3 might now partner with companies with which they had not previously worked.
- As a result of PQMD, members now have a third-party endorsement of their joint efforts (PQMD's stamp of approval, if you will). The partnership provides legitimacy, representation, and a unified voice through which to tackle global health policy debates, governmental standards endorsements (WHO *Guidelines* endorsement) and advocacy issues.
- As a result of the network, members are able to work toward harmonizing practices, sharing lessons learned, and creating common certification standards.
- PQMD has obtained the American National Standards Institute (ANSI) certification for the creation of INGO standards/certification, augmenting the organization's policy and advocacy standing. ANSI certification not only positively affects PQMD member operations, but it also has the potential to affect INGOs and health corporations outside of the network by shaping governmental/global health policies and standards/guidelines.

Figure 5: PQMD Cross-sector member Engagement



- Links with **same color (red, blue, black, brown):** PQMD affiliation with an INGO member as the node
- Links with **same type of line (solid, dash, dash-dot):** PQMD affiliation with a corporate member as the node
- Links with **green solid line:** PQMD affiliation between/among INGOs and/or corporate PQMD members

Since its inception in 1999, PQMD has grown significantly despite the ever-changing landscape for health products manufacturers—corporate buyouts, mergers, and acquisitions (see Appendix C). Health product donations have also continued to grow in volume and dollar value since members created the network. PQMD participant contributions alone have expanded to a multi-billion-dollar equivalent per year. Collectively, Partnership members donated nearly US $22.4 billion in wholesale value of drugs and medical supplies from 2005 to 2010 (PQMD, email

communication, 1 December 2011). Those donations were in the form of product contributions, cash, short-and-long-term corporate employee volunteer initiatives (secondment programs), training, technical assistance, and other services. These initiatives supported a wide range of health delivery efforts around the world.

5.6.1 PQMD's Evolving Emergency Response Role

PQMD's network was founded horizontally (HQ INGO-corporate member) as its chief organizing principle and not vertically (to include field deployed INGOs) structured primarily around the development of standards and guidelines as a way of improving the quality of medical donations broadly. In the development of standards, disaster response/relief factored less prominently than long term health development. According to PQMD's executive director, "in general, less than 10% of PQMD's member giving is disaster relief related" (Field notes, Haiti visit, May 2010). However, in response to member needs in 2004 following the Indian Ocean tsunami, PQMD hosted several teleconferences to support members' emergent necessity to gather, process, and share colossal amounts of field and disaster response information (Arroyave, Cooper & Dilanian, 2006). Two other factors drove PQMD, as a network to change its modus operandi: 1) media requests and media pressure exerted on PQMD as an organizational representative of it members and 2) the value of the network in providing a big picture perspective by hosting a virtual (teleconference) collaborative space (Arroyave et al., 2006). PQMD's 2005-2006 annual report confirms, "We witnessed unprecedented private sector response to disasters such as the South Asia earthquake and tsunami and Hurricane Katrina, situating PQMD and its members in the media as never before" (PQMD Biennial 2005-2006 Report, p. 2). Consequently, PQMD "invested in building its capacity to respond to queries from the public, and to issue advisories related to emergencies" in recognition "that the problem of

inappropriate donations of medical products may increase during emergency situations" (PQMD Biennial 2005-2006 Report, p. 9). At the June 2005 meeting hosted by Americares (PQMD INGO member), Tsunami roundtable discussions "were dominated by a description of innovative [PQMD member] responses to the tsunami," some on-the-ground partners were in attendance (PQMD Biennial 2005-2006 Report, p. 9). This meeting led to the 2005 board resolution to establish PQMD's first ever emergency committee to, "share early on-the ground intelligence, encourage collaborative and cooperative responses, help extend resources, shared transportation and safety information, and ensure non-duplication of efforts while identifying opportunities to leverage resources" (p. 9). PQMD's first emergency committee meeting took place in October 2005 in Franklin Lakes, New Jersey, "to facilitate members' abilities to coordinate plans and update each other on activities" (PQMD's 2005-2008 Strategic Plan (7/2005 version, p.4).

PQMD's Emergency Calls became the institutionalized 'go-to' collaborative space for member INGOs and corporations in pursuit of their mutual goal of serving beneficiaries on the ground more effectively. The Emergency Calls were by design in service of INGO HQ and corporate donor representatives' activities. By and large, all field INGO communication is mediated through HQ INGO staff. Occasionally, HQ INGO personnel will have an INGO field staff member join the Emergency Call in order to provide an "on-the-ground" perspective or to validate field needs and conditions. As a point of clarification, field INGOs are staff members of the same organization as the HQ INGO employees; they are simply deployed members of the organization serving in a particular country or disaster event. Further to the point, HQ INGOs are typically the representatives to PQMD that attend meetings and participate in board activities and committees.

PQMD's emergency committee proposal was in response to a collective emergent need by its members to improve cross-sectoral engagement in disaster response and relief efforts. In fact, the Partnership's emergency committee launch in 2005 resulted from and coincided with four important global trends/initiatives shaping disaster response. The first is a very visible burgeoning involvement of corporate disaster engagement to crisis as a trend (Binder & Witte, 2007; Sayegh, 2004; UN Global Compact Office, 2005; White & Lang, 2012; Zhang et al., 2009). Secondly, the 2004 launch of the Business Roundtable's Partnership for Disaster Response represents "the first clearinghouse of information on disaster preparedness and response for the business community" (Business Roundtable, n.d., para. 1). The third initiative is the United Nations Humanitarian Reform of 2005 which created the UN Cluster approach to "improve capacity, predictability, accountability, leadership and partnership" in humanitarian action (United Nations Office for Coordination and Humanitarian Affairs, In *cluster coordination,* n.d., para. 2). The Global Health Cluster has a goal to "strengthen system-wide humanitarian preparedness by ensuring sufficient capacity in information management; surge (supported by skilled experts, appropriate supplies, security and logistics); normative guidance and tools; development of the capacities of national stakeholders; as well as advocacy and resource mobilization" (World Health Organization, n.d., para. 3). Finally, The Paris Declaration on Aid Effectiveness represents the third significant initiative of the year 2005 to support the harmonization and alignment of aid delivery. These prevailing initiatives were underpinned by the transformative momentum shaping humanitarian action and the global health landscape of cross-sectoral disaster response.

PQMD's accountability in this structure is limited to convening and serving the interests of HQ INGOs and corporate members' disaster response needs. PQMD (the network and its members) have a secondary accountability, without direct access, to the needs of field INGOs.

Figure 6: PQMD collaborative space

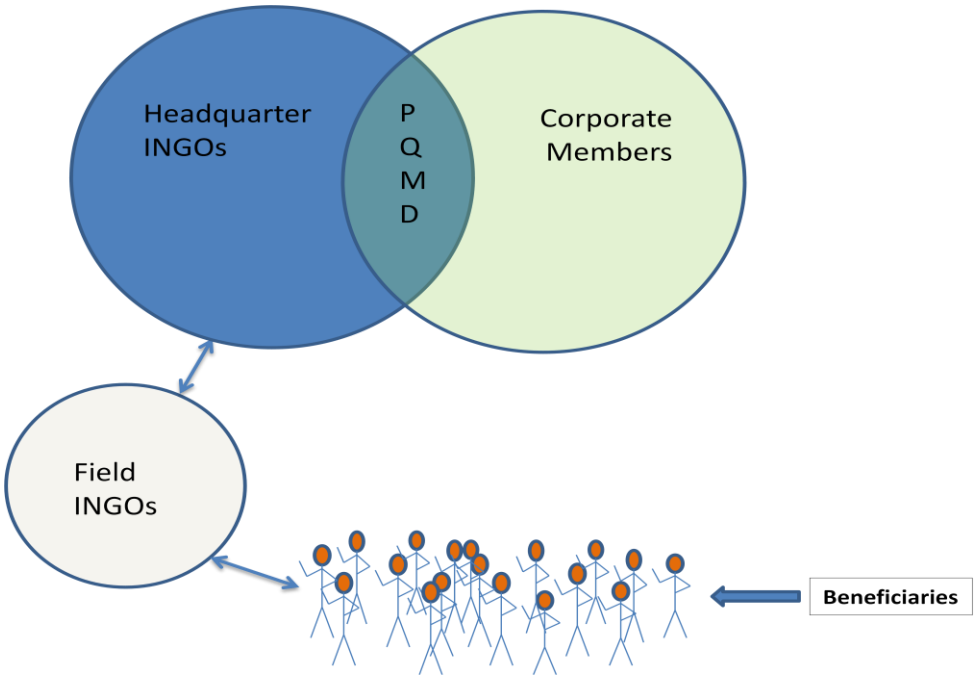


Figure 6, PQMD seeks to improve health outcomes and beneficiary access to product donations by the network's members. In the context of PQMD's membership, headquarters INGO staffs have a triple accountability: To corporate members, their field staffs, and PQMD in attempting to meet beneficiary needs. Healthcare firm members are accountable to the Partnership and headquarters INGO staffs directly in order to address beneficiaries' needs. NGO field staffers serve beneficiaries directly and rely on headquarters personnel for their resources and directives.

5.7 PQMD Governance

In considering Provan and Kenis' (2008, pp.232-235) basic types of networks, shared governance, lead organization, or network administrative organization (NAO), PQMD exhibits attributes of all three forms. The Partnership relies on the complementary strengths, interdependence, and shared aspirations of its members for its capacity to play its various roles (Agranoff & McGuire, 2003; Milward & Provan, 2006; Powell, 1990; Vandeventer & Mandell, 2007). At one level of analysis, PQMD can be considered a shared governance network. Its members together govern the Partnership and all participants enjoy governing board representation with one vote per member organization. In addition, a board-nominated executive committee composed of sitting board members provides leadership and direction. Building board member consensus in decision-making is very important to the collaborative's organizational culture.

However, some might argue that PQMD is a network administrative organization. In a prominent study, Human and Provan (2000) define the NAO's primary function as a broker role, "to help build the network, coordinate and manage its activities, support network firms [members] and network-level goals, and provide a centralized location for performing key activities of the network" (p. 330). PQMD's executive director and staff members are not otherwise affiliated with any of the collaborative's membership organizations, but they play an important convening, administering, and managing role in the partnership's activities, in addition to an obvious leadership role. The executive director's role is one of advocacy and direction, yet its reach is circumscribed by board consensus. In light of these characteristics, PQMD's executive director and staff member can be considered informal brokers in an NAO, albeit one with Board leadership input and guidance.

Yet, at the same time, the collaborative may be characterized as a lead organization-governed network, in that the chairperson of the board exercises significant leadership and authority, and is also a board member organization representative (the office, as noted above, alternates from a corporate to an INGO member every two years). The Partnership functions as a convener in that its operational mandate is a function of board directive. In sum, PQMD evidences characteristics of all three basic network types and I therefore consider the collaborative a hybrid institutional collaboration with more attributes of a shared governance model than NAO.

PQMD is structurally neither a horizontal nor a hierarchical entity. Instead, the Partnership can be described as a decentralized and semi-open structure. Partnership members are part of other networks and associations that facilitate expanded opportunities. For example, most PQMD INGO representatives are members of InterAction (largest alliance of U.S –based international NGOs) or ACCORD (alliance that "serves Christian organizations and churches" working in development), or both, which are fundamentally INGO associations. Several corporate members have affiliations with the Association of Corporate Contribution Professionals (ACCP) and the Business Civic Leadership Center (BCLC is a 501(c) affiliate of the U.S. Chamber of Commerce, the world's largest business federation), networks focusing on the philanthropic interests of the business community. Simultaneously, PQMD has many characteristics of a "closed system," a self-contained collaborative operated by and for its members. According to Dewar (1997), closed systems are aimed at managing information flow effectively and constitute strong vehicles for communicating information as well. These characteristics are best exemplified by PQMD's Emergency Call, a telephone conference among member principals designed to support Partnership disaster response efforts. The initial call,

hosted by PQMD, occurs immediately after a disaster (and calls continue weekly or bi-weekly for typically two or three months post-disaster). PQMD staffers collect information from all members in an effort to facilitate sharing information and to formulate a press release. The closed nature of this call allows the executive director to manage confidential members-only information. It also enables network participants to keep the information and reporting circle relevant and specific (members only, health product donation specific), with predefined inputs and processes (members report in alphabetical order and the agenda is highly structured).

No such communication vehicle presently exists for field INGO personnel. Those staffers are considered an extension of each INGO such that by design, PQMD does not facilitate communication or collaboration among members at the field level in disaster settings (or long-term development programs). In the case of long-term INGO field programs, there are far too numerous and in too many countries for PQMD possibly to act as facilitator for field implementation efforts. However, in the case of a bounded and time delimited event such as a disaster event, PQMD has the potential to improve initial response efforts.

Open communications at PQMD meetings, which are hosted by different member organizations on a rotating basis, reduce barriers to collaboration and cooperation among participants (participant observation, board meeting attendance, 2010 and 2011). These gatherings typically take place at the host's headquarters, enabling that member to showcase its facilities, its hometown amenities, its organizational distinction and strengths, comparative foci, and commitment to global health investment and services. Member organization CEOs or upper management personnel routinely take part in these gatherings, which broadens participation. The rotating basis of PQMD's periodic meetings have allowed participants to come to appreciate, evaluate, compare, and distinguish each participating organization's values and mission,

capacities, staff talents, and facility capacity. These opportunities have increased member interaction and encouraged vigorous participation and open dialogue while supporting strong social engagement.

This chapter has described PQMD, at the institutional level, based on website information, by-laws, and strategic planning documents. I have sketched PQMD's origin and founding, its mission and the context within which the network operates—both in global health development and in disasters—along with the Partnership's limitations. Additionally, the chapter provided an in-depth understanding of PQMD's membership tenets, governance, and structure. Finally, the chapter highlighted relevant important characteristics of network dynamics.

Chapter 6 examines PQMD's three network membership stakeholder groups as they sought to provide assistance in Haiti: field INGO personnel (on-the-ground implementers), headquarters INGO staff (logistics, procurement, and administrative functions), and corporate donor personnel (representatives from global healthcare companies). The analysis is organized according to communication, collaboration, and coordination response challenges across sectors within PQMD's network.

CHAPTER SIX

FINDINGS

6.1 Introduction

This chapter reviews evidence and discusses findings concerning the study's central research questions as they relate to network and disaster coordination studies:

- Whether and in what ways does a cross-sector network, such as PQMD, enhance coordination among its member organizations and improve disaster response efforts?
- What challenges did PQMD's corporate representatives, INGO member headquarters staff, and INGO field personnel experience as they sought to provide assistance in response to Haiti's 2010 earthquake?

Specifically, I examined PQMD's role vis-à-vis the challenges encountered by its corporate, INGO headquarters, and INGO field staffs as they sought to provide assistance in response to Haiti's 2010 earthquake. I begin by presenting data gathered from my two field visits to Haiti conducted in May and August 2010. Thereafter, I review information collected in August 2010 from surveys administered to 19 PQMD-member INGO field staff in Port-au-Prince, along with personal observation and field visit notes from PQMD's Haiti Assembly. I supplemented quantitative data with qualitative interviews with PQMD's INGO headquarters (section 6.4) and corporate member representatives (section 6.5). Using information gleaned from this mixed-methodology, I investigated disaster response challenges across membership categories by comparing survey, interview, and field notes data. Findings are summarized in sections 6.2.4 (INGO field), 6.3.5 (INGO HQ), and 6.4.6 (Corporate), respectively.

6.2 INGO Field Perspective: Haiti Disaster Response

6.2.1 May 2010 Haiti Field Visit with PQMD

I visited five PQMD member organizations,[xi] which led to 13 field site visits,[xii] and discussions with 19 staffers in Haiti. I conducted all of my site visits during clinic and health

facility hours. Hence, participants were often delivering care or aid in difficult circumstances while simultaneously participating in discussions with me. On the whole, I discovered that disaster response challenges for INGO field offices, leadership, and program implementation staff differed across agencies, which was not surprising given the varied mission, aims, and capacities of each organization. I found a vast disparity in the training, field experience, local language capacity, education, and organizational capacities of field staff across INGOs—ranging from specialized physicians to faith-based volunteers.

Of the five PQMD member organizations I visited, only four (of 19 persons interviewed) field INGO staff members or partner agency personnel were familiar with PQMD and its mission and their organizations' association with the network. This knowledge gap existed in spite of the fact that all five organizations had been PQMD members for durations ranging from three to 11 years (since the Partnership's formal incorporation in 1999). As one field member noted, "I've not been involved in the PQMD meetings, so I don't even know who the members are, unfortunately" (field notes, site visit 1, 2010). More importantly, field INGO members did not know they were networked through PQMD and, by extension, they were unaware of the collaborative potential for sharing information/resources and collective problem solving with other members on-the-ground in Port-au-Prince. Additionally, as of May 2010, at the time of these visits, PQMD had no active role or convening mechanism in place for INGO field staff (implementers) in disaster events or otherwise.

6.2.1.1 Missed Opportunities for Maximizing Impact

One overarching suggestion emerged from field staff during my May 2010 field visits. Interviewees conveyed a general sense that PQMD had the potential to improve donation impacts, if a mechanism for information sharing and exchange (such as the INGO HQ-corporate

member Emergency Call) could be created. And, if INGO staff could better self-organize to share responsibilities among members, they could leverage attendance at UN and other field meetings. Overwhelmingly, interviewees wondered why PQMD has 14 organizations going to the same gathering if one organization could go on everyone's behalf, allowing members more flexibility to attend the meetings in which they wish to participate. Field staffers also suggested that they could strengthen their impact if they could join efforts in a more coordinated way with personnel from other PQMD member organizations and engage in genuine collective problem solving and contingency planning. In many respects, this aspiration resembles that of the United Nations Global Health Cluster, led by WHO, which has the following mission:

> … [Build] consensus on humanitarian health priorities and related best practices, and [strengthen] system-wide capacities to ensure an effective and predictable response. It is mandated to build global capacity in humanitarian response in three ways: (1) providing guidance and tools and standards and policies, (2) establishing systems and procedures for rapid deployment of the experts and supplies, and (3) building global partnerships to implement and promote this work (World Health Organization, 2009, p. 24).

Some would argue that the OCHA Health Cluster is designed to facilitate fieldwork. Similarly, PQMD's network could offer its member INGO field staffs a smaller, tighter circle of closely aligned organizations, along with shared health goals and the provision, delivery, and appropriate use of health product donations.

This perception among INGO field personnel was underpinned by the belief that the quicker members could accomplish their goals on the ground (i.e., provision, distribution, and dispensing of health products), the more survivors they could help. Many interviewees noted that PQMD could play a larger role in such efforts (field notes, site visits, 2010). The general logic, in fact, was that, "giving drugs to NGOs without giving them the full opportunity to tap into PQMD's network and resources at a field level is a missed opportunity," which one doctor pointed out at a Port-au-Prince facility (field notes, site visit 4, 2010). INGO field implementers,

upon hearing about PQMD's network, often gave examples of missed opportunities. Most wished they had known about the Partnership earlier and that a contact list of deployed INGO members detailing which other organizations had a field presence, at a minimum, would have been helpful. For example, one INGO staffer (field notes, site visit 4, 2010) suggested that his organization had an overabundance of gloves, in contrast to another PQMD member NGO professional in close proximity, who was distraught because his operation (field notes, site visit 3, 2010) had no gloves and was awaiting a shipment from U.S. headquarters. Despite a connection through PQMD, staff members from these two INGOs lacked the wherewithal (mutual contact information and an in-country relationship) to share their resources, support one another's mission, and in the end improve health product donation resource allocation. Similarly, one INGO Partnership member (field notes, site visit 2, 2010) had a large warehouse near the airport with substantial unused space, while another INGO representative (field notes, site visit 1, 2010) spent nearly three fruitless months in an exhaustive search for warehouse space in-country near the airport. Without mutual contact information and an in-country relationship, neither could help the other. Interviewees spoke at length about how sharing resources at the field level could facilitate service delivery opportunities if PQMD could provide a collaborative space for the purpose.

6.2.1.2 Information Gathering and Sharing

Communication, or the lack thereof, directly and indirectly affects collaboration and the possibility of coordination. The challenge of gathering information and sharing it in a timely manner directly influences the delivery of material aid in a disaster setting. This is especially true for health product donations already in-country ready for dispensing. In other words,

communication among responders in real time following a crisis event can ultimately enhance distribution of health product donations.

Field staff expressed varying degrees of enthusiasm and appreciation for one of the few mechanisms that existed in Haiti to coordinate disaster response; namely, OCHA's Health Cluster meetings. By and large, these professionals questioned the Health Cluster's ability to disseminate information and coordinate action, despite its supposed mandate to ensure more knowledge, assure less duplication of efforts/overlapping services, and encourage partnerships among aid organizations. The reigning perspective among my respondents was that OCHA wanted in-country INGOs to work *through* OCHA, rather than *with* the UN body. Several organizational representatives (3 of 5) neither deemed the humanitarian agency a responder in the same way as they saw themselves, nor did they perceive the institution as a potential partner (a possible recipient of donated medicines). Deployed INGO staff perceived 'coordination' as a way to connect their resources (donated supplies) with field needs (direct beneficiaries or recipients). There was, however, acknowledgment among interviewees that the weekly Health Cluster meetings acted as a surrogate for informal networking with other agencies on-the-ground. Nonetheless, all INGO field staffers indicated that the meetings ran too long and were often overtaken by people from small, well-meaning, inexperienced aid organizations that were not in sync with the prevailing UN system or with disaster response more broadly. As one field professional shared, "For many NGOs, Haiti was their first rodeo and they used the UN meetings to test out their training wheels. It was annoying and time-consuming for the rest of us" (field notes, site visit 5, 2010). The following comments from interviewees and field notes reflect frustration with OCHA and underscore these findings:

The sheer number of organizations responding created bottlenecks and efforts to coordinate by the UN were limited to however effective the UN Rep—which constantly changed—was in keeping meetings focused (Interviewee 8, personal interview, 2011).

Well, we kind of complained about the UN [Health Cluster meetings] not really having a plan, and all their cluster meetings were spent networking with other NGOs, but they keep changing [UN Staff turnover] so much that it has become pretty obvious they don't have a plan. They just kind of do it by the seat of their pants on a weekly basis. So that is a challenge. I would say that besides the networking with the other NGOs and spending time with other healthcare providers and medical directors, they've been a waste of time from the beginning (Interviewee 23, personal interview, 2011).

The Haitian government wants the NGOs [to coordinate], but they make it so doggone hard on us. They do not make it easy to function. They put so many restrictions on us. ... NGOs just say, 'Forget this!'... We work so hard to get the temporary registration and then two weeks later they come back and they ask [us] for a whole bunch more [information]. How can you do that? You just feel like, 'Give me a break! That was off my to-do list.' (Field notes, site visit 1, 2010).

From a 30,000-foot level, I think it's very helpful to have some kind of system in place to initiate the coordination and collaboration. But it's such a challenge in a disaster ... just the logistics. ... And the logistics base for the UN was all the way down by the airport. It could take anywhere from an hour to two hours just to make a one-way drive there because traffic was a nightmare, vehicles were in short supply, fuel was running out (Interviewee 14, personal interview, 2011).

It [attending UN cluster meetings] was a full-time job. The Health Cluster was pretty mixed. I found, the best was for meeting new potential partners, because people would show up. ... 'We run a hospital here and we have nothing.' And then we'd go visit and either set up a partnership or not. But they [UN Health Cluster] just didn't have a great deal of either resources behind them or sort of mission of purpose. I don't know what it was, but it was hard to get anything useful out of the overall group meetings. So I found it mixed and turnover was high (Interviewee 13, personal interview, 2011).

They [UN Health Cluster meetings] don't do a good job of translating. It's all in French and they do a little translating into English. That's frustrating. And they don't seem to have a lot of patience with doing the English part of it even though over 60% of the attendees speak English. It [meeting attendance] is simply a waste of time (field notes, site visit 6, 2010).

I find them [UN Health Cluster meetings] a pain in the butt, because all they do is mess with your mind. It used to be helpful when the UN was actually running those cluster meetings. That was a place where I could find out who I could collaborate with. But then when ... the Ministry of Health took them over months ago, they became nightmares—it was like being pulled in on the carpet—there's this spotlight on you and they're just grilling you, wanting to know this, that, and the other, asking for all kinds of

> unbelievable information. They provided a 17-page form that they want you to keep track and answer all these unbelievable questions. I had to hire one person just to do those. We have to keep track of all of our workers on all of our clinics every day; you have to tabulate the information and you have to put it into this form and one for each one of the clinics. And it is unbelievable (Interviewee 22, personal interview, 2011).

In the absence of PQMD's network facilitation or communication mechanism for field members, the UN Health Cluster represented a proxy for humanitarian actor networking on-the-ground in Haiti. Unfortunately, it is obvious from INGO field staff comments that the UNOCHA effort fell short of meeting PQMD INGO member field staff needs and required a specific dedication of human resources, capital, and time. What is more, Haiti's Ministry of Health (MOH) began running the Health Cluster meetings in mid-2010, which resulted in some significant changes:

1. meetings, previously held in English, were conducted in French with (apparently uneven) English translations, which resulted in longer meetings;
2. an insistence on NGO registration (discussed in comments below) became part of the discourse; and
3. meetings began to raise the INGO accountability bar in terms of tracking what and where health services were being rendered.

Such expectations discouraged INGO participation. In turn, field INGO staff comments illustrate that there was a significant gap between what they needed and what the UN Health Cluster meetings could offer. Additionally, INGO representatives said they did not detect any system-wide management criteria by which the UN guided its efforts. The absence of a "plan" and a lack of transparency caused friction and distrust, and created at least the perception of a lack of leadership among field implementers. References to distrust among organizations in relief efforts are abundant in the literature (Cooley & Ron, 2002; Linden, 2002; McDermott, 1998). INGO staff said they felt underserved by a system that they supposed would streamline information exchange, improve resource allocation (directly or indirectly), and build their in-

country network of providers. In short, the UN and governmental systems of communication and collaboration weakened, rather than strengthened, coordination among this group of humanitarian actors.

Actors in different sectors understand coordination differently. That is, while INGOs evaluated and shopped for potential partners, the government and UN assumed that INGOs wanted to work with them. In return, the government expected information to be shared with a strong measure of accountability for activities and results. Each actor brought assumptions to the table about partnering and coordination; if those expectations did not or were not made to dovetail, the long-term success of recovery efforts could be undermined. Government reporting requirements further encroached on INGOs' sense of autonomy, exacerbating the potential for misunderstandings. The additional imposition of responsibilities on staff time added significant administrative costs to INGO operational overhead. Such requirements generally detract from an INGO's willingness to coordinate no matter how well intentioned or appropriate the requirements appear in the abstract; on-the-ground personnel do not seek guidance or want to be told how, where, or in what capacity their organization should/could be responding. As noted previously, the adage, "Everybody wants 'coordination,' but no one wants to be 'coordinated,'" fittingly sums up the disaster response paradox among disparate actors, organizations, and sectors (Tighe, DRI, 2010).

6.2.1.3 Collective Problem Solving and Contingency Planning

With respect to collaborative problem solving, eight INGO field staff expressed a belief that leveraging their organization's PQMD membership would provide clout, which could help advance joint problem solving through broader representation. In other words, these interviewees believed the collaboration of various INGOs could attain power in numbers and

expedite solutions, particularly in response to the top three challenges that field staff identified: customs clearance, NGO registration, and the "Haitian government" (discussed below). As Interviewee 28 expressed the point, "Why are 14 different organizations trying to find a solution to a single problem—each spending time, human capital, and resources—when PQMD could rally on members' behalf?" This individual reasoned that a third party like the Partnership could help address all members' interests/impediments; facilitate in-country intra-collaborative partnerships (which would improve health product delivery) and encourage others with the media, government, and other in-country networks; provide workshops on appropriate drug donation standards and disposal; and build member public image to raise the funding profile of all PQMD member activities. Field INGO staff considered problem-solving well within the realm of possibility with PQMD support, but that it was not happening INGO field operatives did not have a mechanism in place for facilitating PQMD member field level communication. This coordination function was the nearly unanimously stated need among interviewees for a "PQMD GIK (Gift-In-Kind) liaison." Field staff envisioned an individual/network representative who could carry out a convening and liaising function in-country to assist deployed organizations. An instance of how field staff envisioned this might be helpful was in the case of in-country hurricane planning for field deployed organizations and staff.

Insofar as contingency planning was concerned, hurricane season (Atlantic hurricane season runs officially from 1 June to 30 November**)**[xiii] was officially one week away at the time of my May 2010 visit to Haiti. Even in the absence of earthquake-related mayhem, a hurricane could cause additional severe destruction, further population displacement, disruption of tent cities, landslides, disturbance in the health product delivery chain, etc. However, coordinating national emergency contingency planning in the midst of a massive on-going emergency effort, a

difficult challenge at best given the government's relative lack of capacity, grew even more problematic as thousands of INGOs descended on Haiti after the earthquake. During my field site visits, most health delivery personnel expressed concern that their established relief efforts were at risk because of poor government infrastructure. This sentiment ballooned in light of limited shelter options for those the quake displaced and the initial murmurs of a cholera epidemic on the horizon (which, in fact, erupted on a large scale in Fall 2010). Most INGO staffers interviewed stated that national government, local government, and the OCHA Health Cluster proved only minimally useful in helping them communicate their plans for Hurricane season mitigation and contingency initiatives, including emergency evacuations, shelter protection, prepositioning, and stockpiling of medicines.

6.2.2 PQMD's August 2010 Haiti Assembly in Port-au-Prince

Acting on the recommendations of field staff following my May 2010 visit, PQMD convened its first ever post-disaster field INGO in-country meeting. With the theme of "Reflect, Reconnect, Re-build," PQMD's 2010 Haiti Assembly occurred in Port-au-Prince at the Le Plaza Hotel. As of August 2010, PQMD's network did not directly support or involve field members in board meetings or disaster response efforts in any way. The intent of this program's planners, therefore, was to facilitate information exchange among field INGO PQMD members in-country, and provide a collaborative space for those professionals to meet and build relationships. Moreover, Assembly conveners hoped to solicit field needs, build knowledge (by members communicating best practices), and share insights concerning response steps during the six-month post-disaster period, as well as provide a forum for INGOs to share and understand PQMD INGO programs and roles in Haiti.

Field visits to PQMD member sites represented another important component of the Haiti Assembly. Participants in the event had an opportunity to visit the program sites of four member organizations (five were initially scheduled, but due to time constraints only four were completed). In all, 12 different INGO organizations were represented at the 2010 Haiti Assembly. I took observational notes during the meeting, recorded field notes during the INGO field visits, transcribed flipchart information, provided summary notes, and administered and tabulated PQMD's survey of these staff members (see Appendix D). Finally, I conducted secondary data analysis on the survey responses. That effort is reported in the following section.

PQMD employed a "we have/we need" exercise to identify member needs and resources, and to illuminate potential solutions to ongoing challenges of coordination at the field level. Figure 7 below captures this information, much of which included material/space, staffing, and information (Flipchart notes, PQMD Haiti Assembly, August 2010). Assembly participants asked for information above all other needs. Members also requested the establishment of a 'field members-only' PQMD Google Group in order to communicate and share information amongst themselves via the online platform. There was also a general sense among participants that the Partnership had the opportunity to support field needs in a more direct and formalized way.

Figure 7: We NEED Flipchart Information—Haiti Assembly

Material/Space Needs	**Information Needs**
• Skin Disease Cream—IMC • Trautman Sander (for prosthetics/orthotics shop in Les Cayes—MTI • Warehouse w/loading dock, leased by day (not month)—Project Hope • Quick HIV testing kits—CMMB	• Ways to share med/formulary meds/excess/availability at hospitals • Mapping activity—who is doing what re. health activities? • Needs list w/ specifics from as many hospitals/partner med facilities as possible to allow direct shipments • Share meds info—have some, need some—

• Blood pressure machine—CMMB Chemistry Analyzer—CMMB **Staffing "Needs"** • Physical Therapists—IMC • Inventory management staff person (Haitian, English speaker, computer skills, inventory mgt skills)—Heart to Heart • The MTI/Advantage Haiti physical rehabilitation program needs rehabilitation • Professionals to volunteer short-term (prefer two week, but accept one week) • Commitment; longer term commitment would be great. Therapists, occupational therapists, certified prosthetists/orthotists. • www.advantagehaiti.com • Nurse training, EMS/EMT/Paramedic training	clear understanding of needs for medicines/med supplies • PQMD member list/where working, what they do, and how we can help each other • Contacts re. import process of patient-specific drug into Eastern European countries (import permits, duty/tax waivers)—specifically Serbia, Kosovo, Macedonia, Romania—Genzyme (Tomye Tierney) • Clean Delivery Kits—IMC • Building funds PT/OT Center and partner for duplicating in two more sites Incinerator for med disposal **Coordination** • Better coordination of NGOs that have specific hospital/clinic relationships (no duplication, better supply chain, better long-term assessment) • Biomed/BioMed Engineering dialogue—Project HOPE and MediSend (to lead?)

Notably, the meeting resulted in the emergence of a shared sense of identity among INGO field staff. Knowledge of their membership in PQMD reduced communication and collaboration barriers typically posed by competing organizations (participant observation, Haiti Assembly, 2010). In other words, I argue, based on my observations, participant INGO field staff were able immediately to create a shared sense of identity in PQMD's network and engage in open spontaneous communication based on:

- discovery (in various cases they found out at the meeting itself) of their long-time association in the membership network;
- the close-knit relationships among headquarters INGO staff of different organizations (by witnessing the genuine relationships among the eight attending INGO HQ staff);
- shared context, field needs, and challenges in the domain of health product donation; and

- field visits which moderated the 'unknown partner' effect and gave visiting INGO field staff a sense of trust mitigated by the way each host organization (in the field visits portion of the assembly) openly and earnestly shared/displayed their workplace, programmatic, and worksite impediments.

In written evaluations, field participants favorably rated the Assembly as having met their objectives, noting that their ability to match needs to resources in-country grew via such links as they expanded their organizational contacts, resources, and knowledge of other PQMD member activities.

6.2.3 Field Survey Results

This section reviews the results of a survey conducted with participants in PQMD's 2010 Haiti Assembly. Specifically, I administered a 20-question survey to 24 field INGO participants (not including PQMD staff, corporate attendees, board chair,[xiv] facilitator,[xv] or researcher[xvi]) during the meeting. The questionnaire employed multiple-choice, open-ended, and true/false questions (see Appendix D). Nineteen INGO staff members attending the assembly (i.e., an 80% response rate) completed the instrument. I piggy-backed four questions onto the PQMD questionnaire to collect baseline data on field INGO perspectives to use to compare to HQ INGO and corporate perspectives and challenges:

- Field implementation challenges—what field staff perceived as their challenges in order to determine whether PQMD could provide support;
- Organizational priorities—what field staff perceived as their own organizational priorities;
- PQMD priorities—what field staff perceived the Partnership's organizational priorities to be, and
- Criteria for partner selection—what factors field staff were using to engage/qualify partnerships.

I sought this baseline knowledge to fill in the coordination gaps between PQMD's network member experiences in their roles in disasters, to uncover the issues they face in the delivery of

health product donations, and to suggest ways that PQMD could better support the field work of the NGO members of the collaborative.

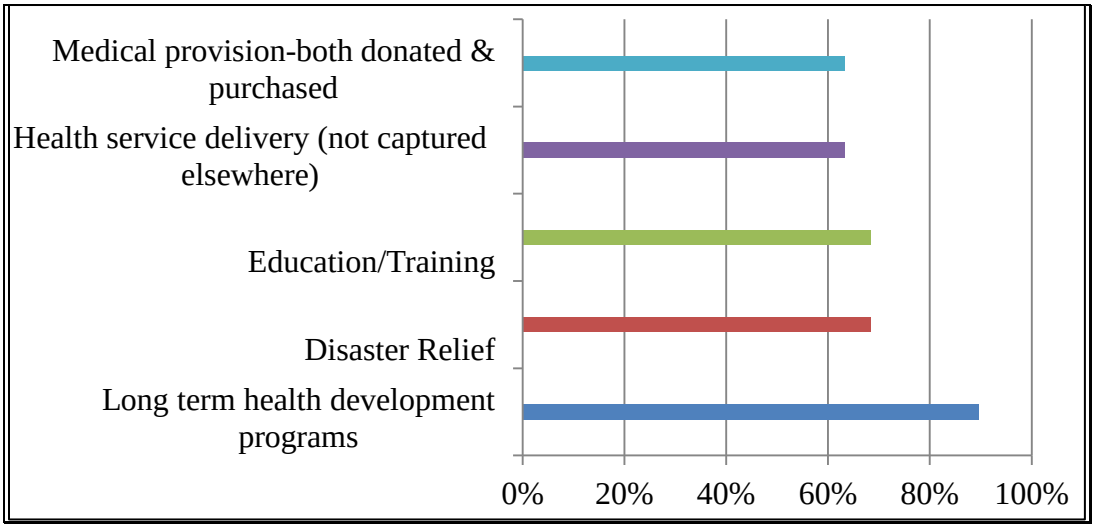
Survey responses revealed, as illustrated in

Figure 8, that INGO field staff ranked their organizational mandates as follows:

1. Long-term health development,
2. Disaster relief,
3. Education and training,
4. Healthcare delivery, and
5. Provision of relevant care, using donated health products

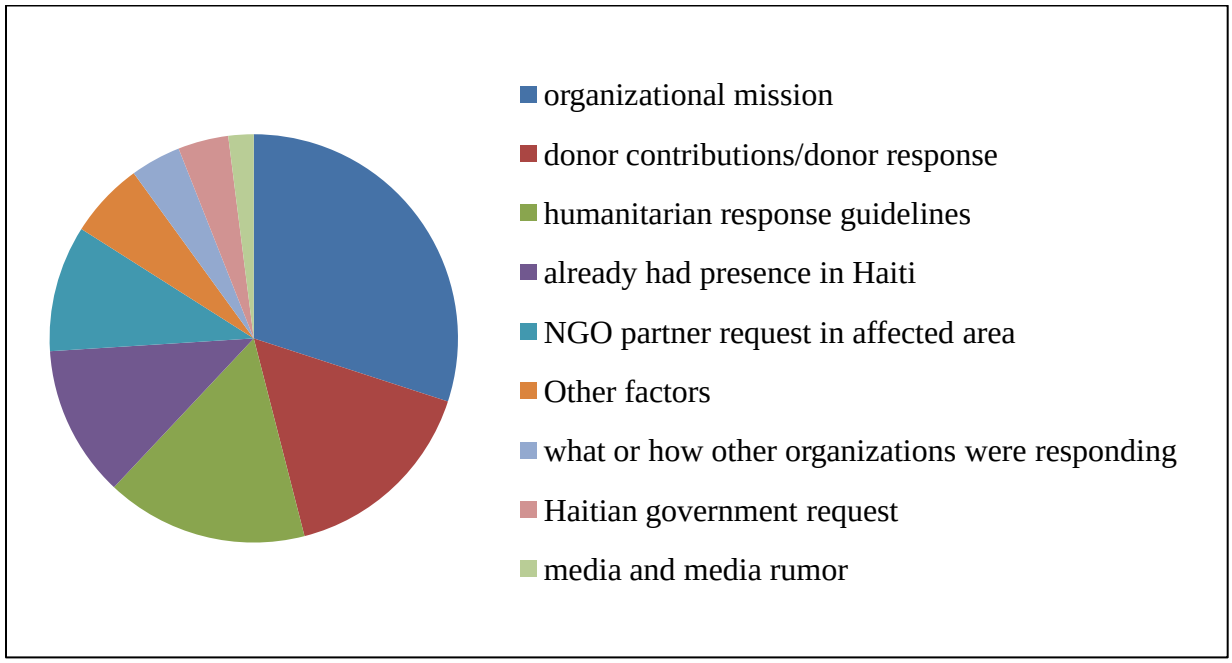
From a field perspective, health product donations support long-term health development and broad programmatic healthcare initiatives rather than short-term efforts to fill service delivery gaps. The implication is that field staffers are most likely to pursue long-term partnerships to support clinics, hospitals, and health infrastructure projects that have long-term impact. Therefore, building organizational capacity and networks to support this operational philosophy could potentially enhance field implementation efforts broadly, i.e. not just in post-disaster scenarios.

Figure 8: Field INGO Perspectives - Top FIVE Organizational Priorities



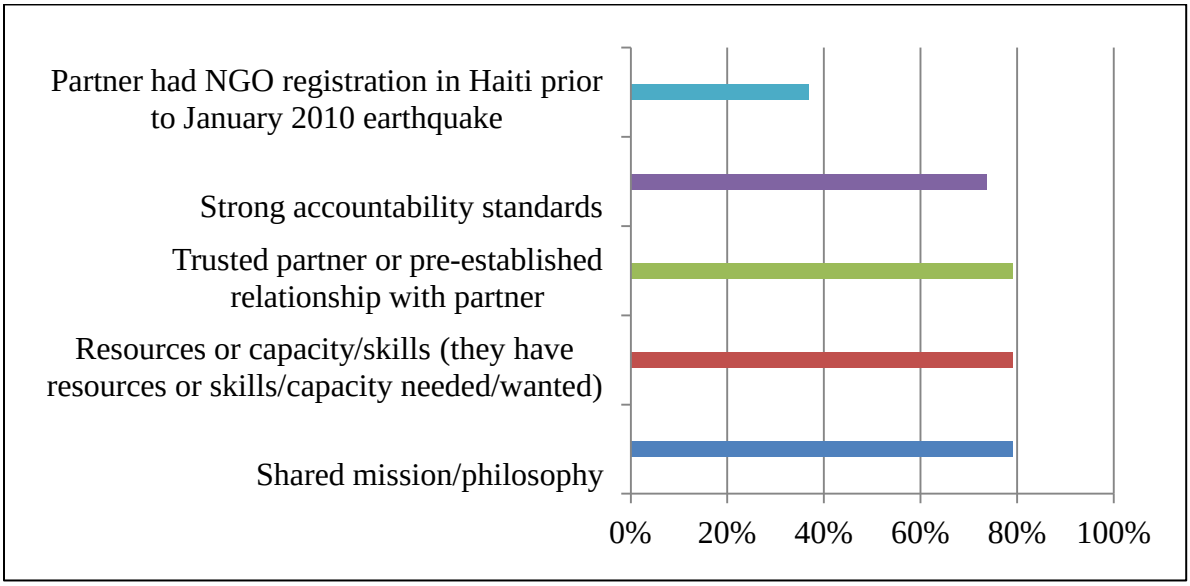
The survey asked participants to answer the following question: "*What factors motivated your organization's response?*" Figure 9 illustrates that organizational mission, donor contributions/donor response, and humanitarian guidelines were the top three factors cited. For example, Interviewee 8 said, "[Our organization's] mission statement is consistent with responding to any event of the magnitude of the Haiti earthquake." Fieldworkers saw "donor contributions/donor response" and the organization's "*humanitarian response guideline*"' (often coupled with organizational mission) as particularly important elements closely tied to their organization's motivation to respond to a disaster.

Figure 9: Field INGOs: What Factors Motivated your Organization's Response?



The questionnaire then queried field staff concerning what top five factors they considered when choosing partners/partnerships, whether within or outside PQMD. Figure 10 illustrates their responses:

Figure 10: Field INGO Response to Top FIVE Factors for Choosing Partners



The factors for selecting partners appear to parallel the motivations for organizational response, as noted above. For example, "organizational mission" was the primary reason for responding, while "shared mission/philosophy" was the principal factor for selecting a partner/partnership. Thus, the same reasons for responding to a disaster also seemed to guide partner selection. The "donor contribution/donor response" category from Figure 9 scored second. When put side by side with Figure 10, "Resources or capacity/skills (they have resources or skills/capacity needed/wanted)," one sees that these two categories are different sides of the same coin. The data suggests that from a field perspective, working with trusted partners or pre-established relationships is influenced by a shared sense of mission, similar resources, capacity, needs, and similar "accountability standards," following roughly the same "humanitarian guidelines."

Seven field interviews (five recorded, two e-mailed) supplemented survey responses. Interviewees suggested that pre-established partnerships were an important component in what motivated agencies to respond to the Haitian crisis. Select interviewees shared the following:

> Haiti was a definite. … We already had six really good partners. Hospital providers that we had already been working with, including [names four partner Haitian hospitals], and

> then a couple of their smaller groups. So we were able to immediately respond with aid to those groups because we already had the partnerships in place. … So it was sort of an easy fit to go down, to know that we could at least support the groups that we're already working with. … So I think that it was never a question of whether we'd respond or not. We knew we would with at least the pre-existing partners we had. … And now we have over 100 [partners in-country] (Interviewee 13, personal interview, 2011).

> [Responding to what motivated their organizational response] "[Organization name] had historical partnerships in the country for over 20 years, proximity to the US, and ability to respond—and size of disaster—motivated our response working with approximately 75 health institutions including: Hospitals (government, private, and NGO), clinics (government, private, NGO, mobile, and fixed), local and international medical teams, local and international NGOs. These partners are located throughout the country with the majority in the Port-au-Prince metro area" (Interviewee 5, e-mail communication, 2010).

> [Our organization] found common ground with many PQMD organizations. Our partnership manifested itself mostly in terms of sharing real-time information on the ground, attending coordination meetings on the ground, and working together to avoid duplication and support an effective response. We found ourselves working with [two other PQMD agencies] (Interviewee 12, personal interview, 2011).

Partnerships were clearly the preferred way of conducting business for INGO field staff. In some cases, historical partnerships that predated PQMD continued to ensure ongoing health service provision during the crisis or to result in the sharing of information—which is a vital resource during a disaster event. The following response from an interviewee highlights the importance of enlisting an indigenous NGO to help a U.S.-based INGO establish a supply chain of goods as an entry point for providing relief services. Thereafter, the added value of doctors and nurses reinforced the material aid.

> In the beginning, the first few weeks, all of our consignments were in partnership with [name of indigenous Haitian NGO] that had a local established presence. They helped us bring a lot of things. Without them it would have been very challenging. But getting supplies and medications in, working under their umbrella, that was vital for us; we had to have that pre-established relationship (Interviewee 25, personal interview, 2011).

Of the partners who had coordinated with another PQMD member, most had done so based on organizational reputation or as a result of an INGO HQ relationship, not necessarily as a result of PQMD's pre-established network relationships. This preference makes sense, because

the likelihood of facilitated communication and collaboration are higher between headquarters INGO personnel due to their participation in PQMD's board meetings (in-person meetings) *and* board forum calls (weekly teleconference call) *and* routinely scheduled disaster relief calls (teleconferences post-disaster) organized by PQMD's emergency committee. Typically, the PQMD Emergency Calls serve INGO headquarter and corporate personnel as they discuss organizational response efforts (this will be discussed further in the INGO headquarters sections 6.3.1 and 6.4.4). Again, field INGOs do not have a PQMD facilitated space to communicate and collaborate in the case of a disaster. Occasionally, a field INGO staff person is invited to attend/speak on a PQMD Emergency Call at the invitation of their HQ counterpart.

During the "Show and Tell" (each organization took turns describing their field programs) portion of the Haiti Assembly, it became apparent that many INGOs were engaged in similar and/or overlapping activities with divergent approaches. While this did not pose any apparent conflict among partners, it did highlight opportunities for communication, collaboration, and potential coordination among members. Of the organizations identified as having partnered with other PQMD member(s), interviewees listed a number of ways in which they had done so, as shown in Figure 11.

Figure 11: How did your Organization Collaborate with other PQMD Members in Haiti Response?

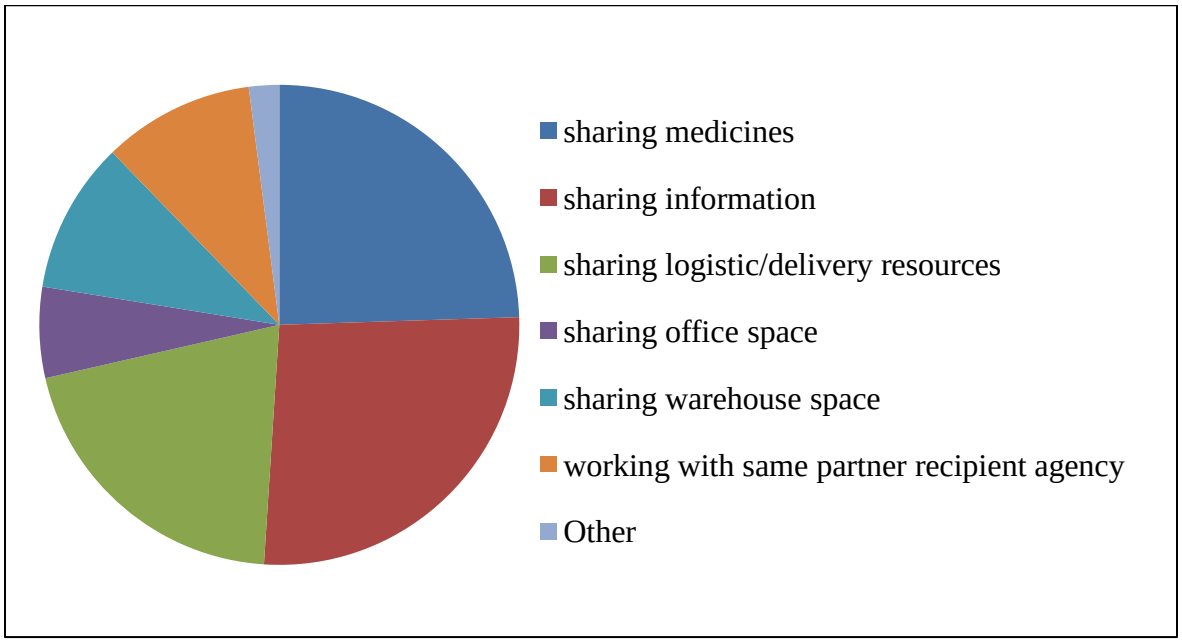
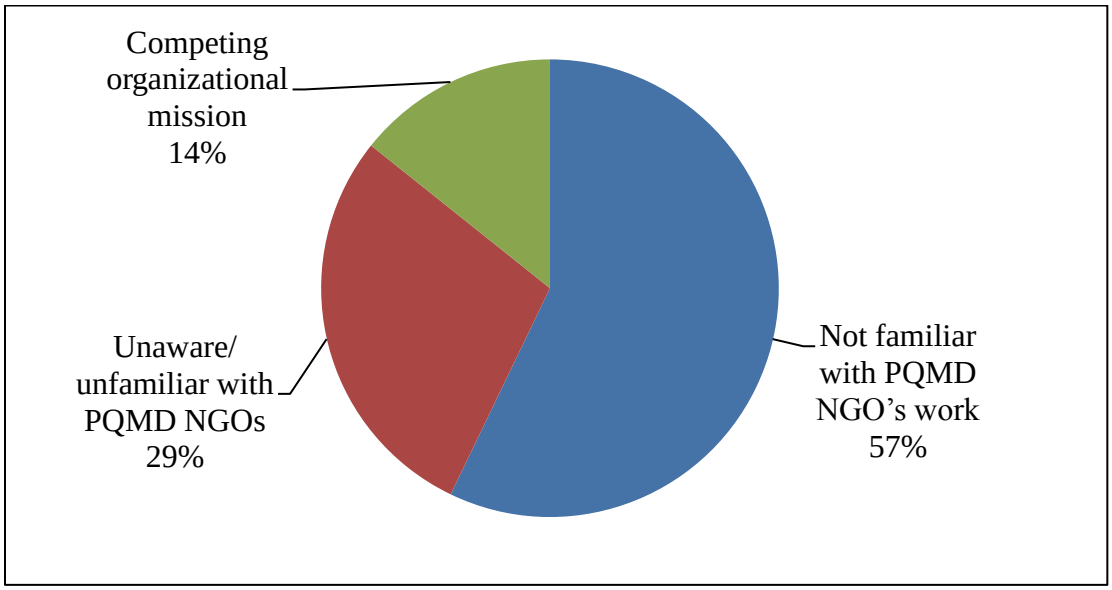


Figure 11 tells an interesting story. An INGO relief response that begins as an organizational mission or mandate extends itself through partnership by way of resources and donor input, and then is operationally implemented at the field level by sharing medicines, information and logistics/delivery capacity, and office/warehouse space. The next sections reveal why INGO field staff within the same network did not often collaborate.

The next survey question asked field respondents why their organization had not collaborated with other PQMD members in response to Haiti's disaster. In contrast to what the literature often suggests, competition played a minimal role in their selection criteria (Figure 12).

Figure 12: Why didn't your Organization Collaborate with other PQMD Members in Haiti Response?



Next, field staffers were asked to identify what they considered PQMD's top five organizational priorities, *despite* their limited exposure to the Partnership and the fact that this was the first time they had been assembled by PQMD during a disaster event.

Figure 13: PQMD's Top Five Priorities Per Field INGO Representatives

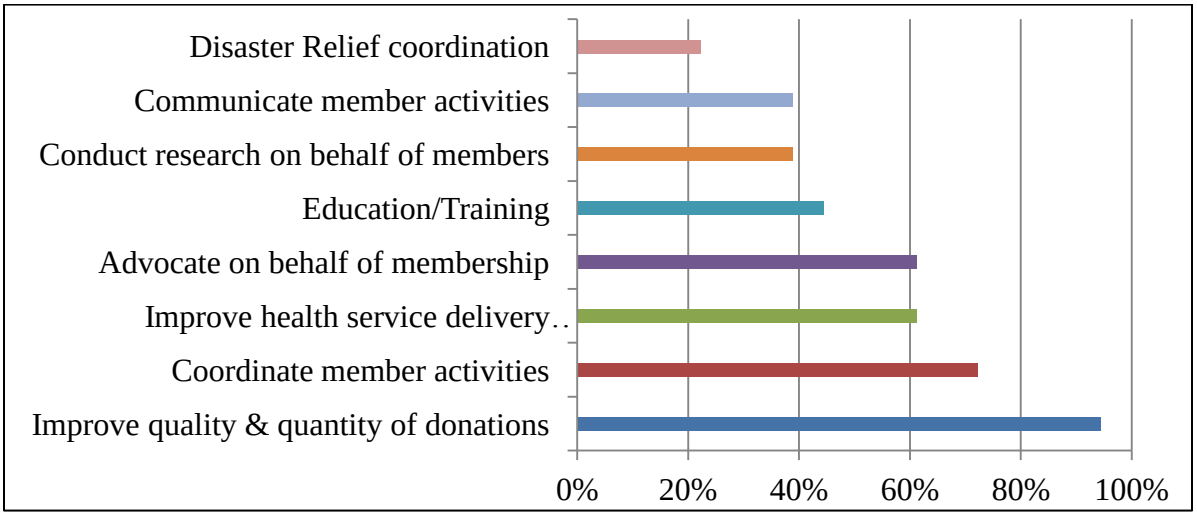


Figure 13 indicates that coordination scored as the second priority, at just over 70%, and disaster relief coordination was 23%. Improving the quality and quantity of donations, health outcomes,

advocacy, and education/training came in first, third, fourth, and fifth, respectively. Notably, 'Improving the quality and quantity of donations' (ranked first) is at the core of PQMD's mission. In other words, the prospect of improving coordination, in both disaster settings and long-term health development efforts, and the quality and quantity of donations could potentially be more fully realized by greater field member network integration. In short, these survey results suggest that facilitating future field efforts represents a latent potential for PQMD to explore as part of its mission.

As field staff considered the Partnership's role in the context of the Haiti Assembly, facilitating disaster relief coordination assumed primacy. One field INGO person even suggested that, "PQMD should consider forming part of the UN OCHA Health Cluster" (Interviewee 20, field notes, 2010). This sub-cluster's function would be to "provide quality standards training" as a way to curb inappropriate donations in disaster settings, improve health product donations already in-country, and potentially (in a GIK liaison function) create a collaborative space whereby agencies delivering health product donations could collaborate with others to minimize destruction of unused medicines prior to their expiration, a common problem in response to disaster events (Autier et al., 1990; Autier et al., 2002; Clark, 2011; Zeballos, 1986). At the same time, another INGO field representative suggested that PQMD might consider initiating a relationship with the UN Health Cluster to post information on the UN's Haiti ONERESPONSE website. For example, a field INGO staff member surmised,

> Since PQMD's mission is to make sure every donation finds a quality home and use, it would be good to find a way to facilitate sharing donations between PQMD members. I think the resources of PQMD and the NGOs represented would suffice for a combined campaign on educating the public and donor base on the stages of a disaster response. … Educating the donor base about the different stages of a disaster would eventually prolong the donor cycle, media interest, and improve the quality of the response (Interviewee 12, email communication, 2011).

This individual's suggestions intimate that if the network were to promulgate PQMD's *Principles and Standards* alongside WHO *Drug Donation Guidelines* in-country during a disaster, both the collaborative and its respective members would become more field noteworthy. Such salience could raise PQMD's organizational profile in the humanitarian relief community, with the UN Cluster System (potentially to become part of the 'inner circle UN Health Cluster INGOs' or a subgroup of the UN Health Cluster on Quality Medical Donations), and finally with indigenous government ministries and institutions. The 'inner circle UN Health Cluster INGOs' was repeatedly at the Haiti Assembly and was explained as PAHO/WHO, UNAIDS, UNICEF, UNFPA, IOM, Save the Children, World Vision, International Medical Corps (IMC), Merlin, Médecins du Monde (MDM), International Rescue Committee (IRC) per field INGOs operating in Haiti-Haiti Assembly 2010. Taken together, building a shared reputation provides a strategic method through which PQMD could help field INGOs establish greater credibility in disaster settings, earn a legitimizing third-party endorsement, and increase the acceptance and use of good donation practices during disaster relief efforts. It seems that raising their organizational profile translated to, in their minds, fewer inappropriate donations, more field recognition, and reduced bureaucratic red tape in-country.

To explore field INGOs' perspectives on PQMD's role further, the questionnaire asked participants to respond to the following: "*In your view, what could PQMD be doing to support your organization's ability to respond to disasters more effectively? Please provide suggestions, identify opportunities, or comment on this idea.*" The abbreviated bulleted quotations below highlight expressed field needs (for full text see Appendix G) "improve field level coordination"

- "**improved communication** … connect and reconvene"
- "collect and distribute key 'Q&As' specific for every disaster"
- "**GIK sharing … exchanges in resources** across partners"
- "**coordinate** member **info**"

- "supply/**info** … to corps **on local level coordination** among partners"
- "organize **information sharing**"
- "provide **forum/facilitates**" [to convene]
- "Support the **coordination** of pharmaceutical logistics"
- "**avenue/forum for discussion** among field staff about logistics, customs clearance, registration, and document field staff story"
- "**resolve [INGO member] problems collectively**"
- "**system for sharing** immediately in-country member who is represented on-the-ground and their contact info"
- "**on-line workspace** … for **data sharing**—also inform corporate members"
- "Posting of **documents and/or information.**"

These comments suggest that PQMD can play an important coordination role in ways the network and disaster coordination literature suggests are likely to be effective. It should be noted that although member INGO organizations are entirely self-sufficient, the individuals who contributed to this study stressed how seeking avenues to integrate and leverage their efforts could be advantageous, as reflected in these quotations:

> Since we are familiar with each other and our standards, we are more comfortable approaching each other to share information, vouch for partners, and leverage limited resources [this interview was post the 2010 Haiti Assembly] (Interviewee 8, personal interview, 2011).

> I think it would be very helpful for someone to come [assuming it to be a PQMD person], someone who understands the sectors, to eventually take minutes and report back to all the PQMD group members, that they're not able to get there. You know, if you don't have two or three health advisors on any given day—they're already out in the field setting up programs, [we are] not able to get to meetings. [PQMD person attending] that could be really helpful … recording information and gathering it and disseminating it. I think that could be really, really, *immensely* [said emphatically] helpful (Interviewee 14, personal interview, 2011).

> To me the most important aspects would just be the overall PQMD spreadsheet showing who the contact person is at each group in the field, and then getting on a Google Group. Because I think getting a space is easy; it's just meeting at a restaurant or bar. So those two. I mean, I've been on a cholera group since that started in October and it's been really, really good. Just sharing sites where our stuff is, and we had stuff that we could help. It was great (Interviewee 13, personal interview, 2011).

These observations point toward a desire for "field-specific" information sharing mechanisms to improve:

- Operational communication and coordination;
- Leverage collective problem-solving capacity;
- The existing operational system for sharing medicines/medical supplies/material aid to advance a sophisticated and progressive supply chain capacity in-country; and
- The dissemination of education materials regarding drug "disposal, donor reporting, field security, rational drug use (RDU), and PQMD standards" (Interviewee 13, personal interview, 2011).

However, one INGO staff member responded to the notion of field coordination efforts by suggesting that "Donor's support is not appropriately 'coordinated' and it results in duplication of efforts, field overlap, competition among INGOs, wasteful use of funds, and places an undue burden on INGOs to do all the remedial 'coordinating' on the tail end" *(*Interviewee 25, personal interview, 2011*).* The INGO field community, as a whole, expressed a need for improved training, better and more reliable information mechanisms for service delivery, and more robust preparedness (expressed as pre-positioning of health product donations) and coordination.

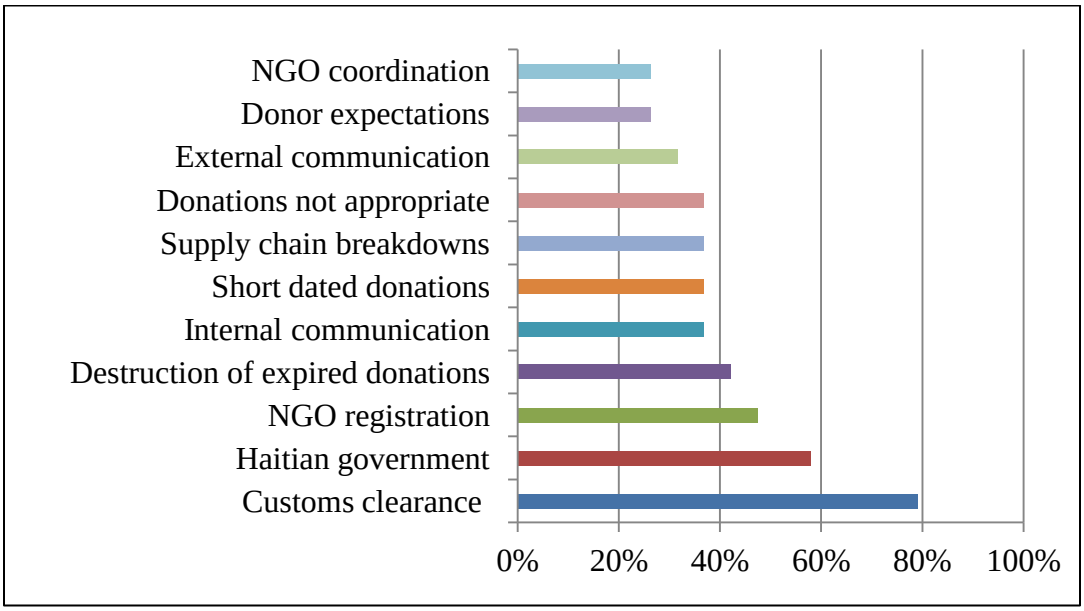
Field interviews revealed formidable impediments to effective field operations. For example, when asked about their biggest challenges within the first four months of operations in Haiti, three participants responded:

> Customs restrictions and difficulty with importations [clearing customs], long process for registering as an NGO in Haiti, expense of local transportation, and availability of temperature controlled warehousing for medicine (Interviewee 5, e-mail, 2010).
>
> … [T]he destroyed infrastructure and communications made it very difficult to assess what was happening and where. For instance, the number of NGOs concentrated in the famous epicenter of the earthquake was too many to count, yet a few kilometers to the east where many survived to suffer, there was no presence. … Traffic was crippling (Interviewee 12, personal interview, 2011).

> In the early days the biggest challenge was, one, just figuring out where the needs were, kind of giving those rapid assessments and figuring out where [organization name] was going to engage, making sure that we weren't duplicating our efforts. We were also, you know, working on communications challenges, the phone system was down, we didn't have radio yet available up and running, and so as soon as someone left the office, there was no way to reach them until they got back again. So in the midst of the disaster the communications were really difficult, and then about a week or two out from the disaster, the UN [Cluster] meetings, two to three a day, then fuel, so fuel was in short supply and we had to have fuel to get the vehicles from point A to point B, either to attend cluster meetings or to coordinate with other NGOs (Interviewee 14, personal interview, 2011).

A related survey question (Question 16), asked participants, *"Has your organization experienced any challenges/difficulties/obstacles in Haiti in the implementation of your programs (check all that apply)?"* Figure 14 highlights the responses of those who identified as a "field" INGO representative (Question 2) from either a European or U.S.-based INGO.

Figure 14: Top Challenges to Disaster Relief Response as Seen from a Field INGO Perspective



INGOs identified their top four field challenge categories as 1) customs clearance, 2) the Haitian government, 3) NGO registration, and 4) destruction of expired donations. Medicines and medical supplies, like all other material aid shipments, have to clear customs at port before

they can be shipped to the actual aid site/health delivery facility. In addition to international shipping/customs challenges, field workers have to deal with appropriate handling/dispensing/tracking by lot, drug expiry management, warehousing pre-and post-shipment, and local transport—which can be expensive depending on national laws, fuel costs, transportation options, tariffs, and national capacity (ports, personnel, and clearance systems in place). However, most INGOs I visited neither trusted nor considered the national capacity of the Haitian government very helpful. As a point of reference, Haiti's national effort to "match the world's medical donations to Haiti's needs" is the PROMESS (Program on Essential Medicine and Supplies) warehouse managed by WHO and the Pan American Health Organization (PAHO) (ReliefWeb, 2010), which therefore served as Haiti's main medical storage and distribution facility. Two INGO field interviewees described the INGO-Haitian government relationship in the context of sharing medical supplies:

> [In the context of collaborating with Haiti's Ministry of Health] My first thought is, there's no way I'm telling the Haitian government exactly what I have and where I have [it] and how much. Because I don't want them coming and claiming it at their choice. And so it's not just anybody we'll give that information to and we are not giving the Haitian government blow-by-blow on what we have (Interviewee 28, personal interview, 2011).

> There is always the tension of competing interests, but this does not preclude assisting each other. It can limit the kind of information that is proprietary or competitive [that can be shared with government entities] (Interviewee 12, personal interview, 2011).

According to Dr. Henriette Chamouillet of WHO/PAHO (a Haitian representative), "Trying to both respond to the massive health needs in Haiti following the quake and organize the large volume of supplies entering the country has been a great challenge" (ReliefWeb, 2010). Sbih, a PAHO medicines consultant, maintained during his November 2010 presentation (AERDO GIK Summit on Haiti) that the "biggest" challenge with PROMESS (in Haiti) was "not [being] completely aware of the instant local needs" during the period when over "30-40 daily requests"

suggested the need for an updated electronic database. Instead, personnel had to make do with hand-written inventories instead of up-to-date database records (Personal notes, AERDO GIK Summit, November 2010). Sbih also criticized an interrelated set of problems for drug and medical material expiration. He added that customs clearance and the process of unpacking, sorting, delivering, and dispensing of such items before their respective expiration dates rendered them "a cost and logistics liability to be destroyed rather than a benefit at times."

One question I had at the start of this study was whether NGO registration provided some in-country advantages, such as expediting customs clearance. According to one interviewee, the absence of NGO registration proved to be an obstacle for operating within the established mechanisms for, "conducting business in Haiti, such as buying property, purchasing vehicles, having a bank account" (Interviewee 17, personal interviewee, 2011). The stunted ability to spend capital meant that unregistered agencies had, "to run their INGO programs, work, and financials through an in-country partner until NGO registration was obtained" (interviewee 17). In short, having NGO registration simplified all in-country processes but obtaining that status often proved difficult and time-consuming.

Natural disasters of the magnitude of Haiti's 2010 event result in an unsurprisingly generous amount of health product donations as part of the humanitarian response. Ideally, all items donated are used before expiry. Inevitably, in some cases, a portion of what is donated will need to be destroyed. This leads to the fourth challenge noted in Figure 14 (above) as the "destruction of expired drugs." Interestingly, of the top 10 challenges identified by survey respondents, four were directly related to health product donations, as follows:

- Destruction of expired drugs,
- Short-dated products,
- Donations not appropriate (or excessive) to disaster needs, and, finally,

- Donor expectations—this relates to the complexity of managing donated medicines and medical supplies.

The destruction of expired drugs is linked to concerns about properly identifying and disposing of pharmaceutical/medical device waste—specifically, avoiding burial or inappropriate incineration practices that can result in long-term environmental degradation and potential endangerment of human health. Several researchers have discussed the disposal of pharmaceutical waste in emergency contexts as problematic (Autier et. al, 1990; Benaragama, Fernandopulle, Galappatthy, 2007; Berckmans, et al, 1997; United Nations Environment Programme, 2011; Zeballos 1986).

A corollary issue with expired drugs is that inexperienced NGOs, recipient clinics, and hospitals that do not uphold rigorous donation practices and standards often accept "compromised" medical donations because they fear donors may not be able to replace older stock or, worse, will simply cut off supplies altogether. Such concerns prompted development of the World Health Organization's 1999 *Interagency Guidelines for Safe Disposal of Unwanted Pharmaceuticals in and after Emergencies* **(**WHO/EDM/PAR/99.2) to minimize and avoid mismanagement of pharmaceutical/medical device waste. A World Bank study followed this guidance document (2002), entitled, "Drug Donations in Post-Emergency Situations," in which PQMD participated. The principal recommendations of that effort included:

- The international community should play a much more proactive role in increasing awareness of the Guidelines and improving the state's capacity to manage the national pharmaceutical system, rather than setting up parallel and competing systems (p. xiv).
- Information, education, and communication (IEC) efforts should be directed to groups that showed least knowledge of good donation practices, in this case, bilateral governments and smaller nongovernmental organizations (NGOs) (p. xiv).
- Only agencies with institutional memory, pharmaceutical experience, established relationships with government and other actors, and a strong field presence in the recipient country should be permitted to assist by donating drugs. Governments and

> NGOs without these advantages should act through these aforementioned agencies (p. xiv).

Albeit vitally important, the guidelines did not address the question of "Whose job is it?" to do all of the above. Nor do they answer other questions, such as,

- Ultimately, who should be responsible for enacting change within a health product donation system, or implementing IEC prevention strategies to reduce inappropriate donations?
- Who should promote, apply, or certify the standards and create a community of practice around such crises?
- Who is the "international community?"
- Which actors form the "international community"—INGOs, governments, donors, OCHA, or anyone responding to a disaster event?
- How does a diverse international community increase awareness or facilitate IEC dissemination? Thus, who ultimately has responsibility for IEC?

In spite of these pressing questions, no central enforcement agency has the mandate to evaluate or certify an NGO's credentials or capacity to assist with health product donations. The WHO 2010 *Drug Donation Guidelines* and the 1999 *Guidelines for Safe Disposal of Unwanted Pharmaceuticals* do provide some guidance for those operating in the health products donation arena. Although influential, the WHO, World Bank, and PQMD do not have the mandate, budget, or personnel to enact or enforce the tenets of these guidelines globally or during disaster events—the time during which missteps are most likely to happen. Nevertheless, INGO field staff suggested the Partnership had an important role to play in improving field communication, collaboration and coordination, in a disaster setting. What is more, the World Bank study recommendations highlighted the role a network such as PQMD might fill given its ability to bring together a diverse set of actors from the international community, while at the same juncture, building awareness of its mission—improving operational knowledge and promoting effective standards around donation practices.

Haiti's state capacity was severely impaired by the 2010 disaster. With the earthquake came the added burden of the disposal of bodies, solid waste removal, and the management of encampments encompassing nearly two million people—all of whom were coping with blocked streets, impaired solid-waste collection systems, and massive debris. During an open forum discussion at PQMD's Haiti Assembly, the INGO representatives attending explored ways to deal with medical waste—whether finding transportation to haul it to Santo Domingo to incinerate it there, or shipping it back to the United States to ensure compliant incineration protocols. A number of INGO staff members cited a related bottleneck. In many cases, they were unable to obtain the Ministry of Health's procedural instructions for incineration and drug disposal options from PROMESS. Participants were also not sure if incineration facilities in Port-au-Prince met the minimum incineration competence for pharmaceuticals with satisfactory emission controls and temperatures above 1,200ºC. Such incineration capacities are most often found in developed nations (World Health Organization, 1999a). This uncertainty partly stems from the lack of a long-term presence in Haiti by some of PQMD's NGO members, but also from unfamiliarity with standard protocol prior to the quake; hence, they lacked the prerequisite relationships with the Haitian government and its agencies for such transactions. More often than not, PQMD INGO members had been supporting Haiti by supplying hospitals, clinics, and medical teams, as well as local and other international NGOs for years. However, they did not establish an in-country office or physical presence until the disaster occurred (with some exceptions, of course). In fact, only four PQMD member INGOs had established organizational field offices prior to the quake, while eight had none.

Another factor discussed by field staffers during the Haiti Assembly was an overarching desire to address the topic of "pre-positioned goods" (medical supplies). Two interviewees discussed pre-positioning and one interviewee discussed the matter as follows:

> It would be much easier to respond with pre-positioned donations dedicated for disaster response. As expiration dates approach, these donations can be shipped to countries in need and replenished. As it is now, to maintain a quality response, we must work assiduously with donors. This delays a large and meaningful response by several weeks after a disaster. Although this affords time for the situation to be more transparent, the need on-the-ground is more often than not immediate (Interviewee 12, personal interview, 2011).

For the recipient, relying on a relatively consistent and predictable supply facilitates more effective health planning and more thorough treatment options. For the INGO, a reliable supply of medicines and related devices is associated with the following benefits:

- the ability to support long-term (3-5 year) product donation programs designed to align and integrate with field-programmatic work;
- the capacity to diminish ad-hoc shipping of half-full containers (due to short expiry dates); and
- the potential for a more predictable pipeline of supplies, which would lead to enhanced health service/delivery planning.

For the donor, long-term planning involving systematic donations might allow for better alignment its business focus. Alignment would allow donors potentially,

- To perform more strategic, planned giving;
- To define publicly their commitment (better public relations strategy);
- To preplan production of items to be donated; and
- To establish their INGO partners and negotiate giving in advance.

Generally speaking, prepositioning benefits all partners, if and when the donor viability exists to do so.

6.2.4 INGO Field Section Summary

Field visits and survey results provided invaluable insights into on-the-ground realities, constraints, and needs within the first eight months of the response effort in Haiti. The INGO

field findings illuminated some of the communication and collaboration complexities that hindered coordination in the deployment of in-kind resources during Haiti's initial response phase. The data suggest several key findings.

The first is that the possibility of operating within a network, as a self-organizing unit, appealed to all field personnel who participated in PQMD's Haiti Assembly. In fact, the overwhelmingly expressed motivation to attend OCHA Health Cluster meetings was specifically for information gathering and sharing (field needs-needs assessment, local context, identifying INGOs working in-country, developing a contact list), networking (meet and greet opportunities, building relationships with government offices/officials), and partnership (exploration of field opportunities with like-minded groups). In essence, INGO field staff members were searching for a collaborative space whereby they could engage; gather and share information; build relationships; and share/leverage resources. Specifically, these interviewees argued that PQMD should promote greater integration among member INGOS involved with the following operational functions: appropriate drug management (warehousing/expiry management/destruction), joint problem solving, leveraging field presence, support with NGO registration, promoting in-country mechanisms for sharing resources, and gathering/sharing information and medical supplies with trusted partners. PQMD's ability to offer a space for the sake of collaboration and relationship building, along with its small size (members only), and narrow mission (health product donations), were particularly appealing to INGO field staff.

In light of PQMD's site visit and Haiti Assembly, most of the Partnership's member INGO field staffers believed that PQMD should assume a broader role in representing field needs to secure better coordination, not just among field members, but for the overall benefit of all members. The findings suggest that INGO field staff members were interested in establishing

ties with other vetted PQMD members, having reciprocal contact information, and demonstrating a willingness to collaborate based on a shared understanding/common mission, field context, mutual respect (embedded in long-standing organizational HQ-corporate relationships), existing social capital, similarity in resources, a common understanding of health product donation processes/supply chain management, and on-the-ground impediments.

A second finding suggests field INGOs should focus their communication and collaboration efforts on in-country coordination groups (such as OCHA or others) and/or government entities to facilitate customs clearance, NGO registration, local logistics, and in-country networking and partnership development. The focus of field INGO efforts is on some or all of the following goals:

- access to disaster zone, if they do not already have it;
- in-country logistics;
- an in-country command center;
- governmental relations;
- communications capacity with partners;
- disaster response execution;
- warehousing and storage solutions;
- health product dispensing; and
- reporting infrastructure to collect data for HQ needs (which, in turn, feeds donor requests for feedback).

This is to say, on-the-ground INGO staff connect through informal relationships or by establishing new mutually beneficial associations with other responders, governmental, and bilateral entities, depending on local circumstances and needs.

A third finding stresses the importance of communication as the cornerstone of any functional disaster relief effort. Indeed, INGO field members discussed communication as a formidable impediment during field visits, the Haiti Assembly and based on survey results, which complicated INGO field staff's already chaotic on-the-ground program implementation

duties. However, venues for gathering information were limited and logistically challenging in the early stages of the disaster relief efforts. Field staff shared their frustrations with in-country information gathering in light of the broader focus and goal of OCHA's Health Cluster. Overwhelmingly, INGO field staff sought more health product donation-related information, resources and networking opportunities. Information sharing and exchange in large, open, and broad health forums like the one provided by OCHA's Health Cluster meetings proved taxing, on several levels, for PQMD's INGO staff. Information exchange in a smaller group of organizations with more closely aligned missions, as described by interviewees, had the potential to increase the efficiency of response activities essential for improving distribution of "life-saving commodities" (participant observation notes, Haiti Assembly, 2010). INGO fieldworker observations suggest that these considered core information as operationally functional knowledge. In other words, core data is information that helps facilitate the reception of health product donations, customs clearance, warehousing, distributing, and appropriately dispensing "life-saving commodities" in a timely fashion to avoid or reduce waste and destruction costs.

PQMD's network, in light of expressed field needs, has the opportunity to facilitate communication and collaboration to galvanize well-honed field implementation skills—this point was expressed by field staff during my May 2010 visit and reiterated by participants in PQMD's Haiti Assembly in August 2010. Field participants recognized the value of increased field-facilitated engagement by PQMD in the following ways:

- **PQMD's Network Endorsement.** *Relationships formed with ease based on pre-established network partnerships.* The Assembly immediately expedited inter-network communication by providing the collaborative space for INGO field implementers to meet, communicate, and to participate jointly in site visits. There was a sense among respondents that "if my organization, which upholds high accountability standards, is a part of PQMD, then other members must operate with similar standards." In other words, "If they are a part of PQMD, they must be trustworthy." The Partnership's long-standing

trusted ties represented a resource not previously known to most field attendees. INGO field staff members were able to "feel a part of PQMD" (Interviewee 22). Partners immediately trusted other members despite having just met in most instances, a reflection of transparency and alignment of mission objectives.

PQMD's executive director characterized this immediate trust: "It's like meeting a cousin you have never met before. You automatically have confidence in them because you know they are family" (Personal discussion with author, June 11, 2010). From my own observations, despite belonging to 'competing' organizations, field staff immediately tapped into the transitive nature of trust stemming from PQMD's INGO HQ long-standing trusted partnerships. As a result, trust in field staff arose automatically. An open dialogue ensued in which PQMD members began sharing field needs, contact information, and openly discussing field coordination and logistics problems. They requested donations from one another. Two INGOs asked for letters of endorsement in order to obtain NGO registration in Haiti and fellow PQMD members pledged to support their respective requests. Others sought recommendations for local translators and explored joint problem solving for donation disposal and the sharing of warehouse space. See Figure 6.

- **Information Sharing.** *INGO Assembly participants established an Internet Google Group exclusively for field members to enhance in-country partnership opportunities.* The partners were able to utilize information technology for the purpose of furthering network relationships. Information and resource sharing (medicines and medical supplies), and a forum for mutual problem solving formed the driving motivation behind participant interest and attendance. Google Groups are easy to manage and very compatible with BlackBerries (which participants identified as working "way better than iPhones" during the Haitian response) (field notes, Haiti Assembly, 2010).

In the end, INGO field staff considered PQMD's membership valuable and, in the following ways, a potential asset for field disaster response coordination:

- **Internal communication and external communication**
  - Internal
    - Sharing and dissemination among field implementers; i.e., improved decision making, greater partnership options/opportunities, improved needs assessments
    - Sharing of best practices (lessons learned and post disaster reports); i.e., learning from each other
  - External
    - Elevating PQMD's effectiveness by disseminating standards for field INGOs (not Partnership members)

        - Building communication capacities that can extend across and within disaster communities/among humanitarian responders
- **Internal collaboration and external collaboration**
    - Internal
        - Providing a collaborative space for field member problem solving, exchanging/sharing products
        - Strengthening member partnerships, interactions, and linkages in order to build greater trust and social capital among field members
    - External
        - Building relationships/representation with government, media, other networks
        - Helping field members make a stronger case (to corporate donors and donors at large) for pre-positioning supplies, which as previously discussed, INGO field staff argued would lead to improved quality and quantity of donated health products in disaster events
- **Coordination potential**
    - Internal
        - Increased capacity utilization and resource allocation in-country
        - Joint accountability/multi-resource management
        - Joint in-country contingency planning and problem solving
        - Improved donor reporting (donors can get a better understanding of health product utilization in-country)
    - External
        - Documenting/disseminating knowledge, tools, best practices to humanitarian community
        - Developing metrics for health product donation in disaster settings
        - Creating responsive, accountable, and efficient solutions

To address similar questions from a different perspective, the next section examines the internal and external challenges that PQMD's headquarter INGO representatives encountered as they sought to provide assistance in response to Haiti's 2010 earthquake.

6.3 INGO Headquarters Perspective: Haiti Disaster Response

This section reviews PQMD's INGO headquarter staff member experiences in response to the Haitian 2010 earthquake. The findings discussed here are based on two primary sources: participant observation and individual interviews. For the individual interviews (Appendix F), I, asked questions regarding challenges experienced in responding to the Haitian crisis designed to

help participants reflect on factors that governed their humanitarian response as well as the role PQMD played in their course of action. I also obtained insights by participating in two PQMD Haiti emergency teleconference calls in 2010 (3 February and 12 February) and attending four PQMD board meetings (February 2010, June 2010, October 2010, February 2011) after the Haitian earthquake, during which a portion of each gathering was dedicated to PQMD disaster relief efforts. This section documents the challenges that HQ INGO participants discussed during the interviews, during the PQMD Emergency Calls, and in the board meetings I attended.

The INGO organizations (all PQMD members) whose representatives took part in this study are humanitarian agencies that typically respond to disaster events globally as part of their organizational mission (94% or 15/16 organizations). Among the 16 INGOs that were PQMD members when this study was initiated, 11 were specifically chartered for disaster response (among other things), four were not chartered for disaster response per se (nonetheless all did respond in some capacity to the Haitian event) and one was not chartered for disaster response (and did not respond). At the time I conducted the interviews, the INGO staff members who contributed to this study were based in both the United States (eight organizations) and Europe (two organizations)—although many have/had offices, partners, and organizational affiliates in various developing countries. In general, INGO headquarters staff bore the following organizational responsibilities:

- Procuring health product donations, and in some cases coordinating their delivery from HQ location to field sites;
- Serving as the primary contact with global healthcare donors, which involves ongoing investments of time and effort in donor cultivation and solicitation;
- Representing their respective organization at PQMD meetings/functions; and
- Communicating field staff needs to donors.

In some cases, interviewee was also responsible for helping corporate donors coordinate

volunteer programs. In all cases, I interviewed a PQMD board member representative. Most INGO staff with whom I spoke possessed at least five years of formal experience in their position at the time of the interview. For the European INGOs, their headquarters staff also actively participated in needs assessment and field delivery of health product donations, which was not necessarily the case for their American counterparts. This U.S. versus European distinction could reflect organization size, mandate, staff capacity (educational background and training), or organizational structure, however, this was not the focus of this study. See Appendix B for a general overview/comparison of full-time staff size, mission, and revenue of participating INGOs.

European adoption of a single source federated model for the procurement of health product donations accounts for the most significant difference between these entities and U.S. INGOs. Both of the European INGOs participating in this study were the principal non-governmental organization in their respective countries (France or England), receiving donated health products primarily from European healthcare companies (either European-based or affiliated). This contrasts sharply to the U.S. model of health product donation giving. In the U.S., global healthcare companies can donate health products to any 501(c)(3) organization (i.e., an American tax-exempt nonprofit) of their choice, creating a more competitive nonprofit health product recipient environment.

The factors most cited by headquarters INGO interviewees as having motivated their organizational response included the following:

- "Presence in-country" if the organization had a field office in Haiti prior to disaster,
- pre-established or long-standing in-country partners,
- Haiti's proximity to the U.S.,
- media coverage based on "the magnitude" of the disaster,
- Haiti's level of poverty prior to the event, and

- Donor support.

Thus, disaster response is very much guided by local as well as national circumstances that are often event specific.

The following sections categorize the specific internal and external communication, collaboration, and coordination challenges identified by INGO headquarters staff members. These examples illustrate INGO headquarters members' challenges in gathering and processing information, collaborating with other organizations, and coordinating disaster relief efforts in the context of Haiti's 2010 earthquake.

6.3.1 Communication

Communication with field assessment staff/partners and donors is central to INGO headquarters disaster response. Without timely and valid information, INGO donor confidence and funding erodes. When a disaster occurs, INGO HQ members are pressed into immediate action to gather and evaluate information, formulate a response plan based primarily on field INGO staff assessments or partner information, seek out trusted collaborators, and secure health product donations and/or funds. This process is typically initiated by communicating with donors about whether the INGO plans to respond, a decision usually based on a preliminary needs assessment.

In response to the Haitian disaster, most INGO organizations deployed field staff or called on their own employees already on-the-ground and/or contacted local indigenous NGO partners with whom they already had working relationships to initiate a disaster needs assessment. Interviewee 27 summarized a needs assessment as, "figuring out how to cover the needs of those affected and determining available resources for responding to those needs" (personal interview, 2011). Importantly, INGO staff must often undertake disaster response

efforts based on limited and/or nebulous second-hand information. Interview participants spoke of this information as essential in two ways. First, the assessment is shared directly with donors (corporate, foundation, private) in the solicitation of funds, health product donations, and support. Second, the needs evaluation is shared during Emergency Call(s) with all participating PQMD members (corporate and INGO headquarter members); such informational sharing seeks to identify overlap as well as the organizational focal points of each member. Half of the HQ INGO staffers I interviewed (five interviewees) considered the Haiti disaster a particularly difficult event with regard to the exchange of timely information, mainly due to the front-end logistical problems of both restricted air travel and an inoperative port. These setbacks hampered INGO HQs' ability to provide timely information and thus have solid grounds on which to make definitive decisions on needs and delivery predictions. In short, the progression of gathering, processing, and sharing information was a central challenge for INGO headquarters staff according to interviewees. The next four sections describe the main communication challenges experienced by HQ INGOs.

6.3.1.1 Primary Sources of Information

INGO HQ members indicated that they relied first on their own organizational field staff or partners to understand the situation on-the-ground—principally as a result of information relayed via a post-disaster needs assessment. However, interview participants also considered the PQMD Emergency Call a vital communication conduit for three reasons:

1. To corroborate the validity of their organizational needs assessments (which is an on-going process),
2. To ascertain how other INGO members were responding, and
3. To learn what actions PQMD corporate members were taking and with which partners.

In the first instance, communication among PQMD members helped to fill in information gaps not provided by their own field assessments. HQ INGO staffers cited the importance of

benchmarking other organizational responses as the second most important element of the EC. Third, INGO HQ staff stressed the importance of communicating with corporate donors with respect to their intended response plan—e.g., what health products were likely to be made available, which firms would donate cash and/or initiate disaster fundraising workplace campaigns, which companies were working with which organizations. Corporate response information helped INGOs formulate procurement proposals and identify potential alignments for both health product donations and field/response programs.

6.3.1.2 The PQMD Emergency Call

HQ INGO staff members play the lead role in procuring health product donations and resources in the event of a disaster. They do so by initiating support for disaster response in conjunction with the assistance of corporate partners, many of which are PQMD members, private donors, foundations, and in some cases, public/government institutions.

In reviewing the transcript data, the vast majority of interviewees (eight of 10) viewed PQMD's Emergency Call as the primary vehicle for communication and collaboration. In fact, HQ INGO representatives almost exclusively attend the Emergency Call. Only two members mentioned attending InterAction teleconferences. Specifically, HQ staff commended PQMD Emergency Calls for increasing transparency, accountability, and providing essential benchmarking information. Interestingly, when HQ INGO members noted collaborative challenges, none indicated that including field INGO participation on the EC was a challenge or limitation for collaboration. This is not to say that HQ participants did not take issue with the way the calls are managed in some regard. In fact, participants did not always agree on what the calls were "meant to do" for network members. Three INGO HQ personnel noted that the call was "supposed to" facilitate coordinated action, but really only served as a "communications

tool." Additionally, four HQ staff members considered participating in PQMD's call as 'INGO collaboration' in and of itself.

6.3.1.3 Media

The depth of media coverage inevitably affects funding because it can help organizations solicit funds by bringing attention to their disaster relief efforts. However, without exception, the interviewees suggested that most manage their response efforts "despite the media and not as a result of the media" (Interviewee 25, personal interview, 2011). The following two quotations from interviewees (the first a HQ INGO staffer and the second their field counterpart) speak to the primary benefits of media coverage:

> We like to work directly with the people on-the-ground. So if we have a partner that is in-country, then that's who we would rely on for information, first and foremost. Media fills in the gaps. You can't help but rely on media in some instances, but I would say that it's probably not our first source. But it definitely becomes important once you decide to make that effort [on the response plan] (interviewee 27, personal interview, 2011).

> They're [media] extremely helpful with making people aware of the catastrophe and the event and very often the extent, some of the depth, of the experiences so that I think they're much more effective and helpful to us for NGOs to do our work because they really work as an information-dispensing and educating tool to us (Interviewee 28, personal interview, 2011).

Conversely, three HQ INGO organizational members cited the various disadvantages of media attention.

> Media hurts disaster situations, without question, because they hog all the resources for themselves. You can't rent a truck because CNN has got everything tied up. … Money talks; celebrity and media have to have everything reserved for them. That was a problem. We were on it really quickly, but over time that became an issue. … But down there, in a sense it's a lot worse because everything has to stop for this one little event to take place, which takes up so many hours of your time that it's just foolish. In an ideal world, I guess, the media needs to be beating the drum so that people know to donate, but a helicopter flyover is a lot better than an on-the-ground interview, in my opinion, because an on-the-ground interview ties up a clinic for hours and hours. What you see for 15 seconds ties up a clinic for, like, six hours at the time when they least can afford it [the time] (Interviewee 11, personal interview, 2011).

> I mean the initial awareness is huge. And that has its downside too. You wind up with

> donations and offers and things that are not appropriate for what you're doing. … I think in the last 15 years, I have watched less than three minutes of coverage—collectively—on disaster globally. I don't trust the media in general; I believe most of them are sensationalistic and if I'm going to get my input to be making decisions on what's right for what's going on in the affected region, I rely on, on-the-ground folks, networks, and personal contacts. … My personal philosophy is to not engage with the media during a response. … And that's for two reasons: one, I don't particularly care to be put on the spot, and two, I don't need the media guiding my actions as our principal point of management here at [organization name] (Interviewee 21, personal interview, 2011).

> We were being told there is a growing sentiment of discouragement and unrest among the public there because of the negative impact of the media in sensationalizing how much has been donated or promised and not received [6 month anniversary coverage] (Interviewee 25, personal interview, 2011).

Additionally, one INGO representative highlighted how more media attention on PQMD (i.e., publicizing its disaster relief role) might benefit the legitimacy of all member organizations.

> I mean just looking at the disaster in Japan. Just getting our newspaper—maybe it was *USA Today*—but they had an article on resources where individuals could just go give their funds to. They listed InterAction. It said, "We are the largest group of nonprofits that provide XYZ." Why in the world is PQMD not on that list? That's going to bring in literally millions of dollars for members of InterAction. There will be a bunch of groups that because of that advertising plug will go to InterAction's website. I mean good Lord, if you could have us [PQMD] there when these disasters happen; I'm all for PQMD advertising during disasters, even if not PQMD's focus and not my organization's focus, but it is when donations can most go wrong. We should be at the forefront of it because we [PQMD] are supposed to be the group that's doing best practices. And I think we know that InterAction is a big group out there, but is it THE group that does Best Practices? Not necessarily—at least not across the board for its members. Where are we [PQMD]? Nowhere! Now why the heck is InterAction getting this good PR and stuff and this good benefit for their members, but PQMD is not at all. I think something is totally missing there. PQMD should be representing our members and being able to tout what our members are able to do, and giving the members a real legitimacy (Interviewee 4, personal interview, 2011).

To summarize these comments, too much media attention immediately following a disaster can result in an onslaught of unsolicited product donations and volunteers, and sometimes puts INGOs on the defensive. Additionally, media salience can impair aid delivery and negatively affect assistance recipients—not to mention the fact that the media can monopolize valuable in-country resources. On the other hand, media can serve as both a source and a conveyer of

information, especially in educating the public. In this sense, media reports can actually help facilitate INGO responses.

6.3.1.4 Differing Information Needs

A majority of HQ INGO interviewees highlighted challenges arising from managing field communications in light of corporate donor information needs. Six HQ INGO representatives, in fact, mentioned that corporate donor demands for accurate assessments from field-deployed staff sometimes pose a challenge to effective disaster response. And, in order to fulfill corporate donor information needs, headquarters staff must work with field professionals to obtain detailed logistical information associated with health products donation offers (i.e., the distribution plan, recipient facilities, and destruction of medicines, as indicated in the next quotation). One interviewee offered the following illustrative examples of the differences and tensions in their roles, a fair representation of views shared by most of the HQ INGO respondents:

> I think all we [HQ INGOs] really need to know is it [health product donation] got there safely, it is stored safely, and it's fully distributed. So after it's been distributed, we want to know—"did you [recipient] use all the product[s] before the expiration date?" We need to know that because if not, we have to be able to figure out who destroyed it and where it went for destruction. … Did you use all of it? And did you use it as you told us you were going to use it? And if not, what changed and why? ... And that's all we have to know (Interviewee 31, personal interview, 2011).

This interviewee went on to illuminate the potential communication dilemmas engendered by corporate donor information requests:

> We [HQ staff] get stuck in the middle [between corporate donor and field INGO communication] going, "Well, this is what [corporate donor company] is asking for and so we either have to harass the people in the field, and then they get mad about it, or they just simply don't provide it. … And then we lose face in front of our corporate donors and then potentially lose future donations. So that's why I think there's a *huge disconnect* [in the information supply chain-donor information needs are thrust on field implementers in midst of chaos before a donation request is considered]. I see that a lot, happening more and more often, especially in disaster situations—disasters intensify the disconnect and make it harder on everyone (Interviewee 31, personal interview, 2011).

The same INGO individual discussed tensions in light of corporate donor information needs:

> … But then it gets complicated because [a corporate donor] wants photos or they want a feel-good story for their website—all understandable. But this is intensified when each donor wants a story, pictures, and donation use story. And so then our needs become the needs of the donor because we still want to get the product from the donor. So that's the power dynamic HQ folks live with. On one hand, one company [corporate donor] wants us to confirm, "Yes the product arrived. Thank you." That's it. And then on the other extreme, you've got [another corporate donor] saying, "I want to know which hospital the product went into, how many people it's treated." Basically they want the name of every person that received a pill or got a drop of eye drops in their eyeballs. So their [corporate donor] information needs differ VASTLY and that is hard for any INGO to reconcile—imagine managing that for each donation! We are getting more and more of the "I need to know how many people this donation is going to treat?" My inclination, which of course I would never vocalize, is, "Seriously, it is your [expletive] product! You don't how many people a hundred bottles of your own product can treat? Like if one bottle has ten treatments, and you're giving us 100 bottles, you do the [expletive] math. They [corporate donor] want us to give them that information. What's worse, I then have to bring in a pharmacist and say, "O.K., they're giving us this donation, how many people does it treat?" When part of me is like—Why am I even doing this? Why am I wasting my invaluable resources to do their [corporate donor] work? Don't they know that? How do they not know how many people their product treats (Interviewee 31, personal interview, 2011)?

In summary, communicating and facilitating the flow of information affects the ability of humanitarian actors to respond to disaster events effectively. The general sense was that HQ INGO representatives felt their role was that of a "go-between," in that they had to interpret donor needs and communicate vital information to them, while at the same time trying to meet, communicate, and translate (into proposals for support) field needs in the midst of a disaster. Overall, interviews with HQ INGO personnel confirmed that the media, differing information needs, and their reliance on accurate field assessments shaped their disaster response decisions. All of these factors, therefore, influenced what they expected from PQMD in disaster settings. HQ INGOs seemed to suggest that donor information needs are at variance with each other, making fulfilling individual company information needs a continuing challenge. Additionally, HQ INGOs found broad-brush benchmarking information about the distribution of health product donations in order to map out INGO and corporate delivery sites (and associations)

helpful in their overall disaster planning. Participating in PQMD's emergency call helped to provide this critical information.

6.3.2 Collaboration

HQ INGOs viewed their PQMD membership as essential to their collaborative efforts. Participation in PQMD's EC and the opportunities for Partnership-facilitated meetings, committee work, and on-going collaborative touch points served as primary benefits in their eyes. In other words, participation in the network implied collaboration for those engaged, regardless of whether coordinated action resulted.

Interestingly, when HQ INGO representatives discussed collaboration-related tensions, issues pertaining to field implementation challenges arose. Specific examples interviewees cited included,

- Frustrations in coordinating with the United Nations;
- Customs clearance (which constrained HQ INGO capacity to actually send and deliver product);
- Concern for the disposal of health product donations (which might need donor approval, support, or communication), and
- Haitian NGO registration (which could impair HQ INGO procurement efforts).

In contrast to field INGO personnel, HQ INGO staffers did not refer to collaboration in terms of "joint decision making" or "joint problem solving" as a "collaborative benefit" of PQMD membership, but rather expressed their participation in PQMD as per se constituting collaboration.

Two factors could explain these differing expectations concerning PQMD's network role. The first, HQ INGO staff are more actively involved in finding solutions to field problems surrounding funding, resources, material aid, and media exposure as a function of their organizational role than field staff. And by the same token, HQ INGO staffers are less involved

in field (in-country) implementation challenges, which are seen as deployed personnel responsibilities. In other words, HQ staff members perceive field challenges as an organizational function, not a network challenge/opportunity. And as for the second factor, HQ INGO representatives deal directly with their preferred PQMD corporate donors to coordinate product donations. In other words, the Partnership does not actually coordinate material aid between or among members; instead, it provides a convening function for collaboration and information sharing during disasters—primarily through the emergency call. That is, the conference call functions as a collaborative space for INGO and corporate members. Field INGOs have no such 'collaborative space' available to them and therefore see potential for PQMD to leverage joint field humanitarian action.

In fact, although HQ staff members said they viewed the network as a vital cross-sector technical body able to provide guidance on quality medical donations during disaster events, there was no "collaborative" procedural mandate or guidance document formally linking INGOs to PQMD. For example, when HQ INGOs were asked to describe their organizational procedures for responding to a disaster, none of the members noted any processes/procedures that required/suggested they collaborate or share information with PQMD and its members. This finding seems to suggest the collaborative's network role was optionally incorporated into their organizational disaster response mandate or procedures. And yet, all the INGO staffers interviewed not only participated actively in PQMD's emergency calls, but also considered them very important to their disaster-related decision-making process and to their programming choices. I asked interviewees the following: "*Do any external guidelines inform your relief response efforts? For example, WHO Guidelines, PQMD standards, AERDO GIK standards, InterAction Guidelines, SPHERE project, others?*" Not one INGO staff member interviewed

referred to PQMD's *Principles and Standards* as a guiding document. Instead, eight (80%) cited WHO Guidelines, six (60%) referenced AERDO GIK Standards (now called ACCORD) guidelines, two (20%) mentioned InterAction, and one respondent (10%) mentioned SPHERE project guidelines. This may help explain why field INGO participation has been limited on the calls in past years to that of an ad-hoc function rather than a procedural one.

Most HQ INGO staff members interviewed suggested that participation in PQMD further supported already established relationships and relationship building with corporate donors. They contended that membership brought about more opportunities for INGO partnership, which in and of itself did not necessarily result in coordination, but improved the possibility of such occurring.

6.3.2.1 Collaborating with the "Other Entities"

Three of the 10 HQ INGO personnel interviewed stated that collaborating with the OCHA Health Cluster meetings in-country represented a barrier to effective provision of health product donations. However, few, if any, headquarters INGO staff attend the UN field meetings. These individuals indicated that corporate donors with whom they worked would like to see more involvement with large coordinating bodies such as the WHO, PAHO (the Pan American Health Organization), or OCHA in their field activities. However, both from my field observations and notes, field programs were often understaffed, too busy, and/or did not consider such collaborations particularly relevant to their operational needs. One of the issues raised by headquarters personnel had to do with the fact that these large organizations (WHO, PAHO, etc.) tend to focus broadly on "health," rather than focusing explicitly on the delivery of health product donations and the needs of INGOs working in this more narrow realm. According to three HQ INGO interviewees, interactions with OCHA—although useful in painting a broad-

brush picture of the population's ongoing health needs—did not provide much in the way of health product donation direction or coordination. In fact, this is similar to the view held by field INGOs about participating in the OCHA Health Cluster meetings in Haiti, as discussed in section 6.2.1.2. My findings suggest that the current OCHA Health Cluster configuration does not lend itself to both field and HQ INGO personnel participation. One INGO interviewee highlighted a unique phenomenon regarding the participation of "new" humanitarian actors in OCHA Health Cluster meetings.

> … One thing that was interesting for Haiti that I hadn't seen in prior responses was the extent to which not just NGO's, but also donors, as well as the militaries of different governments who committed troops to Haiti, and just general kind of interested parties participating in the cluster coordination mechanism. This is to say that they [the listed attendees] go to the meetings that, you know, Company X [a pharmaceutical company], to make product offers and so their rep just went to the health and shelter coordination meetings and during the Q&A period and at the end just raised a hand and said, "Look ... I have a ship full of this thing and anyone who wants it, come see me after." This is disconcerting and disturbing at some level. Donors giving away meds and making random donations to unqualified, unvetted organizations is tricky and dangerous at the same time. We [experienced INGOs] all know that we are as good as our last donation. I mean, a donation gone wrong ruins it for all of us [INGOs and healthcare donors] (Interviewee 14, personal interview, 2011).

This interviewee neatly expressed a widely shared view among INGO headquarters staff, indicating that OCHA Health Cluster meetings were serving as distribution tools, rather than as a coordination mechanism to streamline distribution channels. This observation is particularly important because it speaks to the potential hazards of relying on INGOs with little or no experience to dispense, distribute, and (if necessary) destroy health product donations. This respondent's comment helped to underscore why PQMD members placed such emphasis on having reliable, established relationships to guide health product distribution, as opposed to donors giving away product less systematically in a crisis.

6.3.3 Coordination

HQ INGOs tended to speak of coordination from a logistical viewpoint rather than citing other broader avenues of inter-organizational harmonization, such as joint funding/proposal development, shared needs assessments, and/or coordinated distribution in-country (think "divide and conquer" based on a geographical assessment).Notably, this group considered coordination to be the least important component of their PQMD participation. This perspective differed from field INGO personnel who viewed coordination as the most useful mechanism for joint problem solving, sharing resources, and programmatic coordination. In other words, HQ staffs of INGOs—in the U.S. at least—tend to focus on individual organizational needs that will be individually field-deployed, rather than from a field needs perspective whereby all INGOs combine their efforts to assure maximum coverage. This orientation may be due in part to a U.S. preference for privatization and neo-liberal economics, in which open competitive environments are preferred. Thus, INGOs compete openly for health product donations by creating their niche disaster response proposals and soliciting corporate donors individually. In contrast, the European INGO paradigm embraces a more cooperative federated model whereby a single or specialized INGO consolidates donations and funding. In contrast, American INGO HQ staff perceived coordination at the PQMD network level from a more competitive perspective. For example, US HQ INGO personnel perceived donors as asking the following questions as a part of their resource allocation strategy (product or cash): Which organization has the quickest needs assessment? Which INGO has the best programs in-country? Which INGO has staff on-the-ground? Which INGO has a field office? Hence, these staffs were more sensitive to the competitive nature of their respective work. In contrast to the field INGO professionals perspective, INGO headquarters staff members tended to view coordination more theoretically

than pragmatically. None of the interviewees indicated that PQMD should expand its "coordination" role, except for the European INGOs. Yet, several respondents commented that the Partnership should assume a broader role in disaster events, as discussed in the next section.

6.3.4 Should PQMD Expand its Role?

I asked interviewees, "*Should PQMD expand the capacity of its members in responding to disaster relief events?*" Most, if not all, HQ INGO respondents wrestled with the network not doing enough versus doing too much in light of its staff limitations. As succinctly phrased by Interviewee 4, "The bigger question is, is PQMD intending to become an operational agency or is it simply an umbrella membership organization that serves the needs of its members?" Probing beneath the surface of this dialogue, another important question arises: Are these roles mutually exclusive?

INGO headquarters staff identified several ways that PQMD could potentially expand its disaster efforts and support. Suggestions ranged from improving the emergency call mechanism to expanding disaster management activities, which could include disaster preparedness, mitigation efforts, and becoming more of a "bullhorn" on behalf of its members for the broader public good. Two interviewees offered different insights on the matter, as follows:

> In the middle of it [a disaster], the last thing I want to do is give PQMD more information. I don't think PQMD is an implementing group. I think the strength of PQMD is the strength of its members. I think we could strengthen the call to see if there's a way to match up people and needs and streamline the calls so it's just A, B, C, what people are doing, where they're working. I think it's a great thing for PQMD to say their members are doing X and it raises PQMD's messaging, it gets their name out there more, and certainly all NGO's do that, so that raises their profile (Interviewee 3, personal interview, 2011).

> I think we all get so involved in our own little shipments and our own little world of shipments and logistics that we do tend to not network as much as we really should, and I think in so doing we probably know more about each other's work at the same time. I think somehow if we could get the non-profit sector to be more cooperative among themselves and more forthcoming with the information about shipments and the facilities

that they support and sort of the way to know each other better and know each other's weaknesses and strengths, what they have and what they don't have, and who they're working with, save some money on logistics and transportation prior. ... I think anything that helps us as the NGO community to work more productively together, it's good, and that would be one idea to make that happen. Inter-organizational communications needs improvement, we need more than just calls [PQMD's emergency call] (Interviewee 8, personal interview, 2011).

Table 6 summarizes the many ways that INGO staff believed PQMD could widen its impact.

Table 6: HQ INGO Discussion of PQMD's Expanded Disaster Response Role

Interviewee # 16	PQMD attend relevant UN OCHA meetings – Health and NFI (nonfood items), educate INGO staff on-the-ground on appropriate donations. "Coordination happening on the spot, in the moment down there [Haiti]."
Interviewee # 31	Broader role for PQMD than just conference call. Deploying skilled person to disaster response zone for 15-30 days after emergency to provide coordination and linking PQMD field members. Suggests pharmaceutical companies pay for the added disaster function because NGOs are too "challenged with ramping up their own operations in a disaster."
Interviewee # 25	PQMD needs to "connect with projects like Metrics & Measurements during disasters" and find ways to research the impact of contributions." Also, "engage with OCHA in an advisory capacity."
Interviewee # 8	Develop "Guidelines for product donations for disasters." Also, "improve the capacity of prepositioning of GIK. PQMD can help with importance, emphasis, and advocacy of prepositioning emergency goods." Improve collective logistical support. "If PQMD could somehow do some work beforehand [on members behalf to get them] better rates, particularly for air shipments because they're so critical in a disaster, to reduce rates with PQMD offering good PR for the airline. I think that will be a real plus. It's a huge part of our budget as we ship stuff. Also, PQMD could make it easier to facilitate joint shipments perhaps to save on freight to make it more cost-effective for each organization and also to get the people together on the receiving end to look at the overall picture." [this interviewee also spoke of obtaining reduced-fee telecommunications support] PQMD to help with "coordinating donations from the donor end. I think if the donor companies could help organize the donations going down to Haiti to avoid overlaps to various groups, I think that would be a real help as well." Also, can PQMD "build capacity of governments to implement, understand, and train local MOH's of devastated nations on quality medical donations? Is Mission Impossible DVD deployable on the website whenever a disaster happens? Health clusters are receiving donations—what role can PQMD play at the coordination level?"

Interviewee # 4	"PQMD needs peer-reviewed, scientific articles. I mean if we're really talking about being the group of BEST PRACTICES [emphasized], I think we ought to be putting out quality peer-reviewed articles and stuff. I think we could be like the editor or the facilitator and the publisher of a journal—perhaps an annual journal that could come out at the time of our annual meeting. … Now this is something that people would say, "Wow, they're really contributing to Best Practices." What you're trying to do is trying to develop a new paradigm, create a real science around this stuff, and a knowledge base. That's what we talked about previously about being a Center of Excellence. Well are we kidding ourselves? We're no Center of Excellence right now. We're not putting out anything on a consistent, high quality basis that's been reviewed by other groups. I think something like this would add a lot of credibility. … We're an association; it's just we're a little unusual in that we're NGOs AND companies. … PQMD is more exclusive and the fact that it has the companies involved, you have a whole other perspective that's being offered." [talking about capitalizing on cross-sectoral nature of PQMD's network]

These comments illustrate that HQ staff foresee PQMD taking on additional responsibilities to expand disaster coordination; however, there is no consensus concerning what those responsibilities might be, how they would be enacted, or how they might be funded. Additionally, the table above features coordination and collaboration strategies as suggested by INGO HQ personnel for ramping up PQMD's coordination capacity to help member organizations mobilize and deploy the various resources available to aid disaster relief.

6.3.5 HQ INGO Findings Section Summary

This section chronicled and examined the communication, collaboration, and coordination challenges PQMD headquarters INGO staffs experienced as they sought to provide assistance in response to Haiti's 2010 earthquake in an attempt to answer the question: Were the disaster response challenges encountered by headquarters INGO personnel mitigated by PQMD membership, in the case of the Haitian 2010 earthquake? The findings suggest that PQMD provided a valuable communication (by way of routine emergency calls) and collaboration (by member participation in calls) function. Within hours of the earthquake, PQMD's organizational

members had already responded to support Haiti's weakened health infrastructure by mobilizing essential health product donations and medical materials—a process improved by PQMD's emergency call. Notably, network members would have responded with or without the emergency call given their long-standing relationships with trusted partners. However, the EC enabled HQ INGO members to share information gathering responsibilities learning, benchmark the big picture of member activities, as well as compare, vet, and validate their organizational disaster assessments and identify partnership opportunities. The general sense among INGO HQ staff was that the emergency call was an effective tool, while recognizing that continuous improvement opportunities would increase the value of membership so as mutually to reinforce the benefits of raising member profiles. Lastly, HQ INGOs see an increased role PQMD could play (network activity), although the "what" and "how" is not clearly identified. Although these comments were specific to the Haiti 2010 earthquake, they do illuminate some of the broader HQ versus field coordination complexities of disaster response these cross-sectoral network members confront.

6.4 Corporate Perspective: Haiti Disaster Response

Health product donations are vital for immediate medical service delivery within humanitarian relief efforts. Often, donated medicines provide a bridge to assist communities through catastrophic circumstances that can otherwise cripple local health system capacity. In consequence, corporate partners willing to provide needed health product supplies can play crucial roles in supporting humanitarian action.

This section investigates the challenges that PQMD's corporate donor members tackled as they worked to provide disaster relief during Haiti's 2010 earthquake. In most cases, the response to the nation's earthquake represented the largest corporate commitment of PQMD's

member firms for any natural disaster in its history. I identified many real and perceived challenges for corporate donors in handling in-kind donations in disaster events. I drew on information from two primary sources for this section: participant observations and individual interviews. I gathered interview data from 17 corporate participants representing 15 different PQMD member companies via semi-structured telephone interviews conducted January through April 2011—each ranging from 40-180 minutes in length. I also drew on my experiences/observations as a participant at three PQMD board meetings following the earthquake at which network member responses were discussed.

The companies represent research-based enterprises in global healthcare, pharmaceuticals, medical supplies and medical technology. Twelve of the 15 firms in PQMD are U.S.-based and three are headquartered in Europe (Sanofi, GlaxoSmithKline, Boehringer Ingelheim). The network corporate representatives that took part in this study were organizationally responsible for making health product donation decisions for their respective companies; their experience ranged from two to 20 years working in corporate contributions/philanthropy/global investing/community partnerships. In some cases, the interviewees only handled product donations, while in others, their responsibilities extended to cash contributions and employee matching and corporate volunteer programs as well. Depending on the size of the company, some interviewees coordinated their organization's overall global corporate social responsibility program. In all cases, I interviewed the firm's PQMD board member; in two cases I also interviewed additional staff from the same company. Appendix E provides the interview guide used for data collection, which featured questions regarding the challenges these individuals experienced in responding to the Haitian crisis and what those portended for the PQMD role in coordination for a more effective response. The

questions I developed explored the role of each participant within their organization, information sources used to inform their disaster response decision-making, policies/procedures in place relating to disaster relief, how or in what ways their organization responded, factors that determined their humanitarian response, criteria for choosing INGO partners, and—most directly related to this research—what functions PQMD played in their decision-making processes. Questions were designed to help participants reflect on the factors that affected their corporate response.

What quickly became clear in these interviews was that the Haitian earthquake dramatically emphasized that open and clear communication among partners is essential to prepare for, respond to, and build response capacity. Specifically, corporate donors were influenced by three general concerns: a) the perceived need (as per information from INGO partners), b) employee expectations, and c) benchmarking of other corporations' efforts. Thus, these respondents confirmed the importance of improving PQMD's effectiveness to facilitate communication among members during an emergency event in order to enhance catastrophic disaster response. The following sections categorize the specific forms of internal and external communication challenges identified in the research with specific focus on their portent for efforts to improve collaboration and coordination. The Haiti-specific examples addressed here illustrate corporate challenges in gathering and processing information for the purpose of decision-making and responding to disasters that might occur anywhere.

6.4.1 Communication

PQMD members responding to disasters must expediently gather and assess information, formulate a response plan, seek out trusted partners, secure funds and/or health product donations, and undertake a disaster response—often while relying on limited and sometimes

suspect secondhand accounts of on-the-ground conditions. Thus, communicating and facilitating the flow of information affects the ability of humanitarian actors to respond to disaster events effectively.

A key finding for PQMD's network role is that communication among PQMD INGO HQ members guides how corporate members both individually and collectively respond to catastrophic disasters. Corporate partnership members considered the progression of gathering, processing, and sharing information a vital function for responding entities, but also a significant challenge. The healthcare firm members of PQMD I interviewed consistently cited the need for immediate access to credible information for urgent decision-making in any disaster to determine: a) if their company should respond; b) if not, then why not; and c) if so, in what capacity. While it was clear that the companies in this study had an arsenal of tools to choose from in responding to a disaster, timely and reliable information enabled them to decide which ones to employ. Other factors, of course, also influence a firm's response to a disaster event. In the case of Haiti, the concerns most cited as shaping their responses were the following:

- Haiti's proximity to the U.S.;
- Haiti's level of poverty prior to the event;
- The 'magnitude' of the event—i.e., its size and scope;
- NGO partners ; 'working there already' or that 'already had a presence' in Haiti; and finally,
- Need. In almost every instance, companies responded to the Haitian crisis with cash grants and health product donations.

Many corporate interviewees also addressed the different forms of communication with different sets of stakeholders that confronted them. Specifically, they suggested they were faced with harmonizing communications both internally and externally with at least eight different stakeholders responding to the Haitian disaster:

- U.S.-based and globally-based employees;

- Globally affiliated companies;
- Internal inventory stakeholders (to locate health products available for donation)/sales and marketing personnel (to negotiate for additional health products, if necessary);
- Company disaster response committee personnel, if applicable;
- Preferred NGO partners;
- PQMD's network partners and/or any other networks in which the company participates;
- Upper management (often CEO/company foundation for disaster budgeting); and
- Media outlet representatives.

By way of example, I here sketch a generalized *internal* information flow based on interviews conducted. The first question that company leaders must answer is—will or should the company respond? There are various ways in which a company goes about answering this question. The factors or questions that affect the decision-making process include,

Table 7: Will or Should Our Company Respond?

Does the company have an affiliate site or presence in the country of the disaster? Are company employees secure/safe? Has an office/facility suffered damage?
Are the company's preferred NGOs responding to the disaster?
Gather information from PQMD's Emergency Call. What are PQMD's NGO members doing? How are other PQMD corporate members responding?
Does the company have a foundation to procure/secure funding in the case of a disaster? Or does the company need CEO funding in order to respond?
In the case of companies that have a designated disaster committee, they must convene to make recommendations for a company's scale of response. If they do, the questions are the following: Can a recommendation receive budget approval from the committee? If not (as is usually the case when a committee lacks the power to pass a budget), can the CEO grant approval?
If the company does not have a disaster committee, can the PQMD board member or the member's department make a recommendation for health product donation response and, if need be, cash funding?
If the company has a budget for disaster events and no disaster committee, is there a pre-developed budget by which the company representative can proceed with providing health product donations?
If no pre-developed budget exists, how much of the disaster budget is approved?
Will legal counsel approve? Some companies must get legal approval of large grants/donations before making them available. Three interviewees noted that such approval was a routine part of their process.

These and similar questions define and guide PQMD member company responses to an evolving disaster scenario. However, in order to address them, information must be gathered quickly and from trusted sources—especially given the importance that reliable knowledge has on a company's decision-making processes and the company's triple-E (economic, ethical, environmental) or triple-P (people, planet, profit) bottom line. The triple bottom line, in the case of corporate disaster response, can be re-framed as company goodwill/reputation—potentially factors that can lead to profit.

When a Partnership member company elects to respond to a disaster its leaders must decide *how* it will do so. PQMD's firms have a variety of ways they can respond. For example, they can provide cash grants, health product donations, employee matching gifts, special fundraising campaigns, corporate volunteer programs, or employ other strategies designed to incentivize employee giving while concurrently fulfilling the company's CSR objectives. Interviewees suggested that corporations ask a series of questions as they seek to make the how-to-respond decisions:

- What are our preferred NGOs telling us?
- Which other companies are responding (benchmarking)?
- How much are they responding with?
- With which NGOs should we work?
- From an inventory perspective, which company products will our NGO partners need?
- Does our company have health product on hand/in inventory, in the sales pipeline, or in surplus in order to make the donation?
- Is there inventory in-country [country of disaster event] to meet the NGO request?
- Is there a company manufacturing site nearby that might have the necessary health product supply that could be shipped directly?

Once basic concerns have been addressed and a strategy identified and adopted, the company develops internal and external communications including a press release. That effort is circulated

internally within PQMD first and then shared with the media, and any other networks in which the Partnership and the firm participate. Additionally, the "CEO must be provided with full justification of the company's proposed response, prepped with talking points surrounding the company's response in order to be media ready" (Interviewee 7). Once an initial response has been mapped, then, as one interviewee suggested,

> … [O]h yeah and then I have to find the money, find the product, orchestrate the fundraising campaign—like create internal website/link and mechanism for fundraising tally, roll out information to affiliates, global employee base, the CEO, and the media and manage NGO product and cash expectations and pull NGO teeth to find out where our product is going and try to ensure we are not duplicating other company efforts, NGOs are not offering overlapping services, or we are not over-donating. Or worse, my CEO's office sends word that [another corporation] already has a response up on their website—what is taking us so long? And this is all expected of me within the first three to four days of a disaster, of course. It is insanity to think an appropriate disaster response can be crafted in 72 hours with minimal information, but the demands and communications coming from every [expletive] direction really give us little choice! Frankly, the hardest part of my job is managing a disaster event; it is too much pressure, too many balls to juggle, too many things can go wrong, and too many people are watching and paying close attention (Interviewee 17, personal interview, 2011).

The above series of questions and related steps correlates directly with collection of the information needed to synchronize rapidly with the firm's decision-making process and then proceed to communicate a company's position and define its response plan. Identifying, assessing, and gathering essential information is a key factor in internal corporate disaster coordination—a challenge repeatedly voiced by PQMD's firm member interviewees.

6.4.2 Sources of Information

In response to the two-part question, "*What are your primary sources of information? Who or what do you rely on to get timely information?*" interviewees revealed that PQMD corporate members relied on three primary sources of information in responding to the 2010 earthquake: their preferred INGO partners, PQMD's Emergency Call, and the media.

NGOs as the primary source of information

Interviews confirmed that PQMD corporate members relied primarily on their network NGO partners as their most critical information resource as they mulled whether and how best to respond to the Haitian crisis. Company decision-makers complemented this strategy by gleaning information from PQMD's Emergency Call, which facilitated their ability to gather core response and benchmarking data. As noted above, this finding underscores the fact that gathering, sharing, and facilitating information flow represents a vital PQMD function. Corporate Partnership members stressed the importance of this role:

> NGO partners, number one. Number two, the PQMD call and the U.S. Chamber of Commerce call [BCLC], I'm finding my top two. Then some direct groups like the Red Cross have their own emergency call and don't forget ACCP, too. They sometimes have calls and I find that useful because it's a completely different industry (Interviewee 7, personal interview, 2011).

> [Our primary source is] our preferred partners. And then I think it's a combination of our NGO partners, the media, and then of course our colleagues in-country (Interviewee 19, personal interview, 2011).

Four other interviewees stressed the importance of "having people on-the-ground:"

> The NGO partners who generally have people on-the-ground who are giving reports are invaluable as it relates to the human side. I always feel as though this work involves the heart and the head. And the head needs to be strategic and business-oriented; but there's also a heart piece. And as I said, we don't have a budget for this work, so the first thing that I'm looking for from the NGO partners is what it is really like. What are some of the stories around need so that I can put a human face and story on the need? And I always include that as a part of my proposal to the CEO for funds (Interviewee 6, personal interview, 2011).

> We rely on our close partners, I would say, [named four PQMD NGO members], folks that we know that are on-the-ground that have been there to have a good understanding of what's going on. So we look to all of our close partners to get that information (Interviewee 2, personal interview, 2011).

> I trust our NGO partners and really use them. Because they know—they are the ones who know the situation in-country. That's what they do. That's probably our Number 1 [information source] comes from the partners. Certainly I think our affiliates are also very important because they operate locally so they know … you know, they've got key stakeholders; they've [affiliates] had relationships already, perhaps, with some of the organizations [NGO partners] on-the-ground. They [affiliates] know the expectations that are being placed on them to respond and so we want to make sure that we're providing them with the support that they need as well [from corporate headquarters]. So

> it's the affiliates, where that's applicable, are very important for us as well. I would say TV, um, I think TV just to allow us to see the big picture (Interviewee 1, personal interview, 2011).
>
> Granted, reporting is fragmented at best on the initial calls [PQMD Emergency calls], but I am able to get a big picture of which INGOs and companies are responding and which INGOs have folks on-the-ground (Interviewee 10, personal interview, 2011).

Corporate members reported how NGO partners can serve as a vital window into the disaster situation. This is not surprising, given the nature and mandate of PQMD's network—i.e., improving the distribution and effectiveness of medical donations in-country. Thus, on-the-ground assessments from health delivery field staff can provide an essential baseline from which to develop a donation strategy. Reliable information from INGO personnel can also help to avoid some commonly reported corporate donor concerns: the potential for diversion, donating inappropriate drugs or medical supplies, and giving in excess. These concerns are heightened during a major disaster event due to the rapidity of enacted responses and the immediate level of compelling need. Again, information from INGO field staff can help to substantiate that donation requests develop from a needs-assessment, as well as from personnel who are working locally and weighing actual (i.e., not perceived) needs.

The examples provided in Table 8 illustrate the high level of corporate donor reliance on INGOs as a chief source of information for response decision-making. Reliance occurs both in terms of responding (or not), and in determining which health products to provide. In the case of the Haitian earthquake, these relationships proved a vital component in gathering and processing information for the purpose of response decision-making.

Table 8: Primary Sources of Information Cited by Corporate Interviewees

Corporate Source of Information			
Interviewee	**#1 Source**	**#2 Source**	**#3 Source**
# 1	NGO partners	Company affiliates	PQMD call
# 2	NGO partners	PQMD call	
# 6	NGO partners	PQMD call	Media
# 7	NGO partners	PQMD call	Red Cross call, ACCP call (sometimes have a call)
# 9	PQMD call	NGO partners	
#10	NGO partners	PQMD call	Company affiliates
# 24	PQMD call	NGO partners	Media
# 30	NGO partners	Company affiliates	
# 32	NGO partners	PQMD Call	Media
# 33	NGO partners	Corporate Office	PQMD call
# 15	Media	Company affiliates	
# 17	NGO partners	PQMD call	
# 19	NGO partners	Media	Colleagues in-country
# 20	NGO partners	PQMD call	
# 29	Company affiliate	NGO partners	

6.4.3 Media as an Information Source

For better or for worse, media plays a role in defining what happens in the aftermath of disasters. The scholarly literature regarding the role of media in portraying disasters to the public and how these representations can shape individual/private donations is well-established (Green & Haines, 2002; Ross, 2004b; Scanlon et al., 1985; Shanahan et al., 2008). What is under studied, however, is whether and in what ways media reports influence corporate donors in disaster response. While this topic is not the principal focus of this dissertation, I did find that the firm representatives to PQMD I interviewed doubted the accuracy of media information. Their general perception was that the media sensationalized disasters. Specifically, I asked interviewees, "*In responding to a disaster event, what are your primary sources of information?*

Who or what do you rely on to get timely information?" The following responses from corporate interviewees indicated that they trusted INGOs over the media for receiving timely and accurate information:

> I do not rely on the media. NGOs are number one because I think they're more balanced and more objective (Interviewee 7, personal interview, 2011).
>
> I do not trust them [media]. I trust health people and NGOs and groups we are working with (Interviewee 34, personal interview, 2011).
>
> I definitely rely on their [INGO] expertise and their evaluation of the disaster. When I talk to one of the NGOs and they have their colleagues sitting right there in Haiti, so they're hearing it first-hand from someone who is there to see it—I definitely tend to go with their evaluations more so than the media. And I definitely rely on that. I put a lot of faith in our NGO partners—not just with disasters but with all the other requests as well (Interviewee 33, personal interview, 2011).
>
> Rarely do we depend on the news. Well, I feel that it is not particularly accurate; it serves the media but rarely serves us (Interviewee 29, personal interview, 2011).
>
> I rely on the media to tell me there was a disaster. And then, definitely, I rely on the NGOs to tell me how they're responding because they're on-the-ground. And then I rely on our people in the field to provide context. But the only thing that the media might tell me, again, is the people who are affected and to describe the disaster. But otherwise, the only thing the media does is it confuses things, or it may bring up points that need to be verified. … I don't rely on them [media]. I read about things but I don't rely on them [media] (Interviewee 32, personal interview, 2011).
>
> I would say that we rely on our own people on-the-ground and NGOs that we have relationships with and the PQMD call fills in the gaps. The media is a little less (Interviewee 17, personal interview, 2011).

Interviewees said the media can, however, provide a context for events:

> We are certainly aware of the media. And so we keep track of how things are playing in the media. You know, we'll make certain decisions in terms of how high profile an event is. We'll get a bigger sense of that from our media (Interviewee 20, personal interview, 2011).
>
> I would say that media is secondary. Clearly, I'm going to Google every morning what the new death numbers are, numbers who are infected with a particular problem and so forth, but that's not my first place to go, other than just initially letting us know that something terrible has happened somewhere. And in many cases what the media is saying and what our NGO partners are saying are not always aligned anyway (Interviewee 6, personal interview, 2011).
>
> [I have] very little reliance on the media. And I'm not saying that flippantly, either. … You can't get a true perspective of what's going on [in Haiti]. I'm not saying it's not bad

> in Haiti, but I'm saying there are pockets that are really bad and there are pockets that are still really good. ... So I went to Haiti a few times just to look firsthand and work with our partners and just make sure what we're trying to do matches what we think the expected outcome should be (Interviewee 2, personal interview, 2011).

Interviewees also noted the influence of media reports on their company stakeholders:

> There was such a media frenzy surrounding Haiti. Our employees clamored. Unbelievable. I have never seen my employees call me as much as they did for Haiti for any other disaster in the world and I have been at [company name] a long time (Interviewee 33, personal interview, 2011).

> I rely on the media sometimes for mega disasters because usually it's nonstop news on the disaster. It does raise awareness with employees within the company, so it can make things easier for me to quickly move a request through. I find, though, that the media often tells a story that has a lot of misinformation in it. So there's some give and take with that. I do rely on the media if I do have any rare opportunity to get a plug out there for [company name]. … But it is nice even if it's just on the local news to be able to have some coverage about [our company's responses] (Interviewee 7, personal interview, 2011).

Even though not considered a primary source of information, media reports inevitably impact the corporate response cycle in various ways. Initially, such information tends to fuel employee response and exert additional community pressure to respond, with the end result that corporate members must work quickly with their INGO partners to formulate a response plan. What is more, after the donations pipeline has been activated, corporations rely upon the media to tell the global community their story. Overall, however, external media reports are not generally seen as particularly helpful for understanding conditions in the field.

Conversely, according to members, PQMD has an important internal reporting role to play. Corporate representatives noted how they viewed the network's specific media coverage (press releases) as essential for reinforcing the collective effort of all members and their respective commitments (cash and health product donations).

6.4.4 Collaboration: PQMD's Emergency Call

PQMD has long recognized the need for collaboration among its array of members and personnel involved in disaster response efforts. As a result, the network has an Emergency

Committee chaired by one INGO and corporate board member. The group's mandate is to assemble members, gather response information, and share it across PQMD's membership in the event of a natural disaster. Once the initial "Emergency Call" takes place as soon as possible following a disaster (i.e., typically within 48-72 hours), members set a regular interval for future calls contingent upon the size and scope of the disaster. There is, however, no documented protocol that dictates how long they must continue to meet following a natural disaster.

Corporate member interviews suggested the most important reason for their participation in PQMD's Emergency Calls was to benchmark INGO and other companies' response efforts. The resulting information enabled corporate members to validate and scale their company actions in accordance with how, and in what ways, other major healthcare firms were responding. Companies reported that INGOs filled in information necessary to address some of their own internal reporting needs, as well as to inform subsequent company decision-making. Some of the essential data needed required by corporate members and provided under PQMD auspices follows:

- INGO needs-assessment reports,
- Names of INGOs responding,
- Manner in which INGOs are responding, and
- Identification of the INGOs with "boots on-the-ground."

Several study participants highlighted the value of the call for their disaster response:

> The call provides information access, people access. The call is important. The relationships established with the NGOs and the ability to talk to the corporates if I want or need to. I know there have been several times where we've had a call and I've had corporate members call me after the call to say—what exactly did you say you guys were doing, or how are you doing such and such? And I'm keen to talk to them, and I do (Interviewee 15, personal interview, 2011).
>
> PQMD emergency conference calls gave valuable information about the emergency and its impact, but were time-consuming and required follow-up with individual partner agencies to determine specific product needs. Obtaining more timely information is essential to improving corporate response, which in turn would help more people more

> quickly. Improved Web-based and/or social media tools such as blogs may be an answer. More feedback about how the donations were helping on-the-ground (possibly through a PQMD-sponsored blog) would be helpful to share with key stakeholders. In addition, more information about requirements for donating controlled substances (e.g., pain relievers) would be valuable to corporations trying to respond to urgent patient needs (Interviewee 9, personal interview, 2011).

The call was also deemed essential for establishing a relationship that members found reassuring:

> PQMD is at the top of my list as it relates to the product side. It's nice having an organization that I can go to. It's nice also telling the employees of [company name] that, "O.K., we have a well-established network of organizations that we work with" and sometimes that they're handpicked. Then I don't have to worry about any general employee saying, "Have you tried my little niche charity?" So it's certainly something to talk about as far as giving validity (Interviewee 32, personal interview, 2011).

Other interviewees discussed how benchmarking corporate peers enabled them to place their own response efforts into a context, which potentially resulted in adjusting their actions to how other corporations were responding:

> I mean, again, it all comes back to the benchmarking. I really don't get with other forums because I don't find those to be very worthwhile because those are from other companies that may not be pharmaceutical. And what I'm really looking for is to benchmark other pharmaceuticals. I think it's great whatever Wal-Mart is doing—that's wonderful—but I don't really care what they're doing (Interviewee 33, personal interview, 2011).

> I would say that the PQMD calls that the emergency team pulls together are one of the primary [sources of information]. For me, it's the PQMD emergency calls because, frankly, I'm also interested in benchmarking. I want to hear what the responses are. I want to hear what the NGO's are doing. I want to hear what the other pharmaceutical companies are doing. It's a good touch-base because I'll respond back to our team leadership. I'll put together a summary to see whether or not our response is in line with what other pharma companies are doing, and also give me a sense of who's where. We don't want to get out in front with any type of a statement that isn't aligned with what other members are doing and learning from and understanding their challenges, or something that we want to understand before we take action (Interviewee 32, personal interview, 2011).

> If [company name]'s doing more than Pfizer, then we've got a problem (laughter), so it's good to be able to have those PQMD calls as a source of information to inform decisions or recommendations internally (Interviewee 24, personal interview, 2011).

> When a disaster happens, immediately you've got someone in upper management going, 'What are we doing, because X company made an announcement and we have to make an announcement.' (Interviewee 30, personal interview, 2011)

However, not all respondents found value in the calls, as the following interviewee observed:

> I have to be honest, sometimes ... I've been on several of those disaster calls and I don't find a whole lot of value in them, going through a list of A to Z of 36 members, doing a laundry list of the things that they are doing, and having it captured in a spreadsheet that gets updated, especially in these large-scale disasters, having it updated several times or several versions and scrolling through lines and lines and cells and cells of text. I find that onerous and I don't find any value in it. ... I don't even attend the calls (Interviewee 29, personal interview, 2011).

In assessing these responses, a number of generalizations about PQMD's Emergency Call emerged: a) streamlining and synthesizing information represented the call's fundamental contribution to members, b) benchmarking both INGO and corporate responses assisted corporate firms contextualize their efforts, and c) information gathered during PQMD calls provided members with comparative data that they could then use to modify their own response efforts.

In summary, PQMD's Emergency Call represented an integral component for assembling and processing information for the purpose of decision-making concerning major medical and pharmaceutical corporations' responses to the Haiti earthquake.

6.4.5 Managing Employee Expectations

Increasingly, employees expect meaningful societal action from their employers (Collier & Esteban, 2007; Bird, et al., 2007). My interviews with PQMD company representatives suggested that employees at all levels of a firm have specific expectations for their company's roles related to disaster response. And, the information needed to meet those hopes appropriately is increasing. While it can be challenging to collect and convey that information, as already discussed, it is nonetheless essential for harnessing employee support. Not unexpectedly, interviewees shared that the Haitian 2010 earthquake elicited the largest employee response corporate representatives had ever experienced—for the same reasons that the firms responded

(Haiti's proximity to U.S., the poverty of the country, and the "magnitude" of the event).

Employees went so far as to self-organize when they perceived their company was not moving "quickly enough" to respond. The following observations from corporate interviewees illustrate some of the ways that employee expectations typically affect their internal disaster response coordination efforts—some of which can hinder rather than help. As one interviewee noted,

> Employees self-organizing becomes another fire for our corporate contributions department to manage in the midst of a disaster. The accounting department decided to start a water bottle collection/drive, which they then expected our department [CSR] to pay to ship to Haiti. It is a nightmare because they [employees] have no clue how much money it takes to ship that type of volume to Haiti and that instead of paying thousands in shipping for the container to log jam the port—that, by the way, crumbled in the earthquake [sarcastically stated]—or sit in a warehouse to melt. The funds could instead be used to support the local economy in purchasing water in-country. Employees are eager to do something, so we need to be immediate in our internal communications, vigilant and constantly informing them of company efforts or we are doomed to play the "bad guy," the folks that have to tell them, "our department will not ship the water bottles to Haiti," after all their hard work collecting them (Interviewee 17 personal interview, 2011).

Another interviewee echoed the need for prompt, but informed, action:

> Managing both employees and affiliates [offices], that's typically one of the things we have to do right away just because otherwise it just gets out of control. And so we just have to be very good about the communication. So what we try to do is pretty quickly … especially when it was like for Haiti, for example. Getting communications both internally and externally out there to sort of say, "Look, we are definitely doing something; this is what we are doing; if you want to help, this is how to do it. In particular, during the Haiti earthquake, we were saying that cash is really the most appropriate thing at this time. And here is a list of some of the partners that we're supporting. … Giving them at least some suggestions so, again, kind of more of an informed, more coordinated type of response, but of course not telling them that they HAVE to do it to this organization or that organization. But we're just making sure that they know that we're not just sort of sitting around twiddling our thumbs and that we are doing something. Because I think that's what a lot of them just want to make sure … they want to know whether the company is doing anything. And then, yeah, they usually want to do something to support but we try, really try, and keep them from doing that, at least providing them some options (Interviewee 1, personal interview, 2011).

Other corporate representatives spoke of the need for timely information sharing in their interviews:

> The one area in which Haiti was very different than other situations requiring emergency relief was in employee response. Immediately after the earthquake occurred, many employees requested information about how our company was helping and how they individually might help. Again, based on the time it took us to identify needs and ship products, we could not provide specific information about our response for some time, which may have led some to believe we were not committed to help or that our response was insufficient (Interviewee 9, personal interview, 2011).
>
> So, we have to deal with the employee outcry. Employees that are actually bringing that as an expectation to the companies that they work with. Absolutely. I would say that was THE driver for us responding to disasters starting with the Tsunami (Interviewee 10, personal interview, 2011).

Company information sharing concerning their adopted assistance strategy is not only internal, but also externally focused, according to another interviewee:

> You know it's a challenge because not only are we hearing internally from everybody all over the world who either wants to do something, has an idea, blah, blah, blah. I mean, from business unit president down to individual employees. But we're also getting inundated from various organizations that we belong to for information from us on what our response is. And so all of our membership organizations are wanting information, as if we don't have anything to do; frankly, with product and/or disaster relief—they want to kind of carve out their own niche and "take credit" for their members responses. So managing just the information is unbelievable (Interviewee 6, personal interview, 2011).

Another study participant highlighted the importance of existing corporate policies:

> So managing expectations internally, not just from senior management, but also from employees is a lot of work. Of course, when you see something like Haiti occur or Chile or Pakistan, you have very well-meaning employees. Maybe they're physicians and they go on medical missions. 'What's [our company] doing, what can I do?' kind of thing. So managing a lot of those things and just explaining to people what our policies are, why we have those policies in place and so forth can take some time away from actually preparing response (Interviewee 30, personal interview, 2011).

Despite some of the potential drawbacks of having employees involved in disaster relief response illustrated in these observations, such staff engagement builds a sense of community within a company—which can have a positive impact on total corporate donations. Equally important, disaster fundraising efforts are useful in aligning corporate and individual employee strategic philanthropic giving. Workplace giving offers employees a one-stop shop for charitable giving that is often leveraged, if matching gifts are available, and endorsed by an employer.

Corporations consider aligned strategic philanthropy to improve employee relations, morale, retention, and organizational culture. Simultaneously, the burst of good will and compassion that often follows a disaster must be managed effectively.

6.4.6 Corporate Findings Section Summary

This section investigated how corporate case-study participants perceived their roles and how they obtained necessary information to ensure appropriate and informed aid decisions, including how they used PQMD and their partners within the network in determining their firms' response strategies. It also confirmed that study participants were comfortable sharing organizational information pertaining to matters of collective concern. One member went so far as to say, "Oh gosh, I would not call a company outside of PQMD to ask them, 'What is your company doing in response to this or that disaster?' My word, I could not. I simply don't have that kind of relationship with other companies" (Interviewee 15, personal interview, 2011). Corporate member reliance on PQMD suggests that the phenomenon of increased engagement/communication is not random or simply a function of paying dues. Instead, this synergy reflects the systematic effects of participating, contributing, and relying on network members over a protracted period of time. These repeated interactions reinforce trust, and develop social capital, reciprocity, and predictability within the member community.

Communication challenges emerged in the interviews with PQMD's INGO headquarters personnel and corporate members—specifically with respect to what information is perceived as critical, where or from whom the information is sourced, and where the PQMD network fits into the communication supply chain. Corporate members reported that in almost every case they relied primarily on their preferred INGO partners (almost exclusively those within PQMD) and also on other members of PQMD's network to determine, craft, and guide their responses to

disaster events. Media informed the efforts of member companies, but did not determine them. PQMD's Emergency Call aided corporate donors in getting a big picture perspective of members' response plans, contextualizing other network members' contributions, and donation needs by benchmarking the activities of both INGO and other sector-specific corporate humanitarian actors. The interviews also indicated that corporate donor engagement and resource mobilization were strongly influenced by INGO partnerships, PQMD's Emergency Call, and companies' employee influence. In fact, these factors were shown to shape directly if and how a company is likely to respond to any given disaster. Additionally, the Partnership's corporate members cited "how much and what to give" to INGO partners as one of the largest initial logistical and strategic challenges confronting them immediately following a disaster.

CHAPTER SEVEN

SUMMARY and ANALYSIS

7.1 Introduction

This dissertation reviewed relevant scholarship on networks and disaster coordination as a starting point for exploring PQMD's internal dynamics in its response efforts to the Haitian earthquake. This chapter examines two important aspects of cross-sector networks operating in response to a disaster event: disaster response challenges and network attributes that support members in those relief/response efforts. I focus most closely on Partnership attributes linked to social capital, trust, and learning in the context of disaster response challenges among three principal PQMD member stakeholder groups.

I begin by summarizing and synthesizing research findings from the perspective of all three PQMD member groups. Thereafter, I review the network's attributes in light of this study's findings and known disaster challenges to explore whether, and to what extent, the Partnership facilitates coordination among its members in disaster responses.

7.2 Summary of Findings

Chapter 6 presented evidence addressing the study's central research questions. The findings suggested that challenges common to any disaster effort—namely, communication, collaboration, and coordination—were also commonly encountered by three PQMD stakeholder membership groups examined (INGO HQ personnel, INGO field staff, and corporate representatives) in mobilizing donated health products following the devastating 2010 Haitian earthquake. Additionally, the findings identify important functional competencies and network attributes found in the literature that align with many of this study's findings.

I found observable differences in the ways each member stakeholder group perceived and experienced these three central challenges of communication, collaboration, and coordination, as well as a multiplicity of frames for understanding difficulties linked to each. I outline those below.

7.2.1 Communication

A key conclusion from this study is that the information needs of each membership category within the network were distinct and their corresponding communication chains differed accordingly. In other words, each PQMD stakeholder group needed different information, and they communicated with discrete groups both to obtain and to pass on that information. Differences could partly be attributed to the specific target audience for each group, but also and more basically, to the manner in which each cadre interpreted the meaning and scope of the "communication challenge" they confronted—in terms of incoming and outgoing information. Secondly, the information chain was notably dependent on network members in its design, processes, and outcomes. This is to say, results of this study reveal that the information chain is bottom-up in its elaboration of initial disaster response efforts—field INGO staff feed information to HQ INGO representatives who in turn inform corporate donors of resources needed on-the-ground.

In general, two major sources of incoming information appeared essential for the respondents who took part in this study: PQMD's Emergency Call and field needs assessments provided by INGO staff. The formalized Emergency Calls channeled and streamlined communication among HQ INGO-corporate members. Members routinely used the call to address their "who, what, where, and how" questions. Specifically, the Emergency Call served several purposes for HQ INGO and corporate members:

- To discover which INGOs and corporate members are responding to a disaster; -the "who is responding" question;

- To enable INGOs and firms to understand what other members are doing and what they are responding with; -the "what" question;
- To locate where each member organization is responding/operating; -the "where" question;
- To identify how each organization plans to respond (INGO: vis-à-vis partner agencies, direct field presence, and/or in-country office; corporate: via cash/product/corporate volunteers); -the "how" question.

Interviews with PQMD's INGO HQ and corporate members suggested that the Partnership's ability to a) facilitate timely, trusted, and specific health donation information; b) identify core information; c) provide a forum to benchmark member efforts; and c) identify gaps in information flow were vital communication functions.

Field staff more closely associated the term "communication" with field-to-headquarters interactions and with building partnerships in-country. Keep in mind that most field INGO staff members in Haiti were initially introduced to PQMD as an organization in May 2010 and did not meet other field INGO staff from member PQMD organizations in-country until late August 2010. Prior to that time, few field INGO staffers were aware the network existed or that their organization was a member. In part, this is because there is no formalized communications channel for PQMD field staff to connect with other deployed network member organizations during a disaster. Although this point highlights a network opportunity to support and facilitate INGO field member interactions in the future, that responsibility will be inherently complex. To assist in this way, PQMD will need to reconcile four important elements:

- INGO field staff represent an ad-hoc member stakeholder (they are only "network members" when a disaster strikes);
- Unlike HQ INGO board representatives, field INGO staff are not voting board members (making their participation subject to board member decision and consensus);
- Field staff typically report back to HQ INGO staff as a modus operandi and rely on HQ INGO for resources and PQMD board representation; and

- Field INGO staff often change with every disaster (different professionals respond to different disasters), whereas HQ INGO representatives are often long-time members of PQMD.

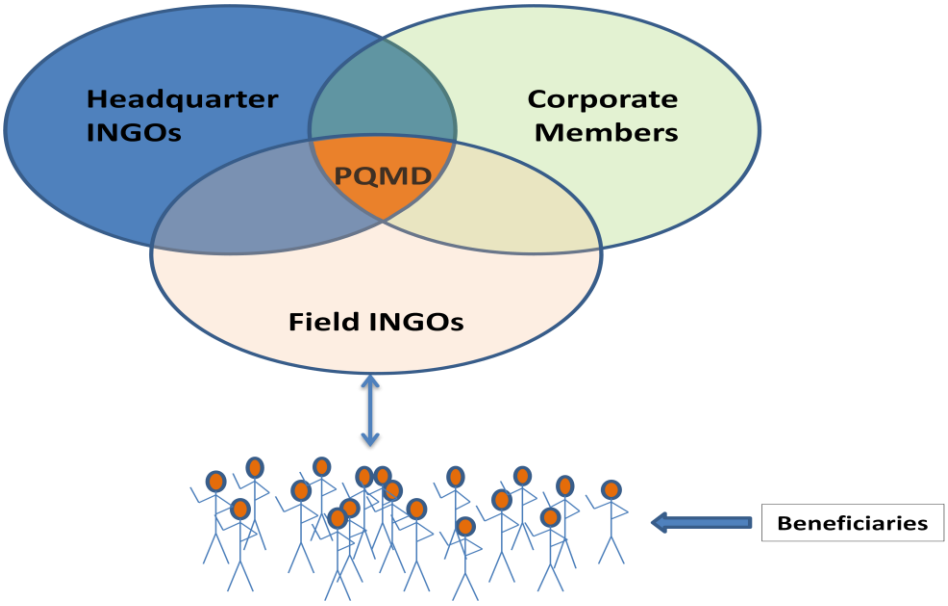
All of this is to say, field INGO staff members are PQMD members to the extent that they are part of the same organizations represented on PQMD's board. The same could be said of corporate members: not all employees of a member corporate company are formally members of PQMD. Instead, employees are represented by their board delegate.

Notably, the PQMD Haiti Assembly afforded the network a number of unique opportunities:

- PQMD's executive director and participants obtained a firsthand look at PQMD member INGO field programs and implementers in action;
- The Partnership was able to introduce itself as an organization to INGO field teams;
- PQMD's executive director was able to develop a more direct, encompassing, and refined understanding of INGO field member realities, needs, and concerns (as opposed to simply hearing those concerns as articulated by HQ INGOs as had always previously been the case); and
- PQMD was able to create a collaborative space in-country for field implementers to communicate.

In contrast to Figure 5, Figure 14 demonstrates the network's capacity to bring INGO field members into the fold relatively easily given the existing network infrastructure and established collaborative history of its HQ INGO and corporate members.

Figure 15: PQMD's Haiti Assembly Results



The Haiti Assembly also afforded PQMD an opportunity for a new role/identity and field perspective. Field visits and the hosting of the Haiti Assembly allowed PQMD's leadership not only to facilitate Emergency Calls, but also to participate in them based on knowledge obtained from 1) member INGO field staff, 2) meetings attended concerning coordination in Haiti, and 3) insights gleaned from the Haiti Assembly (field voices). These experiences allowed PQMD leaders to substantiate the information gathering processes of HQ INGOs and corporate members. In some respects, PQMD's role in this process could be viewed as further corroboration of firm and INGO member experiences and information based on field reports.

In a disaster scenario, INGO HQ members constitute a three-way communication matrix of relationships (HQ to field/HA to corporate donor/HQ to PQMD). INGO HQ members rely first and foremost on their organizational field staff and/or in-country field partners in order to understand on-the-ground needs so they can respond accordingly. Needs assessment data is used to survey organization resources, advise various stakeholders and donors of field needs, and inform organizational decision-making and response plans that are thereafter shared with PQMD

members on the Emergency Call. Moreover, the findings revealed that several HQ INGOs believed that donor-reporting requirements tended to drive information collection. Much of the work that INGO headquarters members discussed involved navigating and negotiating field needs and weighing those against cash and product offers. Respondents seemed to agree that part of the HQ INGOs' role is to broker between field and donor information needs, thereby effectively "translating" relief efforts into funding proposals and development. For the HQ INGOs, communication with donors is understood as procuring and securing funds and resources, or "getting donors what they need to secure funding" (Interviewee 14, personal interview, 2011). These efforts typically focus on procuring health product donations, cash support for operations, and program development proposals to secure field needs.

In general, PQMD's corporate members rely primarily on preferred INGO partners (see Table 8) for information in disaster situations (who, as noted earlier, rely primarily on their own field staff's assessments). Subsequently and sometimes concurrently, donor information needs then prompt HQ INGOs to work with field staff for field reports on donation placement and use. Thus, INGOs can have a significant impact on how their corporate partners respond in any given disaster. Moreover, for corporate members, PQMD's Emergency Call provides a wider intelligence perspective that serves to guide corporate funding choices, helps to formulate the scale of response, and assists in determining resource provision choices. The majority of corporate donors consider the PQMD Emergency Call a vital conduit for communication (gathering information), collaboration (sharing information and resources within a secure and trusted community of colleagues), and coordination (coordinating their disaster response plans with members internally and externally).

Another germane finding of this study was that PQMD corporate member organization employees can and do exert significant influence on how their firms respond to crisis events by playing a role in communication pathways. Employee expectations expedite corporate communications and disaster response planning. Corporate donors seek to channel the 'giving impulses' of their employees in a way that then aligns with other corporate efforts. Several corporate interviewees also discussed how the communication of disaster responses via their company's website aided in the development of a grassroots, bottom-up response among employees—often through a cash-match program, but also through collaborative efforts among those staffers.

On the subject of press releases, eight corporate and three HQ INGO members specifically noted that they highly valued PQMD's joint member press releases immediately following disasters and encouraged this type of "third-party endorsement" of cross-sectoral communications concerning global health initiatives. Conversely, two HQ INGO staff members and two corporate representatives did not value the PQMD press releases in the same way and felt strongly that the Partnership was not an operating agency and thus should not be reporting or "taking credit" for its members' efforts. Specifically, these NGO personnel saw the press releases as competing for media salience, possibly confusing donors, and potentially shifting attention away from their organizations' disaster response efforts at a critical moment for fundraising. Interestingly and conversely, field INGO staff welcomed and expressed a desire for more public relations of their efforts in the form of media networking, improved interorganizational linkages, and relationship building in-country.

Interviewees from all three stakeholder groups viewed the role the media served in communicating their efforts with mixed emotions. Whatever their reservations, most

respondents acknowledged the vital role the media can play in the success or failure of disaster response efforts. Media exposure affects funding, donor attention, INGO and UN deployment, and—by default—corporate response. Notwithstanding, respondents did not generally believe that PQMD was harnessing media power as effectively as it could. The media strategy adopted by most member organizations via the Partnership's website and Internet news media outlets seemed to be targeted at "the big picture"—where members were working, who they were working with, how they were responding (medical supplies, particularly in terms of volume). However, in addition to these concerns, of the 16 press releases (both corporate and INGO) I reviewed that PQMD issued during the three months following the Haiti earthquake on 12 January 2010, three mentioned advancing the quality of medical donations, endorsed the Partnership's donation standards, or advocated for widespread adherence to WHO Guidelines as part of integrated disaster response efforts. Meanwhile, not a single INGO press release issued between the 12th-31st of January 2010 (immediately following the Haiti disaster) mentioned PQMD membership at all. Similarly, only two corporate members mentioned PQMD in their press releases following the Haiti earthquake, despite the fact that more than half indicated that they valued the Partnership-corporate collaboration in publicizing disaster response. While this finding highlights the need to define more clearly PQMD's role in media communication efforts, it also points to the fact that cross-sector partnerships of all types will probably experience similar tensions between the network's needs as a collaborative and its members' specific media goals.

The fact that Partnership members viewed PQMD's role in communicating disaster relief information differently based on their own roles corresponds to broader interpretational differences among interviewees of the network's overall utility. For example, the majority of

INGO HQ members regarded PQMD as a vehicle for communication and collaboration, with no specific aspirations for field coordination. In other words, they viewed the network as a collaborative (rather than promoting coordination per se). For their part, corporate members valued PQMD's communication role more than its potential utility for encouraging collaboration/coordination. Finally, field INGO personnel (not surprisingly) spoke of PQMD as a useful conduit for enhancing in-country operational coordination and assisting in a hands-on problem-solving role. In the end, PQMD provided a useful structure for members to harmonize communication for INGO-corporate donor engagement and resource mobilization. Evidently, for corporate and INGO HQ members, working via PQMD reduced the information gathering learning curve and provided better-vetted information from trusted partners. Prompt access to accurate information increased informed decision-making and potentially allowed health product donations to arrive faster in-country for speedier distribution by field INGOs. As one corporate member suggested, "PQMD has brought infrastructure, depth, and breadth to cross-sector engagement during disasters" (Interviewee 7, personal interview, 2011). This finding suggests that a strategic, coordinated investment in PQMD's process of assessing, gathering, and disseminating information holds promise to stimulate greater network cohesion and more informed communication processes. And eventually, the network will need to answer the organizational question of whether and to what extent it intends to serve as a routine communication vehicle for member field INGO staff in disaster response.

7.2.2 Collaboration

The PQMD cross-sector network provided a collaborative platform in response to the 2010 Haitian earthquake for HQ INGOs and corporate members. For the INGO-corporate members, it provided PQMD's ongoing Emergency Calls (teleconference) and in-person board

meeting opportunities (February, June, October 2010 board meetings). For the field INGO members, the Partnership provided the August 2010 Haiti Assembly in Port-au-Prince and a designated field-only Google Group online site. These opportunities catalyzed group efforts in disaster planning, benchmarking, sustaining established partnerships, promoting shared responsibility, reinforcing mission, and the sharing and gathering of information for decision-making. Indeed, this list embodies how most INGO HQ-corporate participants defined "collaboration." As a result of PQMD's network, a roster of experienced corporate donors and INGOs were able to work in complementary ways to strengthen the impact of each other's efforts.

This study's interviews suggest that PQMD's network structure promotes cross-sector collaboration and integration (i.e., institutional cross-fertilization), and increases social and intellectual capital between HQ INGO and corporate members. In other words, the opportunity to work with trusted partners within a closed network was especially valued by HQ INGO-corporate interviewees. The network served as a knowledge-building infrastructure that reinforced the ability for INGO HQ-corporate members to make data-driven decisions through access to:

- Trustworthy, vetted, and verifiable field assessment information;
- Shared disaster response plans;
- A constant flow of new solutions and lessons learned; and
- Robust discourse among trusted expert colleagues and organizations.

For field INGO staff, PQMD's network provided a collaborative forum to get to know network and other INGO member deployed staff, conduct joint site visits, begin to build a Partnership identity as an extended member (and their role within it), evaluate PQMD's mission, and maximize collaborative potential. The resulting relationships and in-the-moment communication were enabled by the network's efforts and further supported by the PQMD-designated Google

Group noted above. In fact, some of these collaborations allowed members to leverage considerable resources to a degree otherwise unobtainable without the presence of additional PQMD members from both the INGO HQ-corporate members and the INGO field staff. In short, for all three stakeholder groups, the data presented in this study suggests that the network's role in response to Haiti was both catalytic and operational at varying levels of scale.

This analysis has also suggested that members relied on PQMD's network differently, depending on their affiliation. While listening to respondents discuss how they collaborated with the organization, it became clear that network stakeholders saw the benefits of PQMD membership differently. Table 9 provides a synthesis of the various network benefits of the Partnership based on the comments of the various members.

Table 9: Network Benefits of Collaborating with PQMD

Enhancing Credibility and Reputation	The power of 30-plus members from different sectors and countries enhances organizational standing in the donor community, adds a third-party endorsement to efforts, and provides validation to individual member's disaster action plans.
Best Practices and Access to Information	The ways in which other companies and INGOs respond to disasters stimulate programmatic changes or improvements across the network.
Professional Development	Participating in shared network governance expands professional skills.
Networking with other PQMD Members	Maintaining close contacts within and outside their own sector helps to maintain a sense of shared purpose and creates grounds for ongoing mutual respect and collaboration.
Improved Donations	Collaborating in a network tends to increase informed decision-making, quantity and quality of donations.
Disaster/Non-Disaster Coordination and Communication	Collaborating in a network builds relationships and contacts that can be used advantageously before, during, and after disaster events.
Improved Health Service Delivery	Collaborating in a network enhances on-the-ground effectiveness.
Advocacy	Collaborating in the Partnership emphasizes the conduct and sharing of research results, the identification of best practices to bridge learning gaps, and the development of policy guidelines and standards that can be shared among network members.

Table 10 provides the three primary group rankings of PQMD membership benefits from Table 9 according to their perceived order of importance and functional utility:

Table 10: Ranking of PQMD Membership by Network Stakeholder

Ranking	Corporate members	HQ INGO member	Field INGO staff
1	credibility/reputation	networking	improved donations
2	best practices & access to information	credibility/reputation	disaster and non-disaster coordination & communication
3	professional development	professional development	improved health service delivery
4	Improved health service delivery	best practices & access to information	advocacy
5	networking	advocacy	professional development

The one constant among the three groups was professional development. Ten participants from the INGO HQ-corporate members spoke about the critical role that PQMD had played in their personal and professional development. This feedback represents an important endorsement for network arrangements and participation.

Differences in the ways that members perceived the usefulness of PQMD have important implications for member collaboration going forward. An essential factor in increasing collaboration in disaster events for this network, therefore, is not only to facilitate the flow of information to response agents, but also to identify—by membership category—the specific forms of collaboration each most values and requires in its work to successfully galvanize and channel health product delivery efforts in disaster instances.

7.2.3 Coordination

Similar to the findings on collaboration above, coordination was also perceived differently among the three groups. The Assembly survey revealed that field INGO staff conceived coordination at an operational level, rather than from an aspirational/conceptual vantage point. Field INGOs were motivated by a desire to improve *collective* logistical and in

situ problem-solving capacity in-country. This is not entirely different from corporate PQMD members, who tended to view coordination as the result of organized information gathering/sharing and working with HQ INGO partners in disaster response (but more at a headquarters level—which is in-country for these actors), but less from a collective perspective.

Notably, INGO headquarters staff viewed coordination as an aspirational concept rather than an operational one. Nonetheless, US INGO thinking is still based on individual organizational needs in field deployment, rather than from a "field needs perspective," whereby all INGOs might work together to share resources. In short, at the headquarters level, INGOs expressed "friendly competition" for the procurement of health product donations. US field INGO staff did not discuss this "competitive" perception in their interviews, nor did European field professionals.

The findings reveal that coordination occurs at varying levels of analysis in a disaster response event. For example, the interviews confirm that INGO HQ-corporate members communicate and collaborate their efforts to identify product/cash needs, procure/obtain donations based on field needs (further to field assessments), and coordinate to supply and ship donations to the disaster site. At the INGO-to-INGO (HQ) and corporate-to-corporate level, communication and collaboration are mediated by participation in PQMD's Emergency Call and board meetings, which may or may not lead to coordinated or joint action. The field INGO-to-corporate member communication/collaboration most often takes place *through* INGO HQ staff, if at all. Communication and collaboration with direct beneficiaries (whether survivors or hospital/clinics) is typically field INGO-to-beneficiary. And finally field INGO-to-field INGO (of PQMD member organizations) happens if there is either a pre-established relationship (at the field level) or if HQ INGO staffs are working together and ask their respective field

professionals to do so. Interviews confirmed that PQMD's Emergency Calls improved the ability of members to benchmark and formulate a broad perspective on network-wide disaster response plans, which most interviewees argued increased the efficiency of disaster response activities among INGO and corporate network participants. Overall, network members (corporate and INGO HQ) regarded PQMD's Emergency Call and EC notes as helpful in identifying gaps in information flow, resource allocation, and response capacity, thereby improving the capacity of members to respond. PQMD membership also provided its HQ INGO and corporate donor affiliates with internal and external validation of disaster response plans. Several participants spoke of how the streamlined information obtained through the network had a profound impact on the quality of donation decisions and the amount of key resources they both shared and received. This, in turn, increased coordination opportunities and informed resource mobilization.

As with communication and collaboration, the coordination challenges for each of PQMD's stakeholder groups also differed. Corporate members were concerned with excessive or inappropriate aid, rapid assessment challenges, and the lack of monitoring and evaluation metrics (to support subsequent decision-making, accountability, and learning). In contrast, the primary concern among INGO HQ personnel was the expeditious procurement of medicines and medical supplies, as well as the timely sharing of information. Finally, the coordination worries expressed by INGO field staff were, understandably, not having enough medicines, medical supplies, or personnel to meet needs.

In the end, the PQMD network facilitated the potential for coordination. PQMD's network or, better perhaps, its structural existence, offers its members relational possibilities for coordination with the understanding that their relationships are dependent on the network that

enables them. In other words, because PQMD exists and has invested in building member relationships, trust, and mutual accountabilities in its standards (by which all members abide and with which all agree), possibilities for coordination are facilitated. The structure therefore presents relational possibilities for coordination without dictating the process or facilitating the outcomes by which such may occur. The network instead catalyzes and supports the relationships necessary for coordination to occur at all. In short, PQMD has built the necessary conditions for coordination by streamlining communication and collaboration pathways and providing an accessible territory of shared space from which opportunities can emerge for its participating members. All in all, it may be said the Partnership has nurtured communication, collaboration, and coordination pathways as part of its structure. The Partnership promotes governance and mandate by investing in relationship building to foster social capital and trust, and to secure organizational learning at both the network and member levels.

7.2.4 Network Attributes: Social Capital and Trust, Governance and Structure, and Learning

There is no "one size fits all" network model to promote communication, collaboration, and coordination. However, the INGO HQ and corporate member findings reveal that PQMD's governance and structure has yielded a strong culture. PQMD's bi-annual meetings have bolstered members' relationships, augmented the experiential way participants have learned about each other, and created shared experiences as meeting hosts. Members' social cohesion and goal consensus has been encouraged repeatedly by engaging with/contracting for research with multiple universities and global institutions in support of organizational development. Additionally, committee work, weekly conference calls, and co-creation of cross-sectoral donation standards have solidified norms of reciprocity, social cohesion, and trust.

The evidence from interviewee comments also strongly suggests that, institutionally, PQMD's network does galvanize collective action and engagement by facilitating communication and collaboration—principally through information gathering and knowledge/expertise-sharing immediately following a disaster event. The network norms and governance structure that includes bi-annual meetings, ongoing committee work, disaster meetings (when applicable), and weekly member teleconferences provides the means by which members organize themselves, confer responsibility, and continually reinforce social capital, trust, and mutual accountability. These meeting opportunities, whether face-to-face or teleconference, bolster members' support for the network and, by extension, its participating organizations. Improved network morale extends member trust and deepens commitment to improve health product donation practices in mutually reinforcing ways. Thus, the evidence supports the assertion that continued INGO HQ-corporate interaction enhances the quality and dissemination of information, reinforces shared expectations which simultaneously reinforces trust, and further builds partnerships among and across sectors/members within the network—making governance and structure mutually reinforcing factors in continually building trust and social capital.

And while PQMD was not organized to support field INGO member communication, collaboration, or coordination, the network innovated in response to the Haitian event and embraced the process of improving field actions through better knowledge and understanding (Fiol & Lyles, 1985). Field visits by PQMD's executive director unearthed INGO operations-level needs and staffers' view that improved field communication and collaboration could leverage power in numbers, facilitate coordination, and expedite needed activities. Moreover, field accounts affirmed OCHA's Cluster System was not meeting PQMD's INGO field

members' imperative for improved health product donation-specific in-country coordination. The field visits represented an experiential moment for both PQMD's network leadership and field INGO staffs, which resulted in organizational learning. In response, PQMD provided a collaborative space for field members to meet, share, and gather information; conduct site visits; and establish relationships with other network member INGO deployed staff (2010 Haiti Assembly). PQMD learned by testing best practices and experimenting (learning by exploring) based on the knowledge and experience from building the HQ INGO-business relationships over the years. PQMD's Haiti Assembly uncovered the practical knowledge and organizing capacities that can quickly develop among INGO field staff when pre-existing organizational relationships exist (longstanding trusted ties among HQ INGO members and donors), a collaborative space is provided, and the potential for improved coordination presents itself to a small group of humanitarian actors with,

- Common purpose and priorities (global health and disaster response);
- A shared practice and parameters of knowledge (global healthcare procurement, similar logistical needs, similar delivery/distribution supply chains of health product donations vis-à-vis in-country health facilities, clinics, and hospitals);
- Similar commodities (health product donations);
- Well-developed social capital and complementary missions (PQMD members); and
- Commonly accepted accountability standards and norms (PQMD's *Standards & Principles* and WHO *Drug Donation Guidelines*).

In short, facilitating field efforts represents a latent potential for PQMD's network to explore. For the Partnership, the prospect of improving coordination—in both disaster settings and long-term health development efforts (70% + 23% per Figure 13)—and the quality and quantity of donations could be more fully realized by greater field INGO member network integration. However, at a tactical level, PQMD would need to rethink its role if facilitation of

field INGOs is to be folded into it modus operandi. Strategies for inclusion will be challenging, if at all desired, at the board level.

7.3 Summary

This chapter has summarized the study's findings, reviewed the main factors identified as mechanisms for network coordination by network theory and the disaster coordination literature, and framed the analysis within the context of PQMD and the 2010 Haitian earthquake.

Overall, the data suggests that PQMD's network positively supports member communication and collaboration during disaster response efforts and provides a platform for the possibility of coordination. Institutionally, however, the Partnership's role is limited. And yet, the opportunity for cross-sectoral members to convene in disaster response instances would not otherwise exist were it not for PQMD. The evidence indicates the Partnership successfully links INGO-corporate expertise/knowledge; supports professional development; and improves information sharing, gathering, and decision-making for INGO headquarters and corporate members—all important antecedents to coordination. In the same vein, the network's governance and structure has a direct bearing on its members' synchronicity in relief efforts (corporate-INGO headquarters). The evidence also suggests PQMD's network members exhibit high levels of trust and social capital, as well as a companion willingness and capacity to learn and innovate in disaster scenarios in support of member needs (2010 Haiti Assembly). The possibility of coordination among INGO headquarters and corporate members exists precisely because the Partnership's participants communicate, collaborate, share cross-sectoral expertise, possess a strong sense of social cohesion, and jointly participate in knowledge translation and the institutional arrangements that affect those processes. Finally, the evidence also illuminates

latent network possibilities that remain relatively unexplored by PQMD in supporting communication, collaboration, and coordination efforts for member INGO field staffs.

CHAPTER EIGHT

CONCLUSION

8.1 Conclusions and Implications

This final chapter ties together the ideas and findings presented thus far. I provide a brief overview of the purposes of the study, first introduced in Chapter 1, and then share the investigation's overarching conclusions. I highlight this inquiry's contributions to the substantive bodies of literature that I identified as a frame for my effort in the introduction. Finally, I address potential avenues for future research.

Given the scale and magnitude of the 2010 earthquake and Haiti's already extensive poverty, PQMD members confronted formidable challenges in mobilizing to address the nation's needs in their focus areas. Nonetheless, despite virtually unparalleled logistical challenges, PQMD members were able to assemble, deliver, stock, warehouse, and dispense millions of dollars worth of life-saving supplies in support of hospitals, clinics, mobile clinics, and health posts via local indigenous partners, partner agencies, and field programs. Examining the Partnership's dynamics in the context of its members' response to the 2010 Haitian earthquake provided a rich opportunity to review one cross-sector network's efforts to address specific social needs following a major natural disaster.

Much evidence suggests networks provide a useful theoretical construct to explore member dynamics and the nature of relational and structural attributes of coordinative possibilities. This study provided a snapshot of one cross-sector collaborative's response to a single humanitarian event. In consequence, the findings outlined here should be regarded as preliminary and by no means generalizable. Nonetheless, these results inform network and disaster coordination studies and practice, and provide a platform for better understanding which

partnership activities and structures expedite more effective disaster responses. In this case, the relationships in which network members had long invested, and the protocols and structure those many interactions had yielded for intra-collaborative interactions, allowed for seamless member participation. At the macro-level, this study suggests cross-sector networks are moving into the mainstream of global health, business, and public policy. As action structures, networks blur the disaster response lines between corporate sector and civil society action.

PQMD member interviewees provided a number of insights into improving cross-sectoral response coordination during disaster events. The first is that networks can provide a space that supports communication, collaboration, and trust building, but this possibility must itself be continuously and self-consciously nurtured. Second, trusted and established partners benefit from participating in a cross-sector network during disaster response. Third, trust among network members facilitates learning and innovation and the partnership itself provides the scaffolding for the development of such progress only when opportunities are ensured to encourage it.

Indeed, this research suggests that networks can provide great benefits to humanitarian actors by formalizing unified communication and collaboration pathways among their participants by providing a platform for information-gathering, knowledge/expertise-sharing, and collaboration before, during, and after disaster events. What is more, the findings reveal that all network stakeholder groups must understand the partnership's key or ongoing communication and collaboration challenges similarly in order for members to support coordination effectively. For PQMD, the network itself has provided a venue for repeated interactions between firm and HQ representatives; no such accommodations yet exist for PQMD's field professionals. I have argued that network attributes, including trust, social capital, and governance and structure,

confer advantages on a partnership's capacity to support communication, collaboration, and ultimately coordination among its principals. It also seems clear that field INGO implementation efforts can benefit greatly from network support, but the conditions that allow PQMD to play this role are not yet in place.

Variation in the perceived role of PQMD by the organization's three stakeholder groups illustrates that networks confront both external and internal challenges. These hurdles must be managed effectively if collaboratives are to facilitate coordination for their members. PQMD worked most effectively as a "peak" association at the INGO HQ and corporate level. The interviews and surveys confirmed that field INGO disaster response challenges have not traditionally factored into PQMD's network mission. And although the network developed horizontally around the organizational needs of corporate contribution and INGO program development professionals—and its principals never conceived that it would have a vertical dimension, let alone in specific disaster field scenarios—it is now clear that the Partnership provides a structure through which to respond to INGO field needs, should its members elect to pursue this possibility. The Haiti Assembly fostered broad recognition amongst participants regarding the insufficiency of the network's current composition and activities to serve field needs. In other words, until the Haiti disaster field visits, PQMD leadership had been unaware that member field INGOs did not have communication and collaboration pathways with their network counterparts.

Two assumptions led PQMD principals to believe field communication and collaboration was occurring (prior to Haiti): a belief that since HQ INGO members had strong working relationships, this cooperation was trickling down to organizational field implementers, and that the OCHA Health Cluster mechanism provided field INGO implementers communication and

collaboration support in-country. Both of these assumptions proved inaccurate as neither PQMD nor OCHA were supplying network field actors needed support. That fact suggests four principal observations.

First, despite the fact that such did not occur for field actors in this case, PQMD's experience makes clear that networks can serve as surrogates for a central coordinating body and authority. The network asserted leadership by initiating regularly scheduled emergency calls among members post-disaster, developing call agendas, becoming responsible for minutes/note taking, and for dissemination of that information to members. PQMD also fielded media calls and developed press releases to inform the broader public of member and network activities. Some of the key member-perceived benefits of network participation included enhanced credibility and reputation; access to vetted, trusted, and health product donation-specific information and best practices; professional development opportunities; improved cooperation and decision-making capacity; and advocacy enhancement (see Table 9). All of these elements seem to work synergistically among supporting members, resulting in the creation of a space for communication, collaboration, and coordination. This finding and function represents a key reason for conceptualizing relief efforts in network terms as Stephenson (2006) has argued, and likely represents an underlying justification for the proliferation of network humanitarian structures.

A second emergent finding stresses the importance of trust and social capital and their roles in supporting learning within a network, as noted in the literature (Alter & Hage, 1993; Gazley, 2008; Kapucu, 2006a; Provan and Kenis, 2008; Uzzi, 1997; Wymer & Samu, 2003). This finding supports the literature and the theoretical developments which suggest that the more social cohesion and trust within a network, the more likely members are to communicate,

collaborate, and attempt to coordinate in a disaster event (and learn from each other throughout the entirety of such efforts). PQMD members perceived their functional roles in the network as complementary; e.g., each contributed competencies and resources toward a shared objective of improving health delivery. The collaborative space that participation in PQMD created allowed members to share their areas of expertise, best practices, and lessons learned, as well as to acquire knowledge to bolster their practice and decision-making while responding. The open and trusting character of the ties among partnership members provided each the opportunity to support and exchange perspectives that could then translate into changes in practice. When network participants share motivations and these are mutually reinforced among sector members during a disaster (employee motivation and corporate social responsibility on the part of private sector actors, and humanitarian organizational mission among INGO members), organizational divisions blur, if not all but disappear. In other words, in a trusted community of partners, generating and applying ideas gleaned from cross-sectoral participation encourages organizational innovation and individual professional development alike. PQMD has promoted the use of mutually reinforcing standards to share its members' expertise to build a solid infrastructure of common information and knowledge at the INGO HQ-corporate level.

This point leads to a third observation concerning the collective capacity of network members to remain flexible and adaptive. My May and August 2010 field visits convinced me that disaster response challenges at the OCHA Health Cluster level are too diffuse to support PQMD field INGO personnel in their efforts. The Haiti Assembly illustrated that field INGO PQMD members sought partners that face the same challenges, share the same mission/philosophy, and possess similar resources or capacity/skills (see Figure 9), so as to leverage collective problem-solving and to create an operational system for sharing

medicines/medical supplies/material in-country. Field implementers provide invaluable contributions to effective relief/response, which ideally could be used to support INGO fundraising while providing a vital feedback loop concerning the Partnership's ongoing efforts to improve the quality and delivery of health product donations. For perhaps obvious reasons, donations are most often misused in disaster a relief effort, which suggests that support for field INGO implementation efforts would likely yield a strong return on investment (Ali et al., 1988; Autier et al., 2002; Benaragama, Fernandopulle & Galappatthy, 2007; Cohen, 1990; Saunders, 1999). In light of the fact that PQMD was not originally structured to facilitate or mediate field INGO efforts, the network's INGO field members traditionally have had no communication/collaborative forum. Therefore, the potential to avoid duplication of services and collectively address challenges to meet field needs more effectively, while simultaneously creating the possibility of increased resource availability while better targeting existing medicines, should motivate Partnership members to consider this possible role seriously. However, before assuming such a role, network members will need to consider the collaborative's adaptive capacity, the possible tradeoffs involved, their financial capacity, and perhaps even revisit their conception of PQMD's mission.

A fourth important finding arising from my interviews is that the existence of a network structure appears to facilitate information flow, thereby increasing the likelihood for improved collaboration and coordination among its members in disaster response efforts. This teamwork was certainly true for INGO HQ-corporate members. This finding supports the literature, which states that networks are a key driver for effective information flow, joint learning, trust, and sense-making (Daboub and Calton, 2002; Provan & Kenis, 2008; Stephenson, 2005; Stephenson 2006; Waddell, 2011). In this case PQMD also extended its collaborative space to field INGOs

in Haiti; this potential was quickly realized in that context as well. The network's existence creates the relational possibilities for members to coordinate. In other words, the fact the network exists as a scaffolding structure facilitates communication and collaboration by encouraging long-standing ties and consequent information and cross-sectoral exchange. Information gathering, sharing, and facilitating form an important expectation of network membership, and interviewees reported that PQMD had increased the efficiency and effectiveness of their disaster response activities by catalyzing just such efforts. Moreover, an essential aspiration of increasing coordination of cross-sectoral disaster management is not only to provide information to response agents, but also to identify essential elements from the mass of data that would prove most useful and for what purposes. This inquiry found that PQMD provided an important conduit for communication and collaboration, especially for its peak-level members, and to a lesser extent, through its Haiti Assembly for member INGO field implementers.

PQMD peers at the field INGO level did not have the benefit of longstanding relationships built on regular interaction, board meetings, and teleconferences, but that will likely never be the case until the Partnership assists them with coordination. For every disaster event, organizations deploy different staff/employees depending on availability, event type, skills needed to respond, and in-country partners. Disaster staffs continually rotate as well since such scenarios are routinely emotionally and professionally exhausting. Meanwhile, PQMD representatives at the INGO HQ-corporate member level have typically served in those roles for many years, an attribute that is nearly impossible to replicate at the field level in a disaster response. Nevertheless, INGO field implementers were able to tap into their organizations' sanctioned headquarter participation and longtime investment in PQMD to embrace quickly the

idea of collaborating. This finding suggests that if PQMD were to invest resources and efforts in helping facilitate field INGO action, more integrated coordination efforts could result at that level as well.

In short, although the Partnership influenced all of its stakeholder efforts in Haiti to some degree, it did not do so uniformly. PQMD appeared to play a larger role in disaster-related decision-making for its corporate and HQ INGO partners, but was much less influential in INGO field-deployed staff efforts. That fact represents both a challenge and an opportunity for the collaborative. The varied interests of field actors added a layer of complexity to the network's functioning, but also created an opportunity to encourage network learning for those interested in health outcome improvements for populations targeted for assistance, increased disaster coordination, and the creation of more meaningful monitoring and evaluation mechanisms.

This inquiry contributes to a relatively sparse body of literature concerning disaster response involving network actors. This investigation has suggested that the lack of scholarship at the nexus of network studies and analyses of disaster response warrants efforts to address it. These findings also suggest that cross-sectoral networks can be used to identify communication and collaboration processes that can motivate future hypotheses about the nature of inter-organizational and cross-sectoral coordinative structures.

8.2 Areas for Future Research

The emerging field of cross-sectoral networks in disaster response holds the potential to shape the character of future humanitarian interventions. The relative dearth of scholarship on this topic highlights the need for further studies of cross-sectoral disaster response, which can then be used as a source for more adequate theorization and as practice-based evidence. This study points to the utility of bridging "learning gaps" by documenting disaster experiences and

successful (and unsuccessful) response initiatives in the study of these critical phenomena (Castleden et al., 2011). Additional research is needed to ascertain the full potential of integrating network and disaster coordination studies.

This analysis highlighted several fundamental challenges that cross-sector humanitarian actors face in their efforts to address communication, coordination, and collaboration obstacles in response to catastrophic events. Doubtless, however, those concerns examined do not constitute an exhaustive set. I expect future research to explore additional related challenges. I turn next to a brief discussion of several of these issues.

Identify obstacles

At a "nuts and bolts" level, future research could help identify additional obstacles that hinder health product donation efficacy and effectiveness by impeding INGO response capacity while working in emergency relief and international development efforts. Also, further studies are warranted to investigate networks' potential roles in facilitating their members' capacity to forge links with national governments and OCHA in disaster relief efforts. Although my research has shed light on impediments to the donation, delivery, and distribution of health product donations during disasters in general—and during the 2010 Haiti earthquake specifically—additional studies could enhance quality standards and streamline donation strategies for this domain in future disaster events.

Examine other types of networks

Since this study examined a select group of cross-sector corporate and INGO actors within the global healthcare/humanitarian sphere that are involved primarily in procuring and delivering health product donations, future research should examine other cross-sectoral networks, particularly within the realm of disaster relief (although not exclusively), and the

personnel who comprise them to examine their dynamics and import for improved coordination and cooperation in service outcomes. Additional studies could be designed to broaden,

- the range and type of INGO-business humanitarian actors investigated,
- the scope of analysis and range of questions considered,
- the disaster response settings (geographical locations), and
- the range/types of natural disasters explored.

This information would provide a richer understanding of cross-sectoral humanitarian action trends and purport.

Examine organization structure

This study investigated a fundamental question concerning organizational structure: whether networks facilitating cross-sectoral disaster response do so more effectively than organizations that act "alone"—in other words, without a "neutral agent" to foster interactions, trust, cooperation, and coordination among humanitarian players of diverse backgrounds and resources. While the study findings are encouraging in that PQMD did play such a convening and "net weaving" role, a great deal more needs to be known, as just noted, about the impediments, roles, motivations, and contributions of cross-sectoral networks engaged in responses to disaster events. This inquiry also raised another and related concern, whether the cross-sectoral character of PQMD was itself significant, or whether the findings would have been true of a same-sector network. I found high levels of trust among members of PQMD due to its scale (limited number of members, 32), structure (membership parity), and scope (well defined/delimited domain-health product donations). This is in contrast, for example, to InterAction, which plays a similar neutral facilitative role for INGOs with a much broader scope (disaster relief and sustainable development programs) and scale (190+ members). Further studies, which take these variables into account, will need to be undertaken.

This observation raises an interesting and related question: How does a network define and articulate its role and value in ways that make sense to its members when working in a disaster response context? This study suggests that galvanizing collective network action involves catalyzing relationship building, learning within a joint framework, providing a collaborative space, negotiating trade-offs, and managing conflict—all with the goal of flexibly and dynamically creating shared purpose, social cohesion, trust, and direction among otherwise autonomous members. The persistent challenge for PQMD's leadership—really, for all its members—was and will be to operate in a way that permits all three major network stakeholder perspectives to be recognized as plans and actions are developed. PQMD's executive director and board leadership must pay attention to the stated and implied goals of all member-actors simultaneously and then develop communication and management processes that allow INGO field staff to consider those sometimes competing perspectives in ways that ultimately improve health outcomes on-the-ground. This realization suggests that a network's ability to facilitate its members' capacity to engage more fully in a more integrated disaster management process—in other words, to mitigate, prepare, respond, and assist in recovery—depends as much on the cultures of its member organizations and their willingness to develop a clear set of norms and expectations as it does on developing supposed network integrating tools. The three-way intersection of competing decision-making structures, accountability expectations, and institutional perspectives suggests that networks may assist in promoting shared aspirations, but only to the extent that their members permit such to occur. This challenge represents a significant and interesting area for further inquiry.

Evaluate assessment, planning, and monitoring

Improving health outcomes in many developing nation contexts is difficult in the best of circumstances. The need for evidence-based research concerning health system planning, intervention, and monitoring is glaring. Bolton et al. (2007) have argued that this situation exists because "1) there is a bias toward finding positive impacts, 2) there is an inability to explore the basic question of whether a program has done more good than harm, and 3) there is limited information on which to make program improvements" (p. 391). Well-conceived project and program evaluation can demonstrate the results of resource investments and help discern whether the level of investment matches the tasks to be addressed. Further research should be done to investigate the roles of health product donations in disaster relief and recovery might begin to encourage inquiry squarely on the question of how to measure the impact of such interventions on recipients, an emphasis now markedly absent from the literature. Refining evaluation methodologies that can provide reliable empirical evidence about the effectiveness and limitations of cross-sector disaster response employing health product donations is likely to improve health outcomes for recipients. Current health product donation reporting is limited to quantitative indicators, such as how much was donated in financial or volume terms. Such information does not facilitate an analysis of disaster response quality or effectiveness. Russell (2005) has suggested that, "once organizations understand the benefit of monitoring and evaluation, lessons learned can be applied and standardized guidelines developed and implemented" (p. xx). The development of cross-sector disaster relief assessment metrics for drug donations, therefore, would be a vital contribution to all involved in such humanitarian disaster response and development efforts. This study has argued that a cross-sectoral "network," comprised of members whose primary objective is to respond as effectively as

possible to disasters and jointly in ongoing development initiatives as well, is nicely positioned to develop such a monitoring and evaluation system. But additional research is needed to confirm whether this apparent possibility can be realized.

Examine INGO influence on corporate involvement

An equally important consideration in network-based disaster response collaboration is the fact that INGO perceptions, participation, and capacity will likely influence future corporate behavior and involvement in such partnerships. INGO capacity for constructive and responsible cross-sector engagement is broadly documented, but it does not occur without obstacles. Damlamian has highlighted a central INGO-business engagement challenge. On the one hand, "NGOs have become instrumental in development work internationally, but they generally do not have the means and resources to carry out their projects efficiently in a sustainable manner" (2006, p. 5). On the other hand, "Companies desiring to be more responsible do not necessarily have the knowledge, training, or dedication to carry out development programs" (Damlamian, 2006, p.5). INGOs are leading the way in NGO-business relationships to address disasters, but they must do so in ways that permit firms to realize their own aims. PQMD corporate members have historically engaged with INGOs for aid delivery in disaster response for several reasons:

- INGOs by and large have 501(c)(3) status, making donor contributions charitable donations,
- Long-standing relationships,
- The public's general perception that INGOs are effective and trustworthy, and
- A shared perception that many developing world governments/governmental bodies are corrupt and bureaucratic.

With increasing market sector participation in disaster response, it is imperative that the collaborative landscape changes in a way that incentivizes company participation and innovation in disaster relief and recovery. Consider a joint statement released by the World Business

Council for Sustainable Development in 2010 urging for-profit firms to serve as catalysts for social and economic progress: "We believe that business succeeds best in societies that thrive. We further believe the leading companies of the future will be those that do business in a way that addresses the major development challenges" (World Business Council for Sustainable Development, 2010, para. 6). As for-profit firms learn how to assist in disaster response, they gain credibility, competence, and goodwill for any related future efforts they may launch. Going forward and maintaining market institution engagement is vital to INGOs' disaster response efforts, but grander strategies must also be found to generate broader understanding of networks that smooth the progress of cross-sectoral humanitarian actors. More research on this topic needs to be undertaken such that this budding phenomenon is more clearly understood.

Examine policy-making potential

Cross-sector action was and is embedded within the larger social, political, and economic environment, all of which are encompassed within a comprehensive view of global health, institutional mechanisms, and forms of organization that have evolved to respond better to the emerging challenges of the development process. As discussed in the literature review, networks represent a practicable vehicle for collective action, policy formulation, and giving voice to cross-sectoral actors in the global humanitarian action domain. McGuire and Agranoff (2007) have suggested that the most important barrier to the realization of that potential for networks lies in,

> converting a network-generated, multi-agency solution into policy 'energy.' Too often, networks find reasonable solution approaches, but then run into political, financial, or legal barriers that prevent the next action step. Although not well understood, the policy barrier to network success is one of the most logical and most powerful (p.39).

From this vantage point, networks themselves must consider how they will link with, build on, or support existing coordination and response mechanisms in order to become part of a solution to a

key issue in humanitarian action. Partnership policies are often informed and created by the "day-to-day decisions, routines, and strategies devised for coping with uncertainties, conflicts of interest, and cultural differences" (Long, 1999, p.23). Cross-sectoral networks offer invaluable insights at varying operational and relational scales to explore this challenge. Effective disaster response via cross-sector networks is hampered by the fact that there are few global standards for such efforts—a limitation mentioned by several interviewees and these surely cannot be developed without just such research reflection on the part of cross-sectoral partners. Thus, future inquiry should target and document the institutional arrangements that facilitate retention and sharing of the "lessons learned" in such initiatives so as to inform development of relevant public as well as organization-scale policies. In the case of PQMD and its development niche, such benchmarks could emerge as vital for disseminating knowledge, enhancing other partnerships, and improving the practice of disaster response at all phases of the health product donation supply chain.

All of this notwithstanding, the role of networks in disaster response and management remains an under-explored area—particularly with respect to political advocacy, monitoring/evaluation, and accountability. The results of this study provide a point for further inquiry. As noted by the corporate, HQ INGO, and INGO field staff who took part in this research, there are significant challenges associated with the donation, delivery, and distribution of health products during disasters even 'on a good day,' and these vary on an event-to-event basis. This study has highlighted the need for further empirical and practice-based research concerning how network actors can work together before, during, and after disaster by leveraging every available opportunity for effective cross-sector communication, collaboration, and coordination.

APPENDICES

APPENDIX A: 1988 CMC Guidelines for Donors & Recipients of Pharmaceutical Donations

1. Donations should consist only of essential drugs included on national drugs lists, if existing, or otherwise appearing in the WHO model list of essential drugs.

2. Drugs should be labeled by the generic-international nonproprietary name (INN).

3. If a drug is sent to the same place or program regularly, preferably the strength of the drug should not change.

4. Packaging units containing larger quantities are more suitable than small packets.
(This guideline should not be understood as an encouragement to repack from small packaging units of different batches and expiration dates.)

5. Drugs should have a shelf life of at least one year after estimated arrival in the country.

6. To enable local purchase, a financial contribution will, in many cases, be more appropriate.

Source: Christian Medical Commission. (1988). *Guidelines for Donors and Recipients of Pharmaceutical Donations.* Geneva: World Council of Churches, 1988.

APPENDIX B: PQMD INGO Members as of July 2012

The chart, organized alphabetically, was created to provide an overview of INGO members of PQMD. FBO denotes Faith based organizations. SEC denotes Secular organizations.

Organization	Year Founded	Country Headquarters	Employees Line 5 on 990s	Revenue 2009-990s in millions	Areas of operation	SEC /FBO	Info source *as of Aug 2011
Americares	1982	Stamford, CT//USA	130	$809	Global	SEC	Guidestar
Catholic Medical Mission Board	1928	New York-NY//USA	193	$180	Global	FBO	Guidestar
DRI	1948	Santa Barbara, CA//USA	47	$338	Global & U.S.	SEC	Guidestar
Heart to Heart	1992	Olathe, Kansas//USA	39	$96	Global & U.S.	SEC	Guidestar/H2H staff
Interchurch Medical Assistance, d/b/a IMA World Health	1960	Windsor, MD//USA	22	$99	Global & U.S	FBO	Guidestar/IMA staff
International Health Partners UK	2005	London, England//Europe	8	£19	Global	SEC	www.ihpuk.org// 2009-10 audited accounts//IHP staff
International Medical Corp	1984	Santa Monica, CA//USA	353	$131	Global & U.S.	SEC	Guidestar
MAP International	1954	Brunswick, GA//USA	66	$ 209	Global	FBO	Guidestar
Medical Teams International	1979	Portland, OR//USA	116	$212	Global	FBO	Guidestar
MediSend	1990	Dallas, Texas//USA	12	$2.4	Global	SEC	Guidestar/Staff info (Nov 2011)
Mercy Ships	1978	Garden Valley, Texas//USA	199	$28	Global	FBO	Guidestar
National Cancer Coalition	1994	Raleigh, NC//USA	5	$181	Global	SEC	Guidestar/NCC staff
Project HOPE	1958	Millwood, VA//USA	217	$192	Global	SEC	Guidestar
tulipe	1982	Paris, France,EU	3	$ 3.8	Global	SEC	www.tulipe.org
US Fund for UNICEF	1947	New York//USA	168	$244	Global	SEC	Guidestar
World Vision	1950	Federal Way, WA//USA	1469	$ 1,027	Global	FBO	Guidestar

APPENDIX C: Pharmaceutical Company Mergers & Acquisitions

The field of mergers/acquisitions/ buyouts is continually evolving and a dynamic landscape. This chart is by no means comprehensive in its elaboration. The chart is simply a preliminary snapshot of major changes since 1999. It reveals a significant reduction and consolidation of global healthcare manufacturing health product donation donors.

Companies from 1999-2009	# Combined	Now
Bristol-Myers + Squibb + DuPont	3	BMS
Schering Plough	1	Merck
Celltech + Medeva	2	Celltech
Elan + Carnrick	2	Elan
GlaxoWellcome[1] + Affymax + BW + SmithKline + Beecham + Block Drug	6	GSK[2]
Hoescht-Roeschel + Marion + Rhone-Poulac	3	Aventis
Ciba-Geigy + Ciba-Vision + Sandoz + Geneva + Apothecon	5	Novartis
Pfizer + Warner-Lambert + Pharmacia + UpJohn + Searle + Wyeth (Ayerst + AHP + Whitehall + Robbins + Lederle)	11	Pfizer
Watson + Schein	2	Watson
Boehringer Ingelheim + Bedford Laboratories + Roxane Laboratories	3	BI
Abbott + Kos pharmaceuticals	2	Abbott
Watson + Andrx	2	Watson
Sanofi-Synthelabo + Aventis	2	Sanofi
American Pharmaceutical Partners + American Bioscience + Abraxis BioScience	3	Celgene
Alza + Centocor + Neutrogena + Codman + Tibotec	5	J & J Family
Promethus + Faro	2	Prometheus Labs
Lemmon + Biocraft + Novopharm + Copley + Teva	5	Teva
ServiceMaster + Aramark	2	Aramark
Astra Pharmaceuticals + Zeneca	2	AstraZeneca
Alpharma + PurePac + Faulding	4	Actavis
International Vitamin Corp. + Inverness Medical Nutritionals Group	2	Inverness Medical Innovations
MedPointe + Carter Pharma + Wallace Labs	3	MedPointe
Valeant + Aton	2	Biovail
TOTAL	**73**	**23**

1) Glaxo acquired Affymax in 1995, Glaxo merged with Wellcome in 1995
2) GSK sold Affymax in 2001

APPENDIX D: HAITI Assembly Survey Instrument

The full survey was administered 25 August 2010 in Port-au-Prince.

ORGANIZATIONAL CHARACTERISTICS:

1. Is your organization a member of the Partnership for Quality Medical Donations (PQMD)?

____YES ____NO ____UNSURE

2. If YES, please identify your organization's affiliation/association to PQMD (check one):

____European NGO Representative ____European NGO Field Representative
____U.S. NGO Representative ____U.S. NGO Field Representative
____Haitian NGO Representative ____U.S./European Corporate Member
____No association/affiliation to PQMD ____UNSURE of association/affiliation
____Other: _____

3. Please CHECK your TOP FIVE organizational priorities:

____Long term health development programs ____Medical provision-both donated & purchased
____Health service delivery (not captured elsewhere) ____Disease specific interventions
____Disaster Relief ____Education/Training
____Short term medical mission programs ____Health volunteer programs
____Mental Health ____Shelter
____Food distribution ____Water & Sanitation
____Other: _____ ____Other: _____

4. Please CHECK PQMD's TOP FIVE organizational priorities:

____Improve health service delivery outcomes ____Disaster Relief coordination
____Education/Training ____Convene member activities
____Coordinate member activities ____Communicate member activities
____Advocate on behalf of membership ____Improve quality & quantity of donations
____Increase produce to give programs ____Increase disease-specific programs
____Conduct research on behalf of members ____Policy change agents
____Other: _____

5. When did your organization begin working in Haiti (check one)?

____Before the Jan 2010 earthquake → *If prior to earthquake, how many years?* _____
____Within the 1st week of earthquake ____Within the 1st month of earthquake
____Within the first 3 months of earthquake ____Within the first 6 months
____Other: _____

6. What factors motivated your organization's response (check all that apply)?

_____organizational mission ____media and media rumor
____donor contributions/donor response ____already had presence in Haiti
____NGO partner request in affected area ____Haitian government request
____what or how other organizations were responding
____humanitarian response guidelines
____Other factors: _____

7. Your organization collected its own information/intelligence/need's assessment before responding in Haiti

____True ____False

8. Your organization collaborated with other agencies to conduct a need's assessments in Haiti

____True ____False

9. Is or did your organization collaborate with other PQMD members in Haiti response?

____**NO.** Check all that apply below:	____**YES.** Check all that apply below:
____Not familiar with PQMD NGO's work	____sharing medicines
____Collaborative process takes too long	____sharing information
____Competing organizational mission	____sharing logistic/delivery resources
____No MOU in place	____sharing office space
____Unaware/unfamiliar with PQMD NGOs	____sharing warehouse space
____Other: _____	____working with same partner recipient agency
____Other:_____	____Other: _____

10. Do your organizational standard operating procedures for responding to disaster relief events include guidelines for establishing coordination with other PQMD members?

____YES ____NO ____Other: _____

11. Please CHECK TOP FIVE factors in choosing partners/partnerships in Haiti?

____Shared mission/philosophy
____Resources or capacity/skills (they have resources or skills/capacity needed/wanted)
____Trusted partner or pre-established relationship with partner
____Leverage potential --a national/ international presence that will maximize visibility/impact
____Network affiliation –the partner is affiliated to same networks
____Strong accountability standards
____In-country presence prior to January 2010 earthquake
____Partner had NGO registration in Haiti prior to January 2010 earthquake
____Technical support
____Ability to provide medical personnel
____Other: _____

Examples for questions 12 – 15 of networks/forums/affiliations (but not limited to) are as follows:

Coordination Group =	NGO members led by InterAction
Haitian Government =	MOH, MOF, MOE, any government ministry or entity
OCHA =	United Nations Office for the Coordination of Humanitarian Affairs
USAID =	United States Agency for International Development
PQMD =	Partnership for Quality Medical Donations
AERDO =	Association of Evangelical Relief & Development Organizations
PAHO =	Pan American Health Organization
CDAC =	Communicating with Disaster affected communities
WHO=	World Health Organization
ECHO =	European Commission Humanitarian Affairs & Civil Protection
IFRC =	International Federation of Red Cross and Red Crescent Societies
Informal=	Any consortium of NGO actors that are loosely affiliated
Media=	includes print, radio, television, and internet sources

12. Aside from PQMD, what alliances, networks, partnerships or affiliations does your organization participate in *that support your relief efforts in Haiti*?

13. Have there been useful networks/forums/affiliations for *collective NGO problem solving* in Haiti?

____NO ____YES If yes, please identify top three

14. Have there been useful networks/forums/affiliations for *gathering information* in Haiti?

____NO ____YES If yes, please identify top three

15. Have there been useful networks/forums <u>for *coordination (with NGOs or government)*</u>in Haiti?

____NO ____YES If yes, please identify top three

16. Has your organization experienced any challenges/difficulties/obstacles in Haiti in the implementation of your programs (check all that apply)?

____internal communication ____external communication ____ religion
____lack of public awareness ____accurate media coverage ____transportation
____Haitian government ____supply chain breakdowns ____donor expectations
____competition among NGOs ____language/culture ____lack of staff capacity
____legal ____lack of timely information ____NGO registration
____security ____warehousing inventory ____customs clearance
____managing/distributing drug inventory ____hurricane contingency Planning
____short dated donations ____donations not appropriate (or excessive) to disaster needs
____destruction of expired donations ____NGO coordination--No central agency or forum
____failure/incompatibility of communication equipment
____Other:_____

17. Does your organization use any software, technology, internet site or on-line resource tool to coordinate its activities with other NGOs or donors? If so, which?
18. What is the most important thing you learned about the crisis through the media in the last six months?
19. In your view, what could PQMD be doing to support your organization's ability to respond to disasters more effectively? Please provide suggestions, identify opportunities or comment on this idea.
20. Please make any additional comments regarding humanitarian relief in response to Haiti.

APPENDIX E: PQMD Corporate Interview Guide

1. Could you tell me about your role within "_____name of company___" as it relates to disaster relief response?
2. Does your company have policies/procedures in place for responding to disasters?
    a. How does your corporation typically respond? *For example cash/ product donations, matching gift program, employee volunteer opportunities, special fundraising events, other ways?*
    b. How does "company name" budget for disaster response?
    c. Does your company enter into an MOU with INGO partners for disaster relief partnership?
    d. Do any external guidelines inform your relief response efforts? *For example, SPHERE project, WHO Guidelines, AERDO guidelines, InterAction Guidelines, PQMD stds, others?*
3. What three most important challenges must you manage in order to respond to disasters? *For example (but not limited to) Foreign Corrupt Practices Act, timely information, medical mission requests, redundant giving concerns, product dating, available inventory, internal budgets, disaster giving committee, manufacturing, sales & marketing, supply chain issues (like cold chain capacity), affiliate autonomy in giving, employees self organizing, others?*
4. In responding to a disaster event, what are your primary sources of information? Who or what do you rely on to get timely information?
5. What top three factors does your organization consider when deciding which INGO/INGOs to partner with during a disaster?
6. Did your corporation respond to the Haitian 2010 earthquake?
    a. What factors influenced your organization's decision to respond to Haiti?
    b. In what capacity did you respond—what did you do?
    c. What factors does/did your organization consider important in choosing which INGO(s) to partner with in Haiti?
    d. What challenges did you face in responding to this disaster?
        i. External legal/structural/cultural
        ii. Internal organizational
        iii. Communication
        iv. Coordination
    e. In what ways can these challenges be mitigated?
        i. What would you change and why?
7. In your experience, was responding to Haiti's earthquake unique/different/unusual in any way? What has been your most valuable lesson learned?
8. Please tell me about your organization's participation in PQMD.
    a. How long has your organization been a member?
    b. Did/do you regularly participate in PQMD's disaster response calls and/or other relief coordinating activities? Why or why not?
    c. Does membership to PQMD *enhance or inform or support* your organization's disaster relief coordination efforts?
        i. If YES-How, which and what ways?
        ii. If NO-Why/why not? Does it detract?
        iii. Are you more likely to coordinate disaster relief efforts with other PQMD INGOs/corporate members?
9. Is there anything else you would like to tell me about your corporation and/or its efforts to provide humanitarian relief in response in Haiti?

Closing: It's been a genuine pleasure! Thank you so much for your time and for participating in this interview. Is it okay for me to contact you again if I need to clarify any of your statements?

APPENDIX F: PQMD INGO Headquarter Interview Guide

1. Could you tell me a little bit about your role within your organization as it relates to disaster relief response?

2. Does your company have policies/procedures in place for responding to disasters?

3. What factors influenced your organization's decision to respond to Haiti?
    a. In what capacity did you respond—what did you do?

4. Do/did you work with other organizations to coordinate Haitian relief efforts?
    a. If YES, Who and Why?

5. What factors does/did your organization consider important in choosing who to partner with in Haiti?

6. What barriers did you face in responding to this disaster?
    a. External legal/structural/cultural
    b. Internal organizational
    c. Communication
    d. Coordination

7. In what ways can these barriers be mitigated? What would you change and why?

8. In your experience, was responding to Haiti's earthquake unique/different/unusual in any way? What has been your most valuable lesson learned about coordination in responding to Haiti's 2010 earthquake?

9. Did/do you regularly participate in PQMD's disaster response calls and/or other relief coordinating activities? Why or why not?

10. Does membership to PQMD *enhance or inform or support* your organization's disaster relief coordination efforts?
    a. If YES-How, which and what ways?
    b. If NO-Why/why not? Does it detract?
    c. Has participating in PQMD enhanced the probability that your organization will coordinate disaster relief efforts with other PQMD INGOs/corporate members
    d. Should PQMD expand the capacity of its members in responding to disaster relief events? How?

11. Is there anything else you would like to tell me about your organization and its efforts to provide humanitarian relief?

Closing: It's been a genuine pleasure! Thank you so much for your time and for participating in this interview. Is it okay for me to contact you again if I need to clarify any of your statements?

APPENDIX G: HAITI Assembly Survey - Question 19

The full survey was administered 25 August 2010 in Port-au-Prince.

In your view, what could PQMD be doing to support your organization's ability to respond to disasters more effectively? Please provide suggestions, identify opportunities or comment on this idea.

1	The website/weblog to share info
2	improve field level coordination
3	improved communication to help field director connect & reconvene after several weeks/months
6	perhaps collect & distribute key Q& A's referencing specific disaster situations to ??, i.e., " how can we dispose expired meds in Haiti
7	GIK sharing in terms of exchanges in resources across partners
8	1)help find funding, 2)coordinate member info pertinent to field work, 3) "go between" corporate donors, 4) supply/info to corporations or per corporate desires
11	connection to other NGOs that work in the field, training for our personnel
12	help me stay stocked with known needed items that I typically use
13	assist in local level coordination among partner agencies
14	some kind of center of excellence and organized information sharing from field NGO, HQ NGO & corporate partners--provides forum/facilities organization activities, needs, advise on successes, resources lacked and in excess. Support the coordination of pharmaceutical logistics & needs lists of members and excess lists, etc.
15	provide an avenue/forum for discussion among field staff about logistics, customs clearance, registration and document field staff story
16	If PQMD can work on that possibility to resolve network problems collectively to help NGOs. To work more closely and put a system that will help them more effective in sharing together
17	immediately inform each in-country member who is represented on the ground & their contact info (via email or test so is @ the onset) Not via website due to disaster logistics.
18	1) Keep donations on schedule for non-disaster related programs. We experienced a significant challenge to our regular programs because "we were sending everything to Haiti." 2) Also improved during Katrina.
19	1) Ask corporate members to share online if they are open to supporting relief efforts either through cash donations or GIK donations (perhaps service contributions). 2)Perhaps set up a joint on-line workspace for field operating members for date sharing-yet also to inform corporate members. 3)Posting of documents and/or information that can be shared with others.

APPENDIX H: Copyright Approval for Figure 1 on page 37

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APPENDIX I: IRB Approval Letter 24 January 2011

VirginiaTech

Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, Virginia 24060
540/231-4606 Fax 540/231-0959
e-mail irb@vt.edu
Website: www.irb.vt.edu

MEMORANDUM

DATE: January 24, 2011

TO: Max O. Stephenson, Veronica Arroyave

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires October 26, 2013)

PROTOCOL TITLE: Understanding Cross Sector Partnership Networks as Stakeholders in Humanitarian Relief Coordination: A Case Study of Partnership for Quality Medical Donation's Disaster Relief Response to the 2010 Haitian Earthquake

IRB NUMBER: 11-045

Effective January 24, 2011, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the new protocol for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: **Expedited, under 45 CFR 46.110 category(ies) 5, 6, 7**
Protocol Approval Date: **1/24/2011**
Protocol Expiration Date: **1/23/2012**
Continuing Review Due Date*: **1/9/2012**
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:
Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

*Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

cc: File

APPENDIX J: IRB Approval Letter Amendment 3 May 2011

VirginiaTech

Office of Research Compliance
Institutional Review Board
2000 Kraft Drive, Suite 2000 (0497)
Blacksburg, Virginia 24060
540/231-4606 Fax 540/231-0959
e-mail irb@vt.edu
Website: www.irb.vt.edu

MEMORANDUM

DATE: May 3, 2011

TO: Max O. Stephenson, Veronica Arroyave

FROM: Virginia Tech Institutional Review Board (FWA00000572, expires October 26, 2013)

PROTOCOL TITLE: Understanding Cross Sector Partnership Networks as Stakeholders in Humanitarian Relief Coordination: A Case Study of Partnership for Quality Medical Donation's Disaster Relief Response to the 2010 Haitian Earthquake

IRB NUMBER: 11-045

Effective May 3, 2011, the Virginia Tech IRB Chair, Dr. David M. Moore, approved the amendment request for the above-mentioned research protocol.

This approval provides permission to begin the human subject activities outlined in the IRB-approved protocol and supporting documents.

Plans to deviate from the approved protocol and/or supporting documents must be submitted to the IRB as an amendment request and approved by the IRB prior to the implementation of any changes, regardless of how minor, except where necessary to eliminate apparent immediate hazards to the subjects. Report promptly to the IRB any injuries or other unanticipated or adverse events involving risks or harms to human research subjects or others.

All investigators (listed above) are required to comply with the researcher requirements outlined at http://www.irb.vt.edu/pages/responsibilities.htm (please review before the commencement of your research).

PROTOCOL INFORMATION:
Approved as: **Expedited, under 45 CFR 46.110 category(ies) 5, 6, 7**
Protocol Approval Date: **1/24/2011**
Protocol Expiration Date: **1/23/2012**
Continuing Review Due Date*: **1/9/2012**
*Date a Continuing Review application is due to the IRB office if human subject activities covered under this protocol, including data analysis, are to continue beyond the Protocol Expiration Date.

FEDERALLY FUNDED RESEARCH REQUIREMENTS:
Per federally regulations, 45 CFR 46.103(f), the IRB is required to compare all federally funded grant proposals / work statements to the IRB protocol(s) which cover the human research activities included in the proposal / work statement before funds are released. Note that this requirement does not apply to Exempt and Interim IRB protocols, or grants for which VT is not the primary awardee.

The table on the following page indicates whether grant proposals are related to this IRB protocol, and which of the listed proposals, if any, have been compared to this IRB protocol, if required.

Date*	OSP Number	Sponsor	Grant Comparison Conducted?

*Date this proposal number was compared, assessed as not requiring comparison, or comparison information was revised.

If this IRB protocol is to cover any other grant proposals, please contact the IRB office (irbadmin@vt.edu) immediately.

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ENDNOTES

[i] Fifteen of 16 PQMD INGO members responded to the 2010 Haitian earthquake. One PQMD INGO member is not an emergency response organization per se, National Cancer Coalition, such that it may fairly be said that 100% of those network members that engage in disaster response responded to the Haitian disaster.

[ii] Dynes grapples with definitions of disaster in his 2004 article entitled, "Expanding the Horizons of Disaster Research," published in *Natural Hazards Observer* 28 (Number 4): 1-2. 2004. See also Quarantelli's article, "What is disaster?" in *International Journal of Mass Emergencies and Disasters*, 13(3): 221-230. 1995.

[iii] For more on the topic of cross-border charitable giving, see book: *International Charitable Giving*, edited by Clive Cutbill, Alison Paines & Murray Hallam, 2013.

[iv] Heart to Heart 3 staff (Headquarter offices, Bellaire & Leogane Clinic), Americares 2 staff (Headquarter/Warehouse offices, Centre de Sante Communautaire, Delmas 33, City Med Clinic), IMC 6 staff (IMC office (roundtable with 4 health program directors), General Hospital, Petionville Camp-50K people), MAP International 2 staff (Mission of HOPE, Christian Aid Ministries, King's Hospital), Medical Teams International 2 staff (Leogane), plus attended CDAC - Communicating with Disaster Affected Communities meeting.

[v] I interviewed the U.S. representative of Boehringer Ingelheim.

[vi] Charitable deductions cannot, under current law, exceed 10 per cent of taxable corporate income. Many healthcare manufacturers forego the tax deductibility of health product donations all together when working directly with developing nation government ministries or as members of global alliance efforts (IRS, Publication 542).

[vii] Chad Hayward, ACCORD's executive director confirmed the 1994 publication date via email 17 April 2012.

[viii] The Christian Medical Commission, established in 1968, was as a semi-autonomous body of the World Council of Churches.

[ix] Meeting held in Nairobi, Kenya, from 25-29 November 1985 named *Conference of Experts on the Rational Use of Drugs* discusses interventions to improve drug prescribing see conference findings: http://apps.who.int/medicinedocs/documents/s17054e/s17054e.pdf

[x] ANSI "oversees the creation, promulgation and use of thousands of norms and guidelines that directly affect businesses in nearly every sector."

[xi] Heart to Heart, Americares, International Medical Corp, MAP International and Medical Teams International.

[xii] Heart to Heart 3 staff (Headquarter offices, Bellaire & Leogane Clinic); Americares 2 staff (Headquarter/Warehouse offices, Centre de Sante Communautaire, Delmas 33, City Med Clinic); IMC 6 staff (IMC office (roundtable with 4 health program directors), (General Hospital, Petionville Camp-50K people); MAP International 2 staff + 4 field partner staff (Mission of HOPE, Christian Aid Ministries, King's Hospital); Medical Teams International 1 staff+WHO field operative (Leogane); plus attended CDAC - Communicating with Disaster Affected Communities meeting.

[xiii] http://www.aoml.noaa.gov/hrd/tcfaq/G1.html

[xiv] Myron Aldrink, Northwest Medical Teams, Board Chair of PQMD from 2008-2010

[xv] Lois Ann Porter, VisionLink, meeting facilitator

[xvi] Verónica Arroyave, Virginia Tech researcher