An Exploration of Participant Motives and Motivational Tensions in Short-Term Medical Service Trips

By

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An Exploration of Participant Motives and Motivational Tensions in Short-Term Medical Service Trips

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Abstract

Short-term medical service trips (MSTs) are an increasingly popular, although not new, way for healthcare providers from high-income countries (HICs) to provide healthcare in low- and middle-income countries (LMICs). In spite of criticisms for ethical marginality and questionable effectiveness, participants remain generally enthusiastic.

This investigation uses a systematic literature review coupled with qualitative in-depth interviews embedded in an overall case-study approach to answer two primary research questions: (1) what is the status of the existing empirical data surrounding MST activities found in the published medical literature and (2) what do narratives from key members of a medical service organization tell us about the motives and motivational tensions of MST volunteers. I selected, for the case study, a medical service organization that plans and implements both medical and surgical MSTs in countries throughout the world.

Paper one systematically reviews the MST literature reporting on empirical evidence. Nearly 95 percent of published articles lack significant data collection. By incorporating data collection into service trips, groups can begin to address the gap between providing care and understanding its impact on the communities being served.

Paper two explores in-depth, the perspectives and experiences of volunteer participants, hoping to highlight the reasons they give for participating in MSTs. The existing literature includes a number of closed-ended surveys that create a gap by leaving out the intricacies of volunteer motivations. This paper also examines the potential relationship between the limited attention volunteers place on evaluating MST outcomes.

The third paper discusses the relationships MST volunteers build with healthcare workers (HCWs) in the host communities. Previously published articles fail to include in-depth

descriptions of the perspectives or experiences of volunteers from HICs associated with these relationships. Volunteers express short- and long-term goals for the relationships they develop on MSTs. The purpose of this paper is to explore how volunteers make choices that influence the balance between these goals. Individual team leaders create a culture that either promotes interactions that empower or overpower local HCWs. Awareness of the lack of balance in power and the sociocultural impact of that imbalance may help volunteers provide higher quality care.

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Chapter 1: Introduction

Addressing the healthcare needs of the medically underserved in low- and middle-income countries (LMICs) remains challenging for governments with inadequate resources, both financial and human. For decades, one response from providers in high-income countries (HICs) has been short-term medical service trips (MSTs). MSTs as a model of healthcare delivery represent a relatively new area of research in the public health and health services research fields. The need for the evaluation of these services began my pursuit of this field of study, but the striking absence of scholarship on the topic required an interim step so I could better understand the volunteers and the medical service organizations that perform this work. This study, therefore, explores the narratives of key members of a single medical service organization in order to begin to answer why people participate in MSTs, the meaning of their MST experiences, and what benefits they perceive that MSTs provide.

The purpose of this introduction is to locate the scholarship of this study on MSTs within the humanitarian healthcare delivery landscape, express the scope of the healthcare needs in LMICs, and describe how MSTs aim to serve as an answer for these needs. I also present an overview of the three publishable papers that report the findings of my research, including a systematic review of the literature and two papers each analyzing key themes emerging from the qualitative in-depth interviews. Finally, I discuss the contribution of my research that my research makes to the development of evidence-based research in the field of global humanitarian healthcare.

Humanitarian Healthcare as an Industry

Humanitarian aid is a complex network of government organizations, non-governmental organizations (NGOs), and international global cooperatives like the World Health Organization. It has arisen as part of a transformation resulting from mass media, affordable air travel, transnational migration, and the global economy pushing global citizens closer together. These

forces, most often referred to as globalization, work to tie economies, cultures, and societies together without regard for distance or borders. The result is a world more aware of and concerned with the problems, disasters, and needs that face our neighbors. Humanitarianism has become a global industry and over the last 20 years the number, influence, and impact of NGOs has grown significantly (Berger, 2003). Despite the magnitude of the endeavor, this transnational enterprise goes largely unregulated and unnoticed.

The inherent complexity of the pathway from donors to beneficiaries raises concerns about accountability for these organizations. Interestingly, the same organizations that distribute these resources are largely responsible for the oversight and evaluation of their own humanitarian efforts. A critical discourse of the political, economic, or altruistic motivations of humanitarians and humanitarian organizations is developing in parallel with the rising interest in serving others. For multiple reasons, the vast majority of this scholarship, and likely the vast majority of humanitarian investment, focuses on long-term humanitarian efforts rather than short-term efforts. Consequently, the discourse has predominantly failed to explore organizations that focus on the short-term delivery of aid. The goals of this project include the expansion of scholarship around just this sort of short-term work.

The healthcare needs of LMICs are immense and international humanitarian aid for health has grown substantially in recent decades, rising from $4.6 billion in 1990 to $21.8 billion in 2007 (Ravishankar et al., 2009). LMICs often exist at the crossroads of insufficient or unstable healthcare infrastructures and a disproportionate burden of disease (Scheffler, Liu, Kinfu, & Dal Poz, 2008). According to the World Health Organization (WHO), the highest proportions of the global burden of disease fall on the South-East Asia Region (29%) and the African Region (24%) (Scheffler, et al., 2008). Research on the distribution of healthcare providers indicates that

these regions also suffer from physician shortages with only 11% and 2% of the global physician supply, respectively (Scheffler, et al., 2008).

Physician shortage statistics refer to physicians of any specialty or clinical focus in a specific area, but most often, the focus is on the need for primary or preventive care. Often neglected by statistical reports are the shortages of surgeons (P. E. Farmer & Kim, 2008). One of the biggest differences between LMICs and HICs in this regard remains the mobility of society and the availability of specialty training. To be clear, the physician and surgeon shortages in LMICs are not always a shortage of trained physicians, but more often a shortage of resources to provide care in specific areas(Green, Green, Scandlyn, & Kestler, 2009).

The financial situation in these countries prevents access to the resources that could encourage the development of brick and mortar resources. Additionally, there is some evidence that the increasing presence of non-governmental organizations (NGOs) may be encouraging internal migration as physicians and other healthcare leaders take better paying jobs with NGOs (Burns & McGuirk, 1993; Sherr et al., 2012). Cruz et al. describes the loss of human resources to PEPFAR (the United States President's Emergency Plan for AIDS Relief) funded projects because of the superior salaries and benefits, which in some cases were as high as three times that of the public sector salaries (Oliveira Cruz & McPake, 2011).

Medical Service Trips as a Response to Healthcare Inequities

The inequalities that marginalize populations in LMICs further contribute to the constancy or emergence of disease and disability (P. Farmer, 1999). MSTs or medical missions, represent a short-term effort originating from primarily private entities in HICs and aiming to these address global healthcare shortages. This somewhat loosely defined model of healthcare delivery is gaining popularity among those interested in providing international volunteer service to those in need of healthcare (DeCamp, 2011; Maki, Qualls, White, Kleefield, & Crone, 2008).

MSTs utilize a volunteer workforce for the provision of medical care over a short-term visit (generally four weeks or less) for populations primarily considered medically underserved. MSTs draw volunteers, both clinicians and non-clinicians, from communities as well as educational institutions, including undergraduate, graduate, and medical students (Asgary & Junck, 2013; Maki, et al., 2008; Martiniuk, Manouchehrian, Negin, & Zwi, 2012; Montgomery, 1993).

While MSTs deliver significant amounts of care, relatively little attention is given in the medical and public health literature to the impact of these interventions on the populations being served. Authors of several published articles have claimed that MSTs do not address the primary sources of the healthcare problems in the developing world: poverty and overstretched healthcare infrastructure (DeCamp, 2007; Green, et al., 2009; Heck, Bazemore, & Diller, 2007). Investments in MSTs continue to grow while their impact remains largely unmeasured. This demands a critical review and illustrates the need to measure the quality and impact of MSTs (DeCamp, 2007; Maki, et al., 2008; Montgomery, 1993; Rowberg, 1960; Suchdev et al., 2007).

The popularity of MSTs is increasing as is the number of publications on the topic. Nearly 95 percent of all publications, however, lack any significant empirical data collection and the outcomes from the interventions that do exist are not well understood. MSTs travelling to LMICs are largely unregulated and often lack evaluative procedures. Due to the largely disorganized and diverse nature of these efforts, healthcare providers choosing to participate in these activities are largely left to their own impetus to participate in evaluative data collection and critical process or activity reviews. The vulnerable nature of the patient populations served by MSTs raises frequently discussed ethical concerns including the provision of care within the

regular scope of practice of the provider (Dupuis, 2004) and the adoption of standards comparable to those of routine research with human subjects (DeCamp, 2007).

The need for evaluation of outcomes for the care provided by MSTs seems basic. In order to conduct evaluations, however, information is needed about goals and objectives and the perspectives of those that provide the care. We need to know about the motivations of those who support or perform MSTs and how their motives and intentions may potentially influence the organization's stance toward evaluation. This dissertation explores the complex nature of individual intentions and motivations, raising questions and complexities that can best be addressed through qualitative methods. In-depth interviews are ideal for this purpose because they provide rich contextual detail and reveal the meanings actors ascribe to their experiences (Creswell, Klassen, Plano Clark, & Smith, 2011).

The second chapter in this dissertation presents what I believe to be the first attempt to systematically gather and review the medical literature that includes empirical evidence collected in the context of MSTs. As pointed out above, the lack of critically reviewed empirical evidence of activities and outcomes continues to be a concern. Developing evidence-based recommendations for healthcare delivery requires systematic reviewing of the research. While the MST field is growing, its medical literature clearly lags behind, with nearly all of the scholarly publications lacking significant data collection. By incorporating data collection into service trips, groups can begin to address the situation, validate practices, and provide valuable information about areas that need improvement. Evaluation studies are warranted to improve the planning, implementation, and outcomes of MST investments.

Analytic Themes in MST Provider Narratives

Chapter 3 focuses, in-depth, on the perspectives and experiences of MST volunteer participants, hoping to shed light on reasons they give for going on these trips and the perceived

benefits MSTs they provide. The existing literature includes a number of studies using closed-ended surveys to describe volunteers and MST organizations (Campbell, Sherman, & Magee, 2010; Chiu et al., 2012). These create a gap in our understanding of volunteers by leaving out the intricacies of their motivations. In this context, the passion to do the most good for the most people at any expense could create situations that shift the benefits unilaterally toward the volunteers and put patients and communities at risk (MacIntosh, Herman, Shivapuja, & Echeverri-Arguello, 2013).

The paper also considers how participants view the long-term benefits these trips have for the populations and communities served. In this latter context, the paper examines the potential relationship between the relatively modest attention placed on evaluating the outcomes of MSTs and three more prominent components of the MST experience, which constitute major themes in the qualitative analysis of participant narratives: emotional connections, personal and professional rejuvenation, and the volunteer's dependency on participation.

This paper gives voice to key members of one medical service organization in order to express in some detail how these leaders and participants explain their efforts, revealing the perceived rewards and concerns embedded within accounts of their lived experiences. The specific research questions for the study are as follows: (1) why do people say they participate in MSTs, and (2) how do their emotional connections and motivations relate to the evaluation of MSTs.

A central component of many MSTs is the promise of developing an affiliation with healthcare workers (HCWs) in LMICs. These relationships provide an entry point in to the healthcare system of the host community and provide access to patient populations and healthcare facilities. Relationships may positively or negatively influence the impact of activities

on the communities they serve and the duration of that impact. Again considering the medical nature of these encounters, issues of power, ethics, and morals underlie the critical exploration and evaluation of this aspect of medical service activities. Several publications in the MST literature describe consortiums or partnerships between members of medical service teams from HICs and communities or hospitals in LMICs, but again the superficial nature of these inquiries lacks adequate depth to reveal the value added by these relationships within the lived experiences of volunteers (Calisti et al., 2011; Cohen et al., 2001; Duenas, Hahn, Aryan, Levy, & Jandial, 2012; Merrell et al., 2007; Mitchell, Balumuka, Kotecha, Said, & Chandika, 2012; Novick et al., 2008; Novick et al., 2005; Nwiloh et al., 2012; Uetani et al., 2006).

Some criticize humanitarian aid relationships as asymmetric with regard to power balances, making them more like contractual or domineering interactions (Brinkerhoff, 2002; Dolan, 2011). Alternatively, relationships that include high levels of mutuality and high levels organizational identity for all parties involved represent partnerships (Brinkerhoff, 2002). The United Nations and other global development actors identify partnerships as the standard for ethical and sustainable development projects. The short-term nature of an MST creates challenges for the development of true partnerships, especially in MST models that do not return to the same community or return sporadically.

Chapter 4 aims to explore the tension between the short-term goal of efficiently delivering quality healthcare in an MST model and the longer-term goal of developing a partnership between volunteers and HCWs in LMICs. Using descriptions extracted from in-depth interviews with MST volunteers, this paper presents narrative accounts volunteers give, which reveal their perspective and experiences with relationships in this setting. Volunteers express both short-term and long-term goals; however, the purpose for this paper is to describe how

volunteers make choices that influence the balance between these goals. Emphasizing the educational component of an MST forces key members to consider the balance of meeting the short-term goal of delivering care with the longer-term goal of educating a workforce that will manage future patients or the follow-up of MST patients.

I utilize descriptions from key members of a medical service organization to define their relationships with HCWs in the LMICs served by MSTs, revealing their view of the value added by these relationships within accounts of their lived experiences. Two primary research questions serve as the framework for this paper: (1) how do volunteers use the partnership concept, (2) what are the levels of mutuality and organizational identity in the relationships volunteers describe, and (3) are the characteristics of the relationships within this organization consistent across sites.

Overall Contributions to the Field

This dissertation contributes to the health services research literature and public health literature by adding depth to a commonly overlooked healthcare delivery model. These fields may overlook MSTs because the activities take place largely outside of the standard healthcare systems of HICs and LMICs. However, the growth in popularity and the magnitude of the resources invested justifies further exploration. This work represents the first step in what should be a long line of research into the impact MSTs have on the communities they serve and the actors involved in delivering the care.

Each paper within this dissertation adds to the existing MST literature in a slightly different way. The first paper represents the first systematic review of publications including empirical evidence on MSTs. One previous publication reviews the literature systematically, but includes publications of all forms including editorial and commentary pieces. The second paper adds depth to our understanding of the stated motivations and perceived benefits of participation

in MSTs. This area of research appears in the literature predominantly as survey-based research that limits our knowledge to closed-ended questions. The resulting shallow view of motivations does not provide us with information in the words of volunteers. The third paper provides a starting point for future work on the role of partnerships in MSTs. Previous work in this area, like the work on motivations, provides shallow views of the relationships between volunteers and HCWs in LMICs. The previous work combined with the work in this dissertation illustrates some of the landscape surrounding these relationships and offers a starting point for future studies comparing medical service models and exploring the side of these relationships in LMICs that authors commonly exclude from the discussion.

The depth Chapters 3 and 4 provide highlights the tensions that frequent volunteers face while participating in MSTs. The tension between self-focused versus selfless attitudes joins the tension of developing relationships that promote high-volumes of care versus partnerships aiming for reciprocity and empowerment of recipient communities. The competing tensions, in both cases, may cause volunteers and organizational leaders to pursue the self-focused goals of benefits for the volunteers. Pursuing partnerships requires a selfless focus that may result in a more sustainable model. Developing those partnerships will likely result in smaller outputs from the medical service team and reduce the positive feelings that volunteers express as a result of directly providing high-volume care.

Most of the prior published research on MSTs could be categorized as descriptive. The work within this dissertation adds a richer description of the complexities of motivations and relationships associated with MSTs. The limited informant pool means that this work will likely serve as a starting line rather than a finish line, but future studies may build on this work utilizing

themes expressed here as a basis for larger survey studies of medical service volunteers and organizations.

Chapter 2: Short-Term Medical Service Trips: A Systematic Review of the Evidence

Abstract

The healthcare needs of low and middle-income countries are immense. Humanitarian medicine has grown in recent years through short-term medical service trips (MSTs) or medical missions that aim to address both medical and surgical unmet needs. The lack of critically reviewed empirical evidence of activities and outcomes continues to be a concern. Developing evidence-based recommendations for healthcare delivery requires systematic reviewing of the research. This paper contributes by focusing specifically on MST publications with empirical results. Searches in May 2013 identified 67 studies published in English since 1993, a mere six percent of the more than 1,100 published articles on the topic in the past 20 years. Nearly 80 percent of these studies reported on surgical trips with close to one-third of those referring to cleft lip and palate interventions. While the MST field is growing, its medical literature clearly lags behind, with nearly all of the scholarly publications lacking significant data collection. Medical service teams should consider the gap between providing care and understanding its impact on the community being served. By incorporating data collection into service trips, groups can begin to address the situation, validate practices, and provide valuable information about areas that need improvement.

Introduction

With globalization, there has been significant growth in short-term medical service trips (MSTs) from high-income countries (HICs) to low- and middle-income countries (LMICs). While MSTs deliver significant amounts of care, relatively little attention is given in the medical and public health literature to the impact of these interventions on the populations being served. The following review offers a step forward by addressing this gap with a systematic analysis of the existing empirical work and suggestions for further study.

According to the World Health Organization (WHO), the highest proportions of the global burden of disease fall on the regions that also suffer significantly from physician shortages (Scheffler, et al., 2008). A growing group from HICs aims to address both medical and surgical unmet needs in LMICs through medical service trips (MSTs), sometimes referred to as medical missions.

For purposes of this review, MSTs are defined as trips in which volunteer medical providers from HICs travel to LMICs to provide healthcare over periods ranging from one day to eight weeks. Both faith-based organizations and non-faith based organizations facilitate these trips, a feature that; will be discussed in more detail later. Team composition can range from members of academic departments from a single institution to collections of individuals affiliated only by friendship, geography, or the organization facilitating the trip.

Authors of several published articles have noted that MSTs as a form of aid do not address the primary sources of the healthcare problems in the developing world: poverty and overstretched healthcare infrastructure (DeCamp, 2007; Green, et al., 2009; Heck, et al., 2007; Maki, et al., 2008). There are, however, significant resources, financial and human, dedicated to MSTs annually. While there is no central monitoring group or agency for MSTs, conservative estimates that do not take into account opportunity costs for the volunteers, place the annual

expenditures at $250 million (Maki, et al., 2008). With expenditures of this magnitude, questions naturally arise about the return on investment. If noteworthy returns exist and organizations are simply not measuring or reporting them, then this can be remedied. If the returns do not exist and the missions continue, an ethical dilemma may be emerging.

Over the last 20 years, publications describing MSTs have largely aimed to promote models of healthcare delivery in these settings. The pressure to develop practice guidelines has created some standardization in care, but the lack of critically reviewed empirical data continues to be a concern. Assumptions that the safety and acceptable risk or rates of complications from HICs are automatically transferable to MSTs are unwarranted and could be dangerous.[6]

The lack of evidence is particularly concerning given the vulnerable nature of patients living in LMICs (DeCamp, 2007). Under the best circumstances, MSTs address an unmet medical need with high-quality care. Under the worst circumstances, they serve, as one author states, as an opportunity for physicians to practice techniques for the treatment of conditions that are less common in the developed world (Smith, Keen, & Edwards, 1991). This example is extreme and is unlikely to play a role in the justification for most contemporary MSTs, but the possibility is concerning. One report in the faith-based literature (of an evangelical short-term mission trip in this case) suggests that some trips may benefit the volunteer as much or more than the recipient of aid as well as potentially costing the hosts valuable time and resources (Ver Beek, 2006).

Martinuik et al. recently provided a starting point in the review of MST evidence; however, they included papers with mixed goals and did little to assess the quality of the papers presenting empirical data from MSTs or their participants(Martiniuk, Manouchehrian, et al., 2012). The authors describe benefits associated with MSTs, including personal gains for the

volunteers and an increased sense of solidarity between the recipients and volunteers. They go on to identify common criticisms of MSTs, namely questions about efficacy or impact and unintended consequences. The present review differs in several ways. First, it specifically targets publications with empirical results based on intentional data collection regarding activities associated with MSTs. These empirical results include work discussing treatment interventions, cost-effectiveness, quality assessment and assurance, or the perspectives of MST participants and target communities. Second, it addresses the assessment of quality. Third, the final section of this paper suggests a framework drawn from the existing literature and its remaining gaps for the minimum data collection requirements necessary to expand the evidence base for MSTs.

Investments in MSTs continue to grow while their impact remains largely unmeasured. This demands a critical review and illustrates the need to measure the quality and impact of MSTs(DeCamp, 2007; Maki, et al., 2008; Montgomery, 1993, 2007; Rowberg, 1960; Suchdev, et al., 2007). Analyzing the status of existing empirical evidence will help to establish some basic guidelines and a research agenda for future work in this area. Scholarship in the fields of social psychology and tourism also addresses aspects of MSTs, however, this review focuses solely on the medical literature.

Methods

This review follows the PRISMA (preferred reporting items for systematic reviews and meta-analyses) guidelines for constructing the review methodology (Moher, Liberati, Tetzlaff, & Altman, 2009). The aim is to standardize the reporting of reviews. PubMed and ISI Web of Knowledge were the primary sources for identifying relevant publications (Figure 1), using queries for the medical subject headings (MeSH) “medical missions, official” and a “medical missions” topical search for each engine respectively. After adding limitations for English publications, the pool was limited further to those papers with a date of publication between

January 1, 1993 and May 15, 2013. Exclusionary terms, e.g. “not dental” and “not disaster response,” narrowed the dataset. Finally, the terms “study” or “analysis” were used to identify publications with the empirical level of analysis to establish evidence for MSTs.

Study Selection

To be included in this review, publications had to report on work performed in association with a short-term MST. Short-term was defined as trips with a duration of less than or equal to two months. As the intent for this work was to focus on the available evidence produced by these publications, it includes only publications with intentional data collection regarding procedures, patients, volunteers, or the MST literature.

A review of the full-text versions of each publication determined inclusion. In some cases, the abstracts did not reveal enough information to characterize accurately the publication, therefore a subsequent review of the full-text paper was necessary to assess for exclusionary characteristics. Finally, the bibliographies of the included papers were reviewed to identify additional publications missed by the previously described methods. These were then subjected to the same process of inclusion and exclusion analysis.

Authors and the date and journal of publication were collected from the final list of studies. This was followed by the collection of study specific data including: focus (literature, patients, participants, equipment, community, or cost-effectiveness), medical specialty or subspecialty, nature of the trip (surgical, medical, or both), study design, sample size, location, duration of the trip, affiliated organizations, and the terms used to refer to MSTs.

Results

Overview and Quality of the Dataset

The search process identified 1,164 unique publications. Abstract reviews reduced the number to 112 for full-text review. As noted by other authors, one significant limitation on

searches for this literature base is the diversity of terms utilized to refer to seemingly the same activity (Martiniuk, Manouchehrian, et al., 2012). I identified more than 45 terms used to refer to MSTs (Table 1). The final group of publications included 67 studies for the quantitative and qualitative analysis.

When the entire eligible group of publications on the topic of MSTs is considered, these studies represent a mere 5.7 percent of the more than 1,100 publications on the topic in the last 20 years. Figure 2 illustrates the increase in annual publications on this topic in recent years (Figure 2). The peak of 15 publications per year occurred in 2012. The most common journal for these reports was the World Journal of Surgery with 15 percent of the publications (10/67).

The results presented here synthesize the emerging and diverse nature of the MST literature. Results are organized around a series of questions that this literature attempts to answer. There are obvious gaps in the scope of the questions posed here. Moreover, much of the data generated by these publications lacks adequate support to answer fully these questions. Thus, the review closes with a proposal for the basic data points that participants in MSTs could collect during their efforts in order to answer the bigger yet still unanswered questions.

In spite of a diverse group of study designs, nearly all of the publications (98%) represent low-level evidence when judged against standard research design evaluation tools. Nearly two-thirds of the publications can be classified in three groups based on their study design. The largest proportion of the studies (49%) employs a retrospective study design or simple descriptive statistics to report their findings. Quality improvement or quality assurance projects represent the second most common among the published reports, with nine studies (13%). Surveys of individuals that volunteer on MSTs and organizations that operate MSTs represent 10 percent of the publications.

Although the included papers all contained empirical results based on the use of systematic data collection, approximately one-third of the studies did not describe their data collection process and 70% failed to describe approval from institutional review boards (IRBs) or their equivalents, leaving it unclear whether the organizations affiliated with these publications had their efforts overseen by an IRB. Most organizations freely report the frequency of the procedures or visits that occur during an MST (essentially outputs), but the data fail to include demographic characteristics such as, socioeconomic status (SES) of patients or even gender and age distributions (Chu, Trelles, & Ford, 2011). These are the most basic elements required to describe patient populations for the majority of scholarly literature.

What Are the Basic Characteristics of MSTs That Publish Empirical Findings?

This group of publications represents the broad scope of activities and locations in which MSTs are performed. With the exception of Antarctica, every continent is represented as either a provider or a recipient of care, with the majority of the recipients being distributed across regions of Africa, Central and South America, and Southeast Asia. Some publications (24%) describe individual trips to a single location (A. T. Chen et al., 2012; L. Chen, Schink, Panares, Barbuto, & Lagasse, 1998; Clarke et al., 2009; Huijing et al., 2011; Jewell, 2007; Kobal et al., 2004; Lehnerdt, van Delden, & Lautermann, 2005; Matta, Singman, McCarus, Matta, & Silbert, 2010; Niska & Sloand, 2010; Pham & Tollefson, 2007; Politis, Brill, & Jones, 2005; Ramsey, Iliyasu, & Idoko, 2007; Reeve, Groce, Persing, & Magge, 2004; Schechter et al., 1998; Sorfleet, Vaillancourt, Groves, & Dawson, 2009; Spencer & Adler, 2008). Others (34%) describe multiple trips to single countries (Aziz, Rhee, & Redai, 2009; Barrs, Muller, Worrndell, & Weidmann, 2000; Belyansky, Williams, Gashti, & Heitmiller, 2011; Calisti, et al., 2011; Cheng, McColl, & Parker, 2012; Del Rossi et al., 2008; Deonandan et al., 2012; Duenas, et al., 2012; Green, et al.,

2009; Maine, Hoffman, Palacios-Martinez, Corlew, & Gregory, 2012; Marck et al., 2010; Martiniuk, Manouchehrian, et al., 2012; Merrell, et al., 2007; Moon, Perry, & Baek, 2012; Nwiloh, et al., 2012; Oken, Martinez Stoffel, & Stern, 2004; Rumstadt et al., 2008; Sharp, Canady, Ligot, Hague, & Gutierrez, 2008; Sykes, Le, Sale, & Nicklaus, 2012; Tefuarani et al., 2007; Uetani, et al., 2006; Withers, Browner, & Aghaloo, 2013). Finally, the last group (42%) describes multiple trips to multiple countries that in some cases are completely unrelated to one another (Baran & Tiftikcioglu, 2007; Bermudez, Carter, Magee, Sherman, & Ayala, 2010; Bouman et al., 2010; Brown, Fairclough, & Ferrill, 2012; Campbell, Sullivan, Sherman, & Magee, 2011; Chapin & Doocy, 2010; Chiu, et al., 2012; Cohen, et al., 2001; Davis, Wainer, O'Keefe, & Nand, 2011; de Buys Roessingh et al., 2012; Figus, Fioramonti, Morselli, & Scuderi, 2009; Fisher et al., 2001; Gil et al., 2012; Horlbeck et al., 2009; Magee, Burg, & Hatcher, 2010; Mainthia, Tye, Shapiro, Doppenberg, & Ward, 2009; Maki, et al., 2008; Mariano, Ilfeld, Cheng, Nicodemus, & Suresh, 2008; Martiniuk, Manouchehrian, et al., 2012; McQueen et al., 2010; McQueen, Magee, Crabtree, Romano, & Burkle, 2009; Meo et al., 2006; Novick, et al., 2008; Novick, et al., 2005; Reaves, Schor, & Burkle, 2008; Schmitz, Davis, & IvcClatchey, 2012; Sieg, Hakim, Jacobsen, Saka, & Hermes, 2004; Yeow et al., 2002). The fields of optometry, medicine, pharmacy, and surgery were represented. Nearly 81 percent (54/67) of the studies report on surgical trips, with 17 of the 54 referring specifically to cleft lip and palate interventions. Thirty-one percent (n = 21) of the publications include pediatric care. Trip duration ranged from one day to eight weeks. Patient sample sizes varied considerably ranging from a single case up to 8,151 patients. Thirty-six (56%) of the 64 studies included, reported a sample size of 200 or smaller.

What Is the Reported Magnitude of MST Efforts?

Magnitude can be defined as both the financial expenditures and the volume of procedures associated with MSTs. Based on two publications respondents indicate the total costs of MSTs ranges from $12,600 to $84,000 per trip (mean ranging from $22,650 to $34,400) and conservative estimates for annual expenditures from teams departing from the US total $250 million (Chapin & Doocy, 2010; Maki, et al., 2008). McQueen et al. published the results of their survey of medical service organizations and reported that the organizations perform 223,425 surgical cases per year (2010). Many of these organizations and others may be focusing on maximizing the number operations in a short-term setting at the potential expense of quality of care (Yeow, et al., 2002). Approximately 13 percent of the organizations surveyed provide more than 1,000 cases per year (McQueen, et al., 2010). Again, with estimates of expenditures from the US alone reaching one quarter of a million dollars and with hundreds of thousands of patients treated annually, questions naturally arise about the return on investment.

Are MSTs A Cost-effective Intervention for Healthcare Insufficiencies in LMICs?

An increased focus on the publication of projects that measure the cost-effectiveness of their interventions is a promising and emerging trend in the development of the evidence base for MST activities (A. T. Chen, et al., 2012; Magee, et al., 2010; Moon, et al., 2012). Three publications use cost-effectiveness analysis as a mechanism for evaluating the efforts of MSTs. Two of the three cost-effectiveness studies review cleft lip and palate surgeries performed by two organizations (Magee, et al., 2010; Moon, et al., 2012). As noted in the paper by Moon et al., both their study and the previous study by Magee and colleagues conclude that intervening surgically for cleft lip and palate patients represents a cost-effective intervention with a cost per disability-adjusted life year (DALY) of $68 and $34, respectively (Magee, et al., 2010; Moon, et

al., 2012). The third cost-effectiveness study evaluates orthopedic surgical trips to Nicaragua and comparably defines the interventions as cost-effective, but at a much higher investment level of $352.15 per DALY averted (Moon, et al., 2012).

What Factors May Be Limiting the Evaluation of MSTs?

The contributions of some of the included publications are limited because of the lack of priority for research among medical service organizations and the absence of standardized evaluation tools. Medical service organizations do not regularly include research as a part of their goals. A survey of 10 international volunteer organizations reveals specifically that they see it as a luxury or side project that yields limited benefits to their mission (Yeow, et al., 2002). Maki et al. contributed a tool for use with MSTs; however, only one of the 21 publications subsequently citing this paper describes utilizing the proposed tool in any form (Chiu, et al., 2012; Maki, et al., 2008). Current evaluative measures fail to assess any unintentional harm resulting from MSTs (DeCamp, 2007).

Why Do People Participate in MSTs?

Numerous publications, including those from scholars in business, economics, sociology, and tourism, explore the motivations of volunteers participating in MSTs. Some claim that participation in an MST provides an opportunity for personal development, while others report an opportunity to promote diplomatic relations (Chiu, et al., 2012). Beyond the Chiu publication, only the literature discussing the work of military MSTs explicitly addresses the concept of diplomacy.

Withers et al., report emotional benefits, as well as, career and professional benefits derived from participation in MSTs (Withers, et al., 2013). Pansonian and Coates assert that the global perspective emerging in students that have matured in the era of globalization materializes

in the form of MSTs throughout the US medical education, from aspiring medical students to the postgraduate level (2006). While they may get the same emotional benefits described above, they also hope to gain exposure to medical care, show a compassion for the less fortunate on their medical school application, and gain connections in the field (Withers, et al., 2013).

Personal connections to the mission of an organization play a role in a volunteer's interest and the emotional experiences draw volunteers together creating relationships that extend beyond the trips (Withers, et al., 2013). Relationships and the volunteer's ability to feel valuable and useful are reportedly among the most important factors in motivating volunteers to return for future MSTs (Withers, et al., 2013). Withers et al. also report that only one of the 30 interviewees discussed a religious or spiritual reason for volunteering (2013).

What Is the Role of Religion or Faith-based Organizations in MST Activities?

MST efforts from the 19th century through the early 20th century appear to have been predominantly faith-based. Current efforts, however, are increasingly secular (Pezzella, 2006). Among the reviewed literature, web searches of the organizations described revealed that only 18 percent (12/67) of the publications refer to activities performed in conjunction with a faith-based organization. This is lower than the 33% of faith-based organizations represented in a survey of 40 medical service organizations from 2010 (Chapin & Doocy, 2010), thus the proportion of faith-based organizations reported in this review may slightly underrepresent the proportion performing these activities overall (Withers, et al., 2013).

What Role Does Education Play in MST Activities?

Medical service organizations often tout reciprocity for their public image in the form of bilateral education, that is, providers from HICs learning from providers in LMICs and vice versa. Therefore, education has three forms on these trips: (1) education of students from HICs

by providers from HICs and LMICs, (2) education of providers in LMICs by providers from HICs, and (3) education of providers from HICs by providers from LMICs.

Two studies from this review focus solely on the education of pharmacy students or surgical trainees resulting from MSTs (Brown, et al., 2012; Campbell, et al., 2011). Both studies report a strongly positive experience and the second claims to be the first to demonstrate the ability of an MST to provide positive training in cultural competency. The concept of cultural competency is a key training item for the Accreditation Council for Graduate Medical Education. Campbell argues that some residency training programs in the United States could use MSTs as a mechanism for meeting that training competency (2011).

Almost half (48%) of the included studies indicated that their trip included an educational component or exchange aimed at increasing the medical knowledge of local providers or community members. Several of these publications discuss the third educational form loosely, but they fail to formally evaluate or measure this practice. Compiling results from three studies that included surveys of medical service organizations reveals that respondents report an educational or training component in 43 percent (Chapin & Doocy, 2010), 60 percent (Maki, et al., 2008), and 89 percent of trips (McQueen, et al., 2010).

Publications associated with various international partnerships between providers in HICs and LMICs include the term “independence” when referring to local provider achievements (Calisti, et al., 2011; Cohen, et al., 2001; Duenas, et al., 2012; Merrell, et al., 2007; Novick, et al., 2008; Novick, et al., 2005; Nwiloh, et al., 2012; Uetani, et al., 2006). Independence seems to mean that the providers achieve a level of competence that reflects the observable ability to safely manage patients and treat them in a manner equivalent to the quality achieved in HICs. All of these partnerships began as MSTs or MSTs continually support and augment the care

provided by local providers. All but one evaluates their ability to establish independence among the local providers (although they fail to include descriptions of methods for evaluating it). The publications report on relationships that range in length from two to 15 years. While there is not a clear timeline to independence, publications describing partnerships lasting 10 years or less at least show independence in post-operative management. The two publications reporting relationships of greater than 10 years show a mixed level of independence (Novick, et al., 2008; Uetani, et al., 2006). One reports complete independence at 15 years and one reports independence at 75 percent of their sites 14 years into the relationships (Merrell, et al., 2007).

What Are the Patient Outcomes from MSTs?

When asked about patient outcomes and the processes in place for the collection of patient outcomes, volunteers or the organizations that facilitate MSTs report one to three days of follow-up while surgical trips include follow-up ranging from one day to one week (Maki, et al., 2008). Surveys by Maki and others reveal 60 to 80 percent of organizations track morbidity and mortality data (Maki, et al., 2008; McQueen, et al., 2010; Yeow, et al., 2002). This is in stark contrast to the standards in HICs that track this information and in some cases pay providers according to performance on these measures.

In this review, thirteen of the 67 publications (19%) report mortality in a total of 59 patients. Nearly half of these (n=30) were likely due to progression of the disease being treated or a comorbidity. Five died from unknown causes. Four deaths were due to sepsis, allergic reactions, or a blood transfusion reaction. Two deaths reportedly resulted from complications associated with pre-existing conditions that patients failed to report pre-operatively (Fisher, et al., 2001). One case of malignant hyperthermia is reported in this group of publications. The

remaining deaths relate largely to cardiopulmonary complications in operative cases for various cardiac conditions.

For our purposes, outcomes are classified in two ways: early and late. Early outcomes are defined as the immediate post-intervention or perioperative periods ranging from zero to seven days. Late outcomes are defined at minimum as eight days after treatment or as the period after the trip on which the patient received initial treatment.

Among the 50 publications (75%) focusing on the patients of MSTs, only 26 percent (n = 13) report late outcomes. The length of follow-up included in these publications ranges from approximately three months up to 7.6 years. The proportion of patients included in those follow-up statistics ranges from 14 percent to 84 percent. The remaining 74 percent (n = 37) of publications exclude any documentation of outcomes or they are limited to early outcomes.

One qualitative study aimed to establish the feasibility of collecting late outcomes in cleft palate patients (Sharp, et al., 2008). This study presents a unique view into the world of these patients in some cases years after their surgeries. These patients received care from numerous groups and the results do not represent outcomes for one specific intervention (Sharp, et al., 2008). Most notably this publication reveals that patients and their families attribute multiple benefits to surgical intervention despite the absence of the HIC standard level of follow-up care for speech and swallow therapy.

Noma, describes an often fatal rapidly spreading and invasive gangrene with edema of the face originating from an ulcer of the mucous membrane and extending outwardly to destroy bone and soft tissue in surrounding regions (Auluck & Pai, 2005). In HICs, interventions for noma may have failure rates as high as 73 percent (Bouman, et al., 2010). Bouman reports

complications in 64 percent of patients and outcomes that are classified as “bad” in 41 percent (2010). This paper presents data regarding early outcomes alone.

How Do Individuals Impacted by MSTs Perceive the Teams and Their Activities?

Green et al. provide the first empirical evidence regarding the perception of people directly and indirectly connected to the work of MSTs in Guatemala (Green, et al., 2009). This interview group (n=72) was composed of healthcare providers, family members of patients, government officials, foreign medical providers, and non-medical personnel that work with or around MSTs. One Guatemalan physician indicates medical service volunteers inaccurately perceive that everyone is poor thus relieving them from the need to assess the socioeconomic status of patients (Green, et al., 2009). The authors cover a few benefits that Guatemalans attribute to MSTs including providing necessary specialty services to patients, education for local providers, and donations of supplies, but even the benefits they describe come with strong caveats about problems that may result from improperly distributing services and materials. The authors also explore unintended consequences of the actions of MSTs and attribute causality largely to a lack of knowledge of the surrounding medical and sociological environment.

Reeve and colleagues used open-ended survey questions to explore the beliefs and expectations of patients and families receiving care from MSTs for cleft lip/palate (Reeve, et al., 2004). The patients express that they believe the surgery will make a dramatic difference in their lives and that their primary goal for the surgery was improving their speech. According to the authors, most informants inaccurately perceived the origins of the developmental disorder. Finally, the primary concern for patient’s parents going into surgery was pain management.

Deonandan describes an MST aiming to improve health literacy among tribal people in Guyana awaiting care from their team (2012). The MST identified a basic disconnect between

some of the ideas expressed in public health messaging and the knowledgebase of the community. While many describe the presumed benefits of repeat trips to an area, only Jewell describes the phenomenon of gender empowerment as a benefit (2007). The observation of female involvement in the MST prompted women to express feelings of a new ability to move toward gender equity (Jewell, 2007). This empowerment differs from the standard definitions employed in the US, but nonetheless the presence of the MST and the distribution of authority on the team across both genders promoted female empowerment in this setting.

What Can Be Said About Outputs Versus Outcomes of MSTs?

Due to their study design and isolated data that may be difficult to reproduce, one group of publications (n=18) has extremely limited generalizability and benefit for the MST knowledgebase. These studies do not include any assessment of the outcomes of interventions. In some cases, they report on early clinical outcomes associated with morbidity and mortality that occurs during the stay of the team, but intervention efficacy remains absent from their discussions. In the methods section for some of these publications, there is little or no information about the data collection process or any analysis plan. The focus of the methods section in these papers is the model of delivery or the intricacies of the setting of the MST.

Among the medical interventions (n=2) in this group of publications, one describes the utilization of a needs assessment in the planning process for their MST, but there is no description of the tool (Niska & Sloand, 2010). This represents the only publication in the entire group of 67 that explicitly mentions employing this practice. This group also elected to focus on only two conditions (hypertension and parasite infection). Outcomes related to these goals are not available. One publication focusing on non-surgical patients, describes the conditions observed and the interventions performed for these patients (Martiniuk et al., 2012). There are no

outcomes associated with this publication. None of the publications relating to surgical care (n=16) from this sub-group include outcomes beyond the perioperative period and they fail to provide much information beyond descriptive statistics for specific MSTs.

Discussion

Reporting outputs rather than outcomes appears to be the default approach for quantifying the value added to the communities and individuals served by MSTs. This criterion, however, falls short of the measures used to identify high quality evidence based medicine. In some cases, the included publications rely on personal judgments or anecdotes to support their conclusions. This weak form of evidence has the potential to overshadow some of the more promising work in this field. Most of the questions raised in the results section above are unanswered by the included publications and more research is necessary to strengthen the evidence available. The assessment of process output data, without assessing the short-term or long-term impacts of MSTs, precludes the ability to measure efficacy of interventions performed (Ozgediz, 2009).

Aiming to assess the quality of the evidence in some cases justifies the use of a standardized hierarchical evaluation tool. For instance, the tool developed by the US Preventive Services Task Force classifies evidence based on the employed study design, with randomized controlled trials representing the highest level of evidence. However, due to the emerging nature of this body of literature, distinctions based on study design have limited benefits. The assumption with that form of evaluation is that authors have unified research questions and are aiming to move up the hierarchy with their work. In the case of the wide-open nature of the MST literature, authors are not united in their research questions nor study designs to advance the scientific rigor of their efforts.

Students and Trainees as Volunteers

The motivations and expectations of MST volunteers may be as diverse as the trips in which they participate. The enormous number of available MSTs, their short-term nature, and the relatively low cost associated with travel makes MSTs a common choice to fulfill the desire for international experience among students and non-students alike.

Some disparities research argues that cultural competence plays a role in the quality of care provided to minority populations (Campbell, et al., 2011). That assertion prompted academic medicine to encourage training in cultural competence. Some institutions utilize MSTs as a mechanism for cross-cultural training and integrate these programs into their medical education curriculum. The sample sizes and limited scope of the work regarding the relationship between MSTs and educational benefits limit conclusions at this point.

The answers and conclusions from a limited survey of pharmacy students participating in MSTs are largely unrevealing about the motivations and expectations of the students. They note that experiences on the trips positively impact participants, but the brevity and close-ended form of the survey does not allow for an exploration into specifics about how they will put those positive experiences into action beyond possibly travelling on another trip (Brown, et al., 2012). The overwhelmingly positive responses among surveyed surgical trainees raises concerns about bias, particularly social desirability (Campbell, et al., 2011).

Students and trainees may elect to participate in MSTs for reasons similar to those of non-students, but their motivations also may include the desire to receive career and professional benefits (Withers, et al., 2013). There are a limited number of studies assessing the impact these trips have on the life trajectory of students, their participation in future mission-related activities, or the actual benefits of the social capital on their academic pursuits. Another gap exists in the

literature regarding MST organizations and their view of the role they play in medical education process.

Education through Partnerships

The term partnership should not imply reciprocity between providers from HICs and those from LMICs. The intention behind every partnership appears to be the education or training of surgeons and other providers in communities with limited access to specialty care. In some cases, these partnerships bring patients that local providers refer to HICs for treatment. One organization that sends children to the US for care cites this as a far more expensive model, increasing costs ten-fold (Novick, et al., 2005). That contrast prompts most organizations to opt for travelling to countries to train local providers in operative techniques utilized in HICs. Evaluations of the outcomes of that training yield mixed results and seem to require an extended, possibly 15 years or more, presence and partnership to ensure quality.

Many partnerships also include the donation of materials and durable medical equipment. One publication notably reports the inclusion of biomedical engineers in their travelling teams as a way of managing donated equipment that often falls out of repair (Novick, et al., 2005). This addition is often absent from MSTs and has been the source of published concerns historically (Abenavoli, 2009).

Faith Communities and MSTs

In the mid-1880s, to pursue their mission of caring for the soul, the mind, and the body, the Catholic Church began sending missionaries throughout the world, establishing churches, schools, and hospitals (Pezzella, 2006). Such origins may lead to the assumption that faith is motivational for volunteers. While the assumption may have validity, there is limited evidence for it in the published literature reviewed here. Surveys of medical service organizations reveal a

higher proportion of faith-based activities than the 18 percent of publications included in this review. This is almost certainly a publication bias related to the absence of organizational motivation to publish findings in the medical literature. The absence of informants describing religious reasons for participation raises some interesting questions about whether the majority culture of medical service is outside of the faith-based community, if there is change in the comfort with discussing religion, or if this simply an anomaly among the groups that are participating in research. There is no known work comparing outcomes or the impact of faith-based MSTs versus secular efforts.

Creating and Implementing Evidence in MSTs

There is no shortage of opinions about the ideal framework for an MST, but there is a significant shortage of evidence to support any particular framework (Montgomery, 2007). By developing or planning MSTs that include data collection in the mission, practitioners can begin to address some of the concerns and validate the practice or provide information about areas that need improvement.

Maki et al. attempted to address this gap by creating a tool for use by MSTs; however, for unknown reasons this tool has not been widely implemented or it's utilization has not been subsequently been published. One possible explanation for the apparent lack of adoption of this tool could be that the dissemination of the instrument failed to reach the organizations that could put it into action. Another explanation could be that the organizations faced challenges with its implementation that reduced the return on investment for the process to an unfavorable level. Regardless of the reason, tools for organizations to evaluate their work remain a need.

Critics argue that due to the lack of research on either structure, process, or outcomes, a fraction of the care provided as a part of MSTs in the developing world has any evidence base at

all (Buekens, Keusch, Belizan, & Bhutta, 2004). Implementing evidence faces significant challenges in this healthcare delivery model. First, it assumes that providers are aware of evidence-based practices and only treat patients that fall under the spectrum of populations covered by guidelines. Second, it assumes that providers will deliver medical care in a standardized manner including the provision of continuous or follow-up care by either the group or a local provider. Finally, it assumes that they will perform outcome analyses. By definition, MSTs do not typically deliver care under this model.

The primary goal for medical service organizations is healthcare delivery and these organizations do not commonly prioritize the collection and subsequent evaluation of data (McQueen, et al., 2009). Delivering care without understanding the impact or the outcome of that care presents ethical challenges (DeCamp, 2007). Long-term outcome measurement is difficult, but necessary (Sharp, et al., 2008). The consensus for the ethical challenges of MSTs is that there should be no assumed ethical immunity solely based on the altruistic nature of these efforts (DeCamp, 2007).

Failure to Follow Guidelines and Unintended Consequences in MSTs

In some cases, experts and workgroups are establishing guidelines and standards for humanitarian healthcare delivery. The dissemination and implementation of these standards again faces challenges related to the unregulated and uncoordinated nature of these activities. Chapin et al. express a concern about their finding that only 25 percent of respondents were aware of the WHO Guidelines for Drug Donations. Reflecting that absence of knowledge, twenty percent of the respondents reported that they did not leave their donations with qualified medical professionals or health organizations. Drug accountability may be tightening globally and the practice of leaving behind medications is receiving a growing level of scrutiny.

The ethical concerns raised by critics, such as Crump, DeCamp, and others, suggest a need for ethical standards that will guide the work toward measurable benefits in light of the inherent risks (Bradke, 2009; Crump & Sugarman, 2008; DeCamp, 2011; Garbern, 2009/2010; Langowski & Iltis, 2011; Ott & Olson, 2011). There is a need for objectives and long-term plans developed in coordination with recipient communities (Yeow, et al., 2002).[78]

Outcomes – The Effects of MSTs

Bureaucrats, consumers, and researchers commonly measure the quality of healthcare based on patient outcomes, defined according to recovery, restoration of function, and survival (Donabedian, 2005). Morbidity and mortality associated with treatments are standard; however, changes in the quality of life resulting from medical interventions are rarely measured in this literature. While it is not safe to assume that healthcare providers are solely responsible for these outcomes, their actions play a role in the process and represent an opportunity for inquiry. Patient outcomes are the most concrete measure of quality, but they are among the least commonly described concepts in the MST literature. Outcomes in this literature may also refer to the impact on the volunteer, on the patient relative to the cost, and on the local healthcare providers.

Determining Outcomes and Success with Cultural Conscientiousness. The challenges of medical resource shortages come to bear in discussions of patient outcomes. Following patients or obtaining reports regarding the outcome of the interventions performed by MSTs after a team departs remains uncommon and require intentional effort and resource allocation (Sharp, et al., 2008). The challenges are inherent with the transient nature of the patient population and the distances travelled to seek care from service teams. Most teams do not have the ability or data to attest to their psychological, financial, or sociological impact.

The 13 studies that include a measurement of late outcomes all relate to surgical interventions and there seems to be no data regarding the late outcome of any intervention performed by a strictly medical team. In some cases, the best follow-up available is the vital status of patients, but a few of these publications do attempt to evaluate the efficacy of the intervention.

Focusing largely on fistulas and cleft palates the bulk of the outcomes literature falls under the auspices of general or plastic surgery. A few of these reported outcomes are bad enough to raise serious concerns. Preconceived ideas about the risks and benefits of surgery have a sociocultural component, particularly in the context of plastic or reconstructive surgery. Patients and their families have beliefs about the origins of congenital conditions, concerns about the reconstructive procedures, and expectations for the outcomes of the intervention. Understanding the role of the MST to address the perceived origins of conditions in a culturally sensitive way may provide another opportunity to reduce the marginalization of the affected.

Cultural awareness is one of the most important parts of defining successful patient interactions and surgical interventions. Learning that parents fear the pain for their children more than other factors, allows providers to concentrate on that aspect of the consultation to alleviate their fears (Reeve, et al., 2004). Realizing that speech outcomes were the primary interest for patients, allows surgeons to manage the expectations for each individual procedure (Reeve, et al., 2004).

While the aesthetic changes resulting from this type of surgery may provide a dramatic background for fund-raising efforts, aesthetic outcomes, while important to the patient, were less significant than speech outcomes in their definition of success (Reeve, et al., 2004). Speech assessments after cleft lip and palate surgeries are seldom completed and when they are

completed, may reveal unsatisfactory results (de Buys Roessingh, et al., 2012; Sharp, et al., 2008). Operative success in HICs does not stop with satisfactory aesthetics and MSTs should find creative ways to match that standard.

While organizations aim to provide high-quality care, evaluating outcomes should be universally included in their activities (McQueen, et al., 2010). Yeow and colleagues summarize the aims of surveyed organizations and conducting research is considered by most to be a luxury only (2002). The combined results from publications included in the present systematic review report a total of 59 deaths in association with the care provided during MSTs. Simply assuming the care provided is safe and has minimal risks is no longer adequate for these activities.

Comparing Outcomes in Light of Expenses. Recent trends in global health evaluation employ cost-effectiveness analysis to compare interventions and their ability to address the United Nations Millennium Development Goals. These goals aim to increase access to high-quality cost-effective care in LMICs. Comparing the cost-effectiveness of interventions associated with MSTs assists with resource allocation decisions. Disability-adjusted life years (DALYs) serve as the unit of analysis for comparative purposes by accounting for the years of life lost due to disease or injury. These calculations have been widely utilized in public health and health economics.

Interpreting the cost per DALY of interventions introduces subjectivity when determining their cost-effectiveness, especially as they relate to MSTs. The World Bank established guidelines for these determinations in 1993, approximating $150 per DALY as the cutoff for determining cost-effectiveness (Moon, et al., 2012). While the costs vary substantially, three publications in this review report their interventions to be cost-effective even though one nearly doubles the World Bank cutoff (L. Chen, et al., 1998; Magee, et al., 2010; Moon, et al., 2012).

There are limitations to this type of work, but it does represent a promising area for comparative evaluation of MSTs. The basic data necessary for these calculations should include diagnoses and treatments (already collected by most teams), costs for the hosts and volunteers for all treatment and follow-up activities, and a measure of the costs for patients including opportunity costs associated with missed income from work. Decisions about cost-effectiveness may translate to comparisons between trips within organizations or they could relate to comparisons of the costs to employee local providers rather than the standard MSTs. Both raise questions about sustainability and the limited cost-effectiveness data for MSTs leaves these issues open for debate.

Limitations

The diversity of terms associated with MST activities in the published literature increases the likelihood of underestimating the number of eligible articles. This review was limited to English publications, which may have created a selection bias given the global nature of these activities. This review is also limited to the medical literature, which may exclude notable work in other fields of study.

Conclusions

The popularity of MSTs is increasing along with publications on the topic; however, nearly 95 percent of all publications lack any significant data collection and the outcomes from the interventions that do exist are not well understood. MSTs travelling to LMICs are largely unregulated and often lack evaluative procedures. Unfortunately, due to the largely disorganized and diverse nature of these efforts, healthcare providers choosing to participate in these activities are largely left to their own impetus to participate in evaluative data collection and critical process or activity reviews. The vulnerable nature of the patient populations served by MSTs raises frequently discussed ethical concerns including the provision of care within the regular

scope of practice of the provider and the adoption of standards comparable to those of routine research with human subjects (DeCamp, 2007; Dupuis, 2004). The self-imposed standards for MSTs should also include basic critical reviews powered by data collection and evaluation.

Collecting data about the quality of care from patients served by MSTs is a challenge and only a few organizations have shown the initiative to publish the data they collect. Organizations may be evaluating their efforts for internal quality improvement, but the volunteer nature of these efforts and the absence of incentives for publication may mean that these results are not widely disseminated. If these reports do exist, their dissemination could benefit MST efforts in general by allowing others to learn from successes and failures of similar groups.

Cost-effectiveness is relatively new to the MST arena. Relative comparisons to United Nations standards may be problematic and the value of these assessments may be limited to internal comparisons between trips for medical service organizations. The educational benefits and impact on cultural competency from these trips for students may represent a relatively easy area for objective evaluation in the future.

An emphasis on evaluation is warranted to improve the planning, implementation, and outcomes of MST investments. Furthermore, a the limited number of publications describing rigorously evaluated MSTs may lead to the conclusion that the data do not exist and further support the historical criticisms of these activities.

Suggested Data Elements

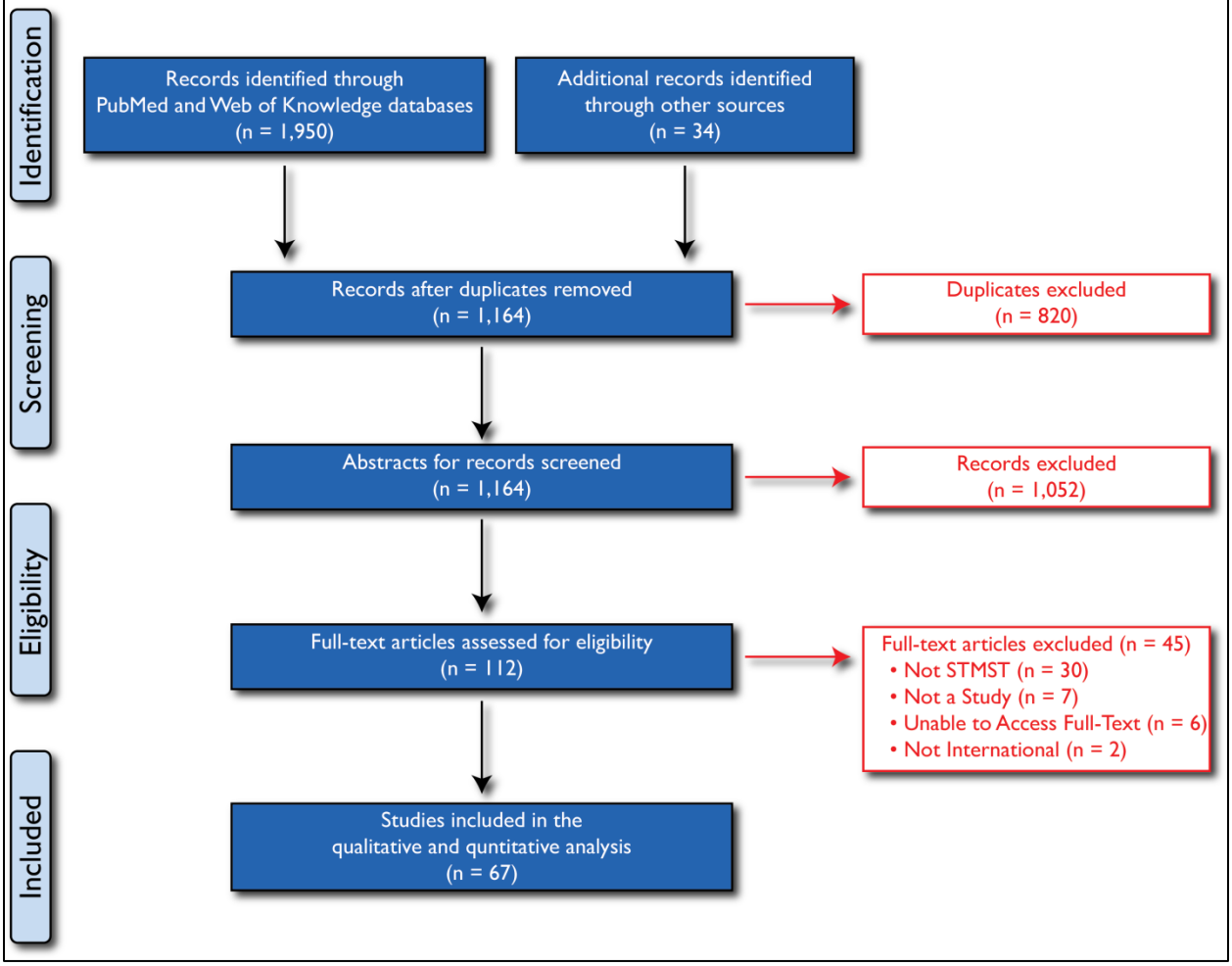
There is a need for comprehensive data collection and outcome assessment to justify, quantify, and verify the impact of MSTs. Organizations and volunteers participating in MSTs should at minimum collect data related to patient demographics, the socioeconomic status of the patients including their household income and liabilities, the availability of regular care in the community, and the cost of delivering the care provided by the MST. Information regarding the

outcome of the intervention performed by the MST is pivotal for decision-making and quality improvement.

Future research in the area of MSTs needs to focus on the development or implementation of materials or instruments capable of measuring the psychological, financial, and sociological benefits or costs of interventions in this setting. At this point, I am not aware of any validated and reliable instruments capable of this assessment.

Table 1. Terms Used in Publications to Refer to MST	
Term	**Number of Citations**
Charity missions	1
“Ear Camps”	2
Foreign surgical missions	1
Humanitarian assistance missions	1
Humanitarian medical missions	2
Humanitarian medical projects	2
Humanitarian medicine	1
Humanitarian mission	7
Humanitarian surgical missions	3
Humanitarian surgical programs/assistance	2
International clinical exchange	1
International cooperation programs	1
International outreach	1
International surgical outreach missions	1
International surgical missions	4
International surgical volunteerism	1
International volunteer surgical trips	1
MEDCAP/DENCAP/MEDRETE/MCMO/MOOTW/MOP	4
Medical brigades	5
Medical humanitarian effort	1
Medical mission	23
Medical tourism	1
Mission	9
Overseas volunteer surgical teams	2
Short-term humanitarian health care projects	1
Short-term international medical relief trips	1
Short-term international medical trips	1
Short-term medical missions	13
Short-term medical outreach	2
Short-term medical service trips	2
Short-term medical volunteer work	3
Short-term missions	5
Short-term outreach mission	1
Short-term voluntary surgical missions	1
Short-term volunteerism	1
Surgical brigades	1
Surgical mission	12
Surgical missionary/mission trip	4
Surgical “safaris”	1
Voluntary humanitarian medical interventions	1
Voluntary surgery abroad	1
Volunteer medical services	2
Volunteer missions	4
Volunteer surgical trip	2
Volunteering surgical teams	1

Figure 1. Literature search for research on short-term medical service trips. January 1, 1993 to May 15, 2013.



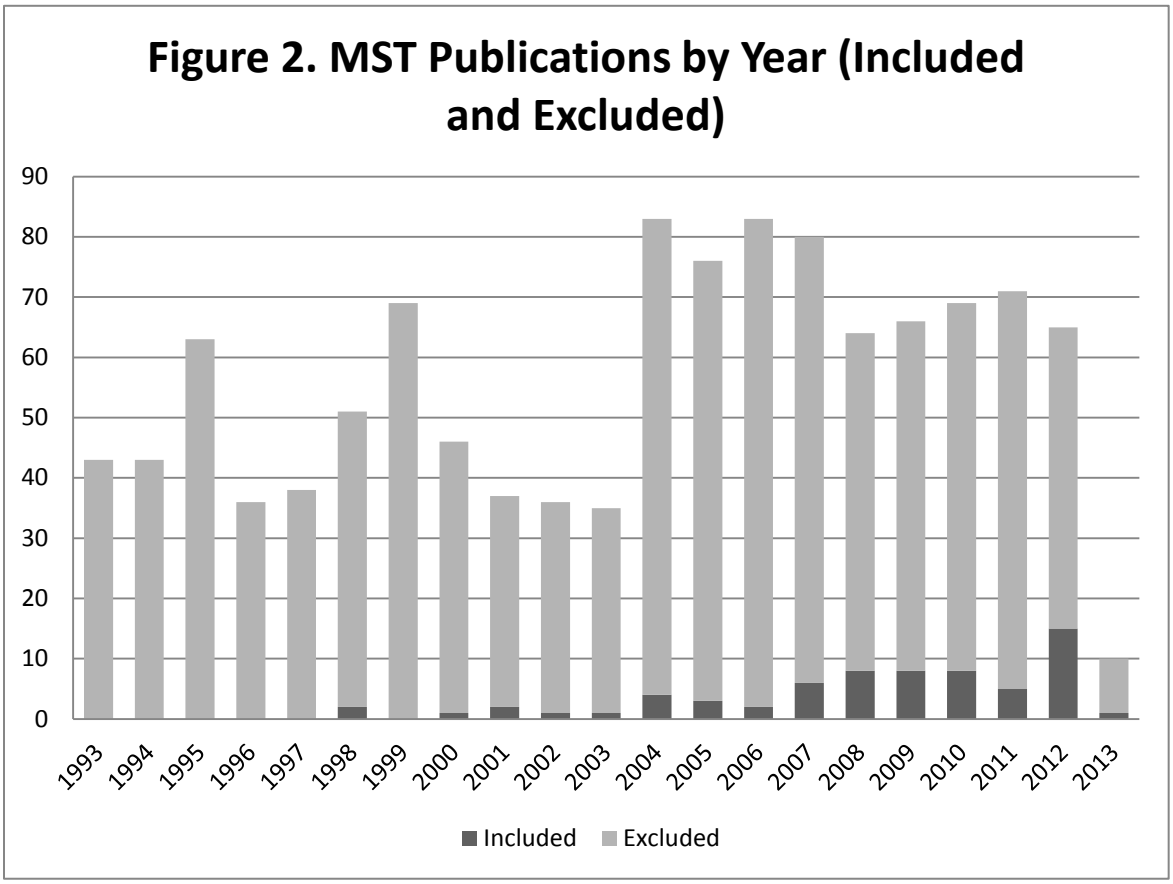


Figure 2. MST Publications by Year (Included and Excluded)
90
80
70
60
50
40
30
20
10
0
1993
1994
1995
1996
1997
1998
1999
2000
2001
2002
2003
2004
2005
2006
2007
2008
2009
2010
2011
2012
2013
Included
Excluded

Chapter 3: Emotional Connection, Rejuvenation, and Dependency in the Context of Evaluating Medical Service Trips

Introduction

Low- and middle-income countries (LMICs) often exist at the crossroads of insufficient or unstable healthcare infrastructures (including provider shortages) and a disproportionate burden of disease (Scheffler, et al., 2008). The inequalities that marginalize populations in LMICs further contribute to the constancy or emergence of disease and disability (P. Farmer, 1999). Short-term and long-term volunteer efforts originating from public and private entities in high-income countries (HICs) aim to these address global healthcare shortages.

Short-term medical service trips (MSTs) or medical missions, are an example of this form of volunteerism. This somewhat loosely defined model of healthcare delivery is gaining popularity among those interested in providing international volunteer service to those in need of healthcare (DeCamp, 2011; Maki, et al., 2008). MSTs utilize a volunteer workforce for the provision of medical care over a short-term visit (generally four weeks or less) for populations primarily considered medically underserved. MSTs draw volunteers from communities, both clinicians and non-clinicians, as well as educational institutions, including undergraduate, graduate, and medical students (Asgary & Junck, 2013; Maki, et al., 2008; Martiniuk, Manouchehrian, et al., 2012; Montgomery, 1993).

This paper focuses, in-depth, on the perspectives and experiences of these volunteer participants, hoping to shed light on reasons they give for going on these trips and the perceived benefits MSTs provide. The existing literature includes a number of studies using closed-ended surveys to describe volunteers and MST organizations (Campbell, et al., 2010; Chiu, et al., 2012). These create a gap in our understanding of volunteers by leaving out the intricacies of their motivations. Individual volunteer motivations for participation in MSTs are far from simplistic. For the majority, the complex nature of these motivations is likely to be dualistic and include self-focused and selfless attitudes within the same individual. Included in the discussion

of motivations should also be the dynamics of the group experience on an MST. These complexities may influence the decision-making process at the organizational level and the patient level. Fundamentally, the members of the organization built a culture based on their motivations. In this context, the passion to do the most good for the most people at any expense could create situations that shift the benefits unilaterally toward the volunteers and put patients and communities at risk (MacIntosh, et al., 2013).

The paper also considers how participants view the long-term benefits these trips have for the populations and communities served. In this latter context, the paper examines the potential relationship between the relatively modest attention placed on evaluating the outcomes of MSTs and three more prominent components of the MST experience, which constitute major themes in the qualitative analysis of participant narratives: emotional connections, personal and professional rejuvenation, and the volunteer's dependency on participation.

The MST literature reveals a contradiction. On one hand, MSTs have been criticized for their ethical marginality or the uncertainty of their effectiveness or both (Crump & Sugarman, 2008; DeCamp, 2007; Dohn & Dohn, 2006; Montgomery, 1993; Wall, Arrowsmith, Lassey, & Danso, 2006). Yet, as this study confirms, at the same time participants are generally enthusiastic. Editorial and commentary pieces regularly appear in the medical literature supportively describing these trips and referring to the rewarding emotional experiences and various forms of social capital to be gained from participation in MSTs (Martiniuk, Manouchehrian, et al., 2012). Polarized opinions regarding MSTs can lead to emotionally charged debates between those who support their utility and those who question it[1] (Bermudez, et al., 2010; DeCamp, 2007, 2011; Dupuis, 2004; Hunt, 2008; MacIntosh, et al., 2013; Robinson, 2006).

[1] Especially the published dialogue between Dupuis and Bermudez in the journal Plastic and Reconstructive Surgery

The divergence of attitudes regarding MSTs combined with their increasing prominence, proliferation, and economic magnitude, raises interesting questions about the motives, expectations, perspectives, and experiences of those who lead and participate in MSTs (Chapin & Doocy, 2010; DeCamp, 2011; Maki, et al., 2008). These same conditions also draw attention to the issue of impact and outcomes assessment in relation to these trips. The published literature is quite limited in presenting empirical evidence regarding MSTs (Sykes, forthcoming). Therefore, few existing studies address these questions.

The need for evaluation of outcomes for the care provided by MSTs seems basic; however, in order to do that, more information is needed about those that provide this care. We need to know more about the motivations of those that support or perform MSTs (MST volunteers as well as the organizational leadership) and how their motives and intentions may potentially influence the organization's stance toward evaluation. This paper gives voice to key members of one medical service organization in order to express in some detail how these leaders and participants explain their efforts, revealing the perceived rewards and concerns embedded within accounts of their lived experiences. The specific research questions for the study are as follows: (1) why do people say they participate in MSTs, and (2) how do their emotional connections and motivations relate to the evaluation of MSTs.

Methods

Overall Study Design

This investigation utilizes qualitative in-depth interviews embedded in an overall case-study approach, that is, an analysis of a single medical service organization. The case study approach takes a holistic look at a phenomenon located in a specific time and space (Lofland, 2006, p. 21). Yin defines the case study as an inquiry into a phenomenon in-depth and within its real-life context (Yin, 2008). Medical service organizations operate largely with a volunteer

workforce that is constantly changing. This creates a dynamic culture that members and leaders learn from one another rather while actively contributing to its development and reformation. Scholarly literature about the phenomenon of these interactions in this setting is not available. There are also no in-depth studies examining personal motivations for participation in MSTs. The absence of knowledge coupled with the dynamic nature of the organization and its activities creates a perfect opportunity for case study research.

The goal for this case study was to identify an organization that, beyond the obvious need for the organization to be actively involved in MSTs, also included three main characteristics: (1) operating MSTs that include both a medical and surgical component, (2) functioning as a relatively small organization with minimal full-time professional staff, and (3) performing MSTs in multiple countries and regions of the world annually. I wanted to include an organization employing medical and surgical interventions in order to identify any differences between motivations or expectations as they relate to these treatment approaches. The significance of the second characteristic comes from an interest in organizations that are more grassroots in nature. The final characteristic addresses the need for an organization with a broad view of the world that allows for examination of differences in cultures, politics, and challenges related to travel.

Organizational Characteristics

Midwest Medical Service Foundation (MMSF)[2] represents an established multispecialty secular organization that plans and implements MSTs. It operates roughly six to eight MSTs annually. There is no formal list of medical service organizations nationally so comparisons of MMSF to other medical service organizations are difficult; however, there are no reasons to think it is significantly different from others discussed in the literature or identified on the internet.

[2]Midwest Medical Service Foundation is a fictitious name used to protect the anonymity of the case organization.

The origins of international medical service are thought to be associated with faith-based efforts; however, there is evidence that these activities are becoming increasingly secular (Pezzella, 2006). Even among faith-based organizations, evangelism is not a universal part of MSTs. There are no known published comparisons between medical service organizations that include faith-based activities with those that do not. The distinction between faith-based organizations and secular organizations may be difficult in the absence of blatant proselytizing. As discussed below, medical service teams within secular organizations may include actors that participate for faith-based reasons. Discussions outside of the current research project indicate that some faith-based MSTs include members that do not participate in or support faith-based activities.

Founded in the mid-1990s, MMSF has sent 74 teams to 12 countries (China, Croatia, Cuba, Ecuador, Guatemala, Mali, Mexico, Panama, Philippines, Romania, Uganda, and Vietnam). This 501 (c)(3) non-profit organization relies predominantly on local philanthropic donors within the United States and four annual fundraising events for financial support. The 2010 990 IRS Forms indicated net assets approaching one million dollars. Experiencing a steady growth over time, these figures are up significantly from their 2002 value of approximately $200,000.

A Board of Trustees (BOT) consisting of 29 members from varied backgrounds led MMSF, at the time of this study. Three full-time staff positions at the organization (a public relations position was vacant at the time of this research) are primarily concerned with domestic administrative duties. The teams of volunteers for these trips include medical and non-medical personnel and historically these range in size from five to 76 volunteers, with a mean of 35. Each

team has a medical director and a mission coordinator lead the trip; in many cases, these trip leaders organize the same trip every year.

This author had a prior working relationship with the organization and had performed research projects in association with several of their MSTs. This relationship provided access to the potential informant pool and built on the previous rapport of successful work within the organizational environment. The BOT approved this study prior to its initiation and agreed to provide access to members, volunteers, staff, future board meetings, fund-raising events, financial records, and publicity materials for the duration of the study. This study was approved by the University of Kansas Human Subjects Committee and complied with all associated ethical standards for research with human subjects.

In-Depth Interviews

I gathered data for this paper from semi-structured in-depth interviews conducted with the key members of MMSF. Aiming to capture the meaning of experiences for key members of an organization in the context of MSTs, I selected a qualitative method to provide a detailed exploration of motivations for participation and the relationship between these motivations and evaluative activities. The complex nature of individual motivations exemplifies the need for in-depth qualitative interviews to explore this phenomenon while providing contextual details and information (Creswell, et al., 2011). The previous literature contains only one study exploring MST volunteer motivations in-depth and using interviews to understand the factors that keep volunteers engaged (Withers, et al., 2013). This was a study in of an organization providing dental services in Northern Mexico. The current study differs in two significant ways. First, the current research project explores a medical and surgical organization with a presence in numerous sites throughout the world rather than a single site. Second, the prior work relied on a

convenience sample of volunteers and the current study targeted the key members and leaders of an MST organization specifically.

Members of the organization were eligible for participation if they fell into any of three groups: staff member, BOT member, or trip leader. Twenty-seven key members of the organization participated in the interviews (Table 1). Twenty-two of the informants were members of the BOT, 11 were trip leaders, and two were staff members (groups are not mutually exclusive and thus the totals exceed 27). The Executive Director, one of the paid staff members, sent a mass email to the BOT and trip leaders notifying them that I would be contacting them in the near future about participating in the study. I recruited informants primarily via email and gave them the option to select the location for the interview, with one caveat, that the location should be relatively quiet to aid with my own concentration and recording. Data collection began March 1, 2013 and continued through May 22, 2013. Following 20 interviews, I began to see evidence of data saturation. This became increasingly evident by the end of the twenty-third interview. At this point, I had already scheduled the remaining four interviews and I felt that cancelling them would be unprofessional.

Among the informants, the median number of MSTs was eight with a range from zero to 25. The two informants with no experience travelling with an MST were the staff members. Since the time I interviewed these two individuals, one has been on a trip and the other has volunteered to travel in the next year. The remaining 25 informants represent a highly experienced group of MST volunteers. Nineteen (76%) of these volunteers have been on five or more trips and 10 (40%) have been on 10 or more trips. Sixteen of the 27 informants (59%) work as healthcare providers in the United States, as well as, when they are participating in MSTs.

I assigned identification numbers to each interview based on the group that best represented their duties in the organization (100s for staff, 200s for BOT members, and 300s for trip leaders). Interview guides directed the conversations based on their assignment into the BOT, staff, or trip leader categories. Those informants that served in more than one role were assigned interview guides that covered both categories, but avoided duplicate questions.

After providing oral informed consent, interviews were conducted in locations selected by the informant. For 14 (52%) of the informants we met in their office. Eight (30%) of the informants chose to meet me at local coffee shops for the interview. Three met me in my office at the university and the remaining two invited me to their home for the interviews. All interviews were recorded digitally and transcribed verbatim. Interviews lasted 53 minutes (standard deviation = 16.3 minutes) on average and ranged in length from 21 to 95 minutes (Table 2). Field notes were collected during board meetings, fundraising events, and data validation meetings.

Data Analysis

Data collection, transcription, and preliminary analysis occurred simultaneously. Using the constant comparative method of qualitative analysis, I analyzed the transcribed interviews and arrived at themes inductively (Charmaz, 2006; Glaser, 1965). The constant comparative method generates several properties and hypotheses about a phenomenon through comparisons of incidents that fit within the theme, integration of the themes and their components, defining the theme, and finally ending with a better understanding of the phenomenon (Corbin, Strauss, & Strauss, 2008; Glaser, 1965). As the interviewer and analyst, I began to develop ideas and interests while reviewing the first few transcripts of the interviews. These interests served as the catalysts for the themes and later reviews of all of the transcripts further evaluated them (Corbin,

et al., 2008). Transcribing interviews within a few days of completing them allowed me to pursue some of the emerging ideas in more depth with future informants. On several occasions during the analysis and writing phases of the project I remembered specific discussions from interviews. These memories then provided me with a specific point to return to and identify relevant illustrations.

The full transcripts and associated descriptor data for each interview were uploaded into Dedoose, a web-based mixed methods analysis software system that allows for the creation of databases that link descriptive data with qualitative transcripts (Dedoose). I created a set of codes that included both deductive and inductive themes. The software allows users to apply codes to specific text within the transcripts. I collected excerpts from each of the codes and exported these for further analysis. I found that some of the codes identified overlapping concepts that I could consolidate into themes. The results of this consolidation formed the framework for this paper and the following chapter as the themes represented significant findings describing motivations and expectations for the work of MMSF.

Credibility of the Data. I was intentional about trying to make the informants feel safe and comfortable with participating in this research. Focusing on the environment for the interviews, I encouraged the informants to select the meeting location that would be comfortable and convenient for them. Every participant had the opportunity to refuse participation. My introductory statements included remarks about protecting the confidentiality of the information the informants would share with me. I encouraged all informants to speak freely about their experiences and feelings. At the end of each interview I asked them to raise any subjects that we had not covered.

Several informants made phone calls on my behalf to potential informants that had not scheduled meetings with me or that were proving hard to reach as an effort to encourage their participation in the study. This seems to indicate a level of trust and I believe demonstrates my ability to establish a rapport with the informants. I also believe this translated to honesty and comfort among the subsequent informants. The frankness and informal nature of speech also seems to indicate a level of comfort with me as the interviewer. Several informants indicated that they were hesitant to mention concerns with the recorder on, but they went on to discuss the concern in spite of this hesitancy.

The initial analysis of the findings was validated through member checking during three separate meetings with informants that participated in the interviews. The first meeting included a trip leader, the second two trip leaders who are also BOT members, and the final meeting included two BOT members and a paid staff member. During these meetings, I briefly discussed the items of interest that I felt were emerging from the data analysis. We discussed how I was interpreting the comments about relationships with the medical communities in the recipient communities, the influence of emotional connections on the organizational decision-making, and the concept of dependency that many of the informants listed as a motivating factor in their participation. These meetings prompted further clarifications and added depth to my understanding about each concept.

Results[3]

The in-depth inquiry resulting from the semi-structured interviews provides some insight into the reasons an experienced group of volunteers give for their frequent participation in MSTs. The sections below include three major themes that describe (1) the influence of emotional

[3] All of the names included in the Results section have also been changed for anonymity.

connections on decision-making, (2) the personal and professional rejuvenation that volunteers receive from participation, and (3) the volunteer's dependency on participation in MSTs.

While the medical literature on MSTs covers a wide range of issues, it does not discuss explicitly the individual's motivation to volunteer regularly and repeatedly. There are a few references to feelings of anticipation or discussions about looking forward to the next opportunity to participate, but generally, accounts stop with expressions of leaving with a feeling that there is more work to do.

Why do people say they participate in MSTs?

In discussions and publications regarding philanthropic work, it is common to see the phrase "I receive more than I give" or something similar (DeCamp, 2011; Dohn & Dohn, 2006). Often this phrase seems to appear in the form of personal testimonials for recruiting statements or in response to accolades. This somewhat ambiguous statement does little to explain the motivations behind the efforts of volunteers. The informants in this study cite motivations for participating in MSTs that include the good feelings that come from working hard, a need to fulfill their faith or their sense of obligation to society, an interest cross-cultural experiences that include staying busy or impacting students, and a desire to feel appreciated again for their work.

One informant describes the good feeling resulting from the experience, which rests on his belief that the work is benefiting a large number of patients. "At the end of the week you get to see how many really hundreds of patients you've seen" (ID 217). One physician feels an obligation to give back to humanity in general, as repayment for the opportunities in his own life.

> Well probably a combination of factors um I always suspected that it would be very rewarding … emotionally and kind of spiritually to feel like you're giving back because … anybody who's gotten a long way in education or in their career, they know that other people have helped them along the way and you always feel like you kind of owe somebody, not sure who you need to payback I mean certainly your parents and your family but uh society in general you feel like you

> kind of owe a debt and … it's just a nice way to give back to the world at large … that that that part I expected, what I didn't expect was that it was going to be just so much fun I mean the people I've been on trips with so far have always been really … good natured people. (ID 302, Medical)

As discussed earlier, in spite of the fact that this is a secular organization, some members of the organization participate for faith-based reasons and thus make the division of secular and faith-based organizations somewhat difficult. One informant refers specifically to fulfilling her faith by participating in MSTs and describes the impact this has on the rest of her year.

> For me it's a way of sharing … what I've been blessed with … and using my talents that, my God-given talents … with other people. Serving and being in a serving role without receiving anything … it's a really concentrated way of giving, because you are doing it all in one week. But there's aspects of that that get brought home the other 50 weeks out of the year that you can take to work with you too. So, for me it's a way of, a matter of serving and fulfilling my faith or you know that sort of thing. (ID 207, Medical)

A strong work ethic seems to be a consistent characteristic of the informants in this sample; however, this characteristic may be less evident among volunteers that are not a part of the leadership of MMSF. A surgeon member of the BOT that also serves as a trip leader describes the volunteers' predisposition for working hard on these trips even as they take vacation time from their jobs at home.

> Most surgeons, anesthesiologists, clinic doctors, when they go on a trip like this they want to be busy. You don't want to go and just be doing nothing or like a vacation because ya know, you took some sacrifices to do it, you're away from your family you're not really there for other things, most of the time. (ID 211, Medical)

Another physician builds on this idea by recognizing the difficulty some volunteers have with relaxing on a beach in addition to their desire for cross-cultural experiences.

> Another thing that for some of the physicians and nurses, it's just sort of like medical tourism, you know they want to go on a trip, they want to go somewhere, but a lot of us don't sit on the beach very well or sit on a cruise very well. So we can go do what we do, but we can do these things I just talked about, we can see a new country and try a new thing, meet new people. (ID 303, Medical)

A non-medical volunteer and BOT member describes the work ethic from her vantage point and how that translates to measuring success for the volunteers.

> These surgeons go, they want to work and they will work all, as you've watched they'll just work and work and work … so the more people they can help, the better the, to them the mission is. (ID 212, Non-Medical)

There is a value placed on the feelings of gratitude expressed by patients in these settings and the acknowledgement of how this differs from healthcare delivery domestically.

> The appreciation that comes from those people, … here we get that appreciation … they may say thank you and oh they're paying us you know so that's a little bit of incentive that I don't think people who are going to get the um, going to do these things for the applause or the social aspect. … Here it's just not as appreciated like I said we get the appreciation most often is just getting paid and my field in anesthesia most people don't even know our name, which I say is part of my job they never remember, then I've done my job. I … have often said that if someone could take care of bills here, I would … I mean just go … stay. (ID 216, Medical)

> You get to go and basically give your talents, you know that you work so hard to achieve you know you work so hard to get these skills and learn how to do all these things and uh even though you kind of get to do them every day. I don't know, your work is not always, doesn't always seem to be genuinely appreciated. The people you work for in the hospital administration sometimes aren't that appreciative and the patients aren't always that appreciative, but … when you go on a medical mission trip … you're basically giving of yourself and the people recognize that and they're very appreciative and … it's a lot of fun. (ID 302, Medical)

Previous publications described the potential for MSTs to impact the cultural competence of trainees in medicine. One informant who is responsible for some of the students that participate in these trips is skeptical about this potential in her students, but she remains optimistic about benefits in other areas of their development.

> You'd like to think it is changing your practice for years too, I think, and that realize, you know come back down to earth, and realize why you went into medicine, but maybe not so much. We don't know, so, you know I would have to say for anesthesia providers it's impacting their assessment skills for sure. I don't

> know if it's gonna help anymore altruistic than that, at least they're better at assessment. (ID 201, Medical)

For one informant there is a feeling that encouraging others as they participate in these trips has the potential to multiply his efforts by developing an attitude of service in trainees and his children.

> Well in reality I think always when I've gone it's been um to expose others … you get a lot of value out of the services you provide but it's really the exposure of others to … not only the experience in the the environment, but the opportunity to appreciate what impact they can have um whether it's my kids, medical students, residents, nurses other surgeons whoever, you can be a multiplier that way. So that's always been an important part for me is to make sure we had other people there participating who who it would potentially influence what they would do going forward. (ID 215, Medical)

The informants in this study volunteer their time and effort to support activities that they genuinely believe help others in need. The sense that working harder and longer will extend these benefits to more people increases the positive emotional feedback resulting from the trips. The reward of feeling appreciated for that hard work, may be as much a response to the healthcare system at home as it is a response to a need abroad. Increasing altruism in trainees and children serves as an additional positive outcome for volunteers, but the lasting effect of these trips on future healthcare providers will only be evident in time.

The Influence of Emotional Connections

Emotional connections appear to play an important role in the motivations, decisions, and behaviors of the key members of this organization. This study only provides a unilateral view of these connections, but from the perspective of the informants these connections can be with other volunteers, members of the host community, and patients. They may also include emotional connections to memories of an experience in a specific place that may form an idealistic view of that trip. Each trip creates emotional connections for participants and the BOT (which is largely

composed of MST participants) makes decisions about future trips with these connections in mind.

Connections are important in the individual decisions people make to return on trips to the same location or to travel with someone. Many of the informants describe how the relationships built with people from the host community play a significant role in the experience drawing them to certain trips repeatedly as a sign of solidarity and allowing them to see changes in the communities over time.

> I've seen hundreds and hundreds of people and have made friends with … the people that translate for us or that we work with and they're … like my brothers and sisters there. So part of the reason I go is I go just to maintain that relationship and show them that I still do care. (ID 208, Non-Medical)

> I think a lot of people go back on these trips because they can see …what changes are made, but it's just those relationships they build with the people in those countries, they never leave them. (ID 212, Non-Medical)

Additionally, there seems to be something in the shared challenges and successes that connect volunteers to one another in a personal and professional fashion.

> I think I came out of that trip with some of the best girlfriends I have now … to the point that we've travelled on each mission trip at least two or more of us have been there and … do girl trips outside of that too … where … we get taken care of instead of taking care of everything and … that certainly does make a big difference just the people you meet and to see those people you participate with around the city at different events and to have those contacts it's a huge um help professionally and actually it feels really good to be able to go out and say hey hey how are you doing ya know to Dr. Michaels who I adore, you know to Dr. Moore, um Eric, those people that you know too that you know I was working out at the gym with Eric today … and to be able to have that connection too … you know I've referred patients to them, on that on this professional on that personal side, to just have the contact with people. (ID 216, Medical)

Another informant talks about how close she has become to those that she travels with and how the fundraising events and regular trips create a sense of family. In this excerpt, she seems to equate the value of the mission with the value of the reunion.

> I've said for a lot of years about going on these trips is that the folks you go on the trips with will end up being, even you don't see them for two or three or four years, will end up being some of the most important people you know in some way shape or form. … These are, granted while they are delightfully wonderful medical missions, they are also, it's like a family reunion. I mean we've said before we come back after we've been on a trip with the Michaels and we can't figure out what we're supposed to do for dinner the next night because we should be at their house because we just had dinner with em for the last seven nights and so you really start to feel like family. And the people that you go back with year after year, it is a family. And when you go to [fundraisers] or things like that, the folks you see feel, it's a different kind of friendship that you will never find anywhere else and people have been through some of the same experiences and maybe that that's in part because the people who are drawn to something like this are similar anyway. (ID 206, Medical)

Volunteers feel a sense of connection to the patients that may solidify the challenges of living in a low resource setting. There seems to be something particularly significant about the impact that comes from joining a family (either a patient or another member of the community) in their home. Interestingly, when the informant reflects on providing a wig for a young girl who lost her hair following a serious burn to her head he acknowledges the impact came from a non-surgical intervention. The experience in the home took the interaction away from the sterile environment of the hospital and allowed him to catch a glimpse of life in this particular community.

> I was able to go to her home, I was able to kind of see where she burned herself and how this whole thing had happened when she was like two or three years old and uh, you know see the family and see them in their own setting and that was that was the one that really sticks with me. … It really did solidify that we were doing something worth very worthwhile. And you know, it didn't it didn't even really have to be a surgery, you know, you know we made an impact um and it definitely solidified that for me. And as far as it really made me want to be able to do that again in the future, but it's a rare opportunity for me. (ID 204, Medical)

For another informant, the experience in the home established a sense of solidarity and an emotional connection to the members of the family.

> I mean you know these people, you're invited to their homes for dinner, you're ya know you are you become very close with them and sort of a solidarity and it

> doesn't matter that you're from a country that has a lot of resources and they may not have it. You're just people, which is pretty cool. Um, and there's ya know it's, there's an adventure to it and I think that I, MMSF could attract more adventurous people to, to go on these missions if we had the message in the right way. (ID 212, Non-Medical)

Her discussion of the adventure associated with MSTs was a unique statement I had not heard before and I asked for an explanation. The informant clarified the idea by describing the cross-cultural experience and the feelings of connecting with others.

> Well the idea that you are going to another country is ya know obviously one. Then getting immersed in another culture, uh getting to know those people and to be responsive to what, what you can do to help and helping somebody else in need is always good for the soul. So I think that's and it just, just the whole experience all together is kind of an adventure no matter how many times you go even to the same place. (ID 212, Non-Medical)

Due to a decline in contributions, the organization is facing some new financial challenges. The emotional connections to the recipient communities influence the decisions of the BOT. One of the non-medical members suggests that the decisions about future trips have always and probably will always take into consideration emotional connections.

> I found out in my five years, they're, that that they're usually emotional decisions. And they're usually governed by strong mission director/ coordinators who want to go to those missions and been there and see the need. So, trying to put it into a business context and doing a numbers evaluation is probably going to be difficult to do um but hopefully you know if we get to those crossroads we'll have to take a look at those type of analysis. (ID 218, Non-Medical)

The financial challenges are forcing the BOT to consider the possibility of adjusting the number of trips they take each year. That possibility is forcing some of the members to consider the grounds on which they would make that decision if necessary. One informant explains that it may be time to consider cancelling one of the long-standing trips because the impact, from her perspective, seems to be diminishing. The challenge is defining success for MSTs, especially with "hard evidence." She also offers the observation that these trips would not happen without the emotional investment of trip leaders.

> I think that's really complicated because I feel like the decision does need to be made at some point you have to look at the, the hard evidence what is there, what are we contributing and but then again the how do you determine if something is successful if you don't really have a definition of what you're trying to achieve, it's hard to take the emotion out of it because I don't know that a lot of these trips would have happen, would there be someone willing to step forward and and coordinate a mission and lead a mission if they if they weren't emotionally involved. So it's hard to it's hard to ask someone to make that decision without having some emotional connection to it so it, I found myself in a very difficult position this year because because I was part of the leadership team last year I didn't feel I kind of came away from that trip not being as happy as I wanted to be with who we saw, you know what what we were able to contribute. (ID 221, Medical)

A conversation with this informant at a fund-raiser turned toward the possibility of cancelling the trip to Romania. The informant suggested that the experiences in Romania were life changing for her and the feeling that the trip is declining in value creates a certain feeling of loss in her mind. This conversation and conversations with other volunteers personalizes the decision to cancel future trips to certain areas and alludes to a feeling of desertion when they reflect on their relationships within these countries. Returning to the transcript from her interview illustrates this further.

> I have a very very special place for Romania in my heart, I always will um, and so I want to see if successful but it's it's a touchy one right now I feel like I feel like maybe it has run its course, but we have so many connections there because I mean it's such a long standing mission that we do have a lot of friends there, we have a lot of um just connections for getting things to happen whether it be the hotel to the train ride to right there at the hospital so those are resources that are hard to come by and if they're there and you can utilize them you want to. (ID 221, Medical)

When I asked one informant if the experience of participating in these trips changed over time and became more like the work done at home, she did describe a maturation process, but said that it doesn't remove the emotional component.

> I don't think you really lose an emotional component I think you become a little bit more savvy you know you see some of the problems and you're not going there thinking oh this is great we've done such a great job and all that and you know you feel that but you're also thinking what, you're you're I think you're just

> you've just moved up to the next level in terms of thinking about what can I do that's going to have the greatest impact, I think it's just a little bit more sophistication about what you're doing. (ID 222, Medical)

For some members of the organization, the current mechanisms for measuring success do a reasonable job of determining when a trip should return to a location and when it should not. Bringing in a more critical evaluation that relates the cost of a trip to the benefits of a trip seems irrelevant to these members. The response of one informant expresses the belief that there is no way to quantify or qualify the impact of these trips on the life of a child and any expense even if only one life is changed justifies the effort and cost.

> That's hard because if one life is changed, that one life is changed, but if it was $70,000 and there might be some people that argue that. I think that that's a tough one, but I think that, like I said earlier, I don't think we're doing a fair evaluation of the trips in the end. … You know, it's a hard, it's a hard metric to have because if one kid that had a cleft palate doesn't have that cleft palate anymore, I don't want to be the guy that says, no. (ID 210, Non-Medical)

The organization needs a way to evaluate the work and to make decisions based on their benefits and potentially unintended consequences. Evaluating trips in this way would represent a significant change in the culture of the organization and the view members use to construct or interpret the reality of each trip. One local businessman that serves on the BOT feels that applying standard business principals for evaluation may present problems. The emotional connections to these trips have historically driven the organization to approve future trips without regard for objective measures of success.

> [Evaluation] will be a difficult task because you're dealing with children's lives and to say okay if we go to this country we can do 10 more procedures that should make the decision easier to go to that country versus going to the other one that may cost more and it may have less opportunities. Uh but I was told when I first joined cause I I asked well how how do you decide where you're going to go? And usually they say it's because there's there's a love or affection for that area by some member of the staff who is born there or has relatives there you know there's some compelling reason that they've sought out that country so these decision are going to be emotional pretty much but I do think we're moving

> toward uh somewhat of a business analysis that will help guide us to make those decisions. (ID 218, Non-Medical)

The passion that pushes people to dedicate their time, money, and efforts is at the core of the reason this organization exists; however, according to the informants increasing expenses and decreasing revenues are driving the organization to a turning point. The BOT may be making difficult decisions about future MSTs and they need tools to establish measurable values beyond the value of the emotional connections to each trip.

Personal and Professional Rejuvenation

Most of the volunteers that participate in MSTs with MMSF (and most other medical service organizations) pay for their expenses and take vacation time from work. Commonly, volunteers describe conversations with their friends or coworkers where they talk about struggling to explain why they would take vacation time to work. They claim that in many ways this is a vacation for them, an escape from the mundane or the challenges of the work at home. It seems to rejuvenate them, possibly by reminding them about why they entered medicine or possibly by returning some autonomy that they lose within the bureaucracy of medicine in a HIC.

Several of the informants allude to the idea that these trips can act as a catalyst for remembering why they chose a career in medicine originally. One informant stated this a little more explicitly than others did, claiming that she learned a great deal about herself through the trip and her own adaptability.

> That first trip was a big learning experience and by day, day five of travel I was ready to come back home and still had ya know seven more days and uh just between the work and the travel, um but in that there was so much learning about what was important and why why we practice medicine and um learning of how to adapt to the situation when there was nothing to adapt with. (ID 216, Medical)

One common concept in these discussions could be summed up in terms used by a couple of the informants as a trip "back to the basics" of medicine. This concept seems to emerge as a pushback from their frustrations with medical practice at home. One informant equates the concept to camping and escaping the routine life.

> I mean I do feel like I help a lot of people here in my practice I just think there's something, it's like when you go camping and you get back to just the, the really basics and how it's kind of a good feeling and you're like you get rid of all of this [points to the table, phone, and recorder] and you're just, there's no distractions, you're helping people do whatever you know how to do best, you're around a bunch of great people not only from here that came with you, but the people you meet. It is just a, a it's a wonderful atmosphere that you just can't recreate here because, I mean we're around all these people every day but we're all doing our, we're working to get paid and you've got these goals and you have to finish all these charts before you go home and it's just, ya know it's more relaxing setting. (ID 211, Medical)

Another informant expresses a similar idea, but focuses on the connection to the patients that is often missing from anesthesia at home. She goes on to suggest that the medicine practiced at home is full of components that are not directly related to patient care and these trips provide an opportunity to escape those obstacles.

> I can never be as humbled here as I am in Africa you know it, it takes you to your very being to be able to serve in that capacity and there is, I don't know that I've never been so touched here in serving a patient population or even I mean I have patients that I adore um in anesthesia you don't get to see them a lot on a second time basis but at [work] we do um I know them by name but in there some of them I never saw again and some came back you know and it just to serve in that capacity, it takes you to the root of why you really do medicine I mean here it's all decorated but um we go back to there and it's medicine at its most bare bones. … Decorated being that here um, you know there's all the legal loopholes to run through and um that's just almost incapacitating here with the paperwork and there we don't have that, it doesn't mean we're not giving them the same level of care because we um, carry the same standard of care there as far as what the environment and our um our uh provisions allow. (ID 216, Medical)

This interest in getting back to patient centered care without the economic and corporate challenges is something that comes up often in conversations with volunteers when they describe

the strengths of the model or the reasons they enjoy the trips. In spite of the work associated with these trips, this could be a component in viewing these trips as a justifiable use of vacation time. Simply put, these trips provide an escape that rejuvenates them about medicine in general.

> Some of the strengths are that number one it's very efficiently delivered because um from our end we don't have to deal with a lot of paperwork, a lot of extensive record keeping, a lot of you know approving or denying claims, there's no third party payer who has to approve every procedure or every visit um that's, I think that's one of the big attractions for those of us who participate is that we just go there and the right thing for the patient within you know the limits of our capabilities so if we see something that this patient really needs then we can offer it to them and we don't have to wonder if we're going to get paid for it, we don't have to wonder if uh you know the hospital is going to allow us to do that or if their insurance is going to allow it um, so that is a huge part of you know being able to go and everything we do is pretty much clinically based it's not limited by kind of outside influences other than just the availability of resources um and everybody is a volunteer so everybody's there to work and they all want to get something done again there's no second agenda you know these people aren't going on the mission trip because they're paid so their goal in going there is to do something for somebody else, it's not too earn a paycheck and uh that kind of thing. Those are the, I mean to me those are the main things that are make it so strikingly different from the way we deliver healthcare here. (ID 302, Medical)

> Well I think it is that you're able to practice medicine and provide healthcare to people who really need it and it's outside of all the political and all the stuff that goes on every day as far as running a practice, all the issues, the billing the you know you're constantly nickel and dimed in practice about things that take up time that aren't what you really want to do, what you really want to do is practice medicine and take care of patients so that's one thing is that it's it's really neat to be able to help people like that. (ID 303, Medical)

One interesting perspective describes the opportunity for including the volunteer's children and allowing them to see their parent or parents practicing medicine and enjoying it. She sees this as a contrast to the negative perspective they may present at home when complaining about the challenges at work. "When their parents come home and complain about how much they hate medicine, they can actually see them enjoying things that they do" (ID 301, Medical).

Freedom presents welcomed challenges and a welcomed respite from the challenges that exist at home. The feelings of respite can result in the relaxation of standards and some of the trip leaders and volunteers raised concerns about the resulting behaviors.

> Craig and I will both say as far as the medicine, it is back to doing medicine for the sake of pure medicine, so it is out there it is remembering your skills, it's remembering what it feels like if you don't have somebody looking over your shoulder with policies and procedures and you have to think a lot more critically then you would because maybe there's nobody else here and your stretched. (ID 206, Medical)

> I think that people love that freedom or think that that's how a mission trip should be that you don't have to follow all of the rules that you do at home, and it's not that way. (ID 207, Medical)

> I also have noticed um especially last year it's really easy once you you know you're in this foreign place and you're working in a foreign atmosphere it's really easy to kind of let things go, get a little too casual or you know um just you're a little too comfortable with things and so I think you always need to have someone with some experience reining everybody in. (ID 221, Medical)

While the feelings of rejuvenation are not inherently concerning, when the search for rejuvenation leads to the relaxation of standards the concerns rush to the forefront. MMSF is aware of those dangers and relies on the experienced volunteers to orient others to the expected behavior on these trips.

Dependency among the Volunteers

As mentioned above, this is an experienced group of MST volunteers with more than 75% having participated in five or more trips. These informants take trips nearly every year and some travel more than once a year. Questions about why they participate in MSTs may only elicit the initial motivations and neglect discussions about regular participation. Exploring the question of why they continue to go provides an interesting perspective on the language participants use to describe complex motivations.

Informants commonly refer to a driving force that compels them to participate regularly in MSTs, and they often use the language of addiction. The informants seem to feel compelled to participate in MSTs, but the term addiction carries strong implications of the inability to control certain behaviors. Here the use of "addiction" seems to rest in a less formal or lay understanding of and the informants' descriptions. Expressions of compulsion seem to fit more closely with dependency rather than addiction. The dependency is a response, for most, to dissatisfaction with healthcare as they practice it domestically.

Some informants reference an urge that somehow needs to be satisfied. Others have expressions of this concept amidst larger discussions, but they still reflect back the dependency to participate. "Well it gets in your blood" (ID 212, Non-Medical). "I agreed to go and then once you go you kind of get hooked" (ID 303, Medical). One informant claims the distinction is clear cut among participants, where some are hooked and while others are not.

> Well I think I went back three or four times to Romania and I think it was um just having such a positive experience. I think everybody's first mission is kind of, you've probably heard that from people, that you're either hooked or you're not and I think I was hooked. (ID 222, Medical)

While this seems to be a largely personal feeling, one informant declares that apparently there can be outward expressions of this internal dependency.

> Yeah, I don't know for me personally it's just very satisfying and helps me kind of understand people, be more patient and um ya know it's like you need a fix like my nurses in my office if, I mean they always they'll say to me 'I think you need to go on a mission trip' ya know I mean you get to that point where it's time to go away. (ID 211, Medical)

Dependency is compelling individuals to participate, but the specific therapeutic rewards relate back to the themes discussed above regarding emotional connections along with personal and professional rejuvenation. One informant attributes the dependency to the cross-cultural

experience and the relationships built with other volunteers or members of the recipient communities.

> Well, you've probably heard other people say you do one trip and you get hooked, you know as like addicted. And the it's a number of things, it's the interactions and satisfaction you have with the people in the host country your patients, and not just the patients, but the staff you work with there, the translators. Um, it's just a special way to make a connection to a new culture. Um, but also people that in for the most part you haven't really worked with before in the operating room, people other MMSF participants, you just you get a great connection with them too you know kind of camaraderie and um you know you are doing the kind of work that you like to do back home in a different setting and um, it's it's just it's fun and uh a little bit of a challenge because you are in an unusual setting you don't have the back up and the equipment that you're used to, which probably adds to the element of you know um the satisfaction I guess because it challenges you a little bit. (ID 204, Medical)

Continuing the theme of dependency, one informant fondly remembers his first trip and how the excitement of seeing so many people and working so hard created a passion for this work, but now that trip has changed and he is interested in regaining the passion of the first experience.

> I mean I've been on some of the trips some of the Romania trips have been over 70 people. Again we had four surgeons, we had and ya know we're doing, that was, it's chaos, but I loved it. It was, that was my first experience, with 65 people or something like that. And it was just crazy for a week and you're just mentally and physically exhausted. And um, I don't think we get that, necessarily, out of for one of the Romania missions anymore, it's not nearly as crazy as what it was and we've done so much good there. … Some people ya know, and I can only afford to go on 1 trip a year, I'd go on them all if I could ya know. But ya know, I'm just, I had the discussion with my wife about, after the last meeting, about I really want to go to Uganda and see how, I want to get back to that, that real passion about why I do this and touching so many people and stuff like that. (ID 208, Non-Medical)

The idea that these trips can provide some sort of "fix" for participants raises more questions than it answers. Other authors have described a "high" following short-term (non-medical) trips that artificially inflates survey responses measuring the impact of these experience on the lives of participants (Priest, 2008). It seems that this metaphor emerges primarily from the

feelings of accomplishment, satisfaction, and humanizing cross-cultural connections that help volunteers from HICs feel a sense of purpose and gratitude for the opportunities their life affords.

Presumably, those that only go once are not hooked and this concept was not present in every interview in spite of the level of participation of the group as a whole. I did not design this study to identify the factors influencing the compulsion to participate regularly, but it seems to feed back into the themes of emotional connections and rejuvenation.

How do informants present the organization to potential volunteers and donors?

A grass roots MST organization relies on their volunteers and leadership to recruit other volunteers and to help to build the donor support necessary for sustain their activities. The stories these advocates for the organization tell others are an important reflection of their own opinions and thoughts about the work they are doing on an MST that serve to support the results in the previous sections. In some way, these stories may also explain some of the reasons that originally influenced their own decision to participate in an MST. The language used to present the organization to outsiders appears to support and confirm the themes I described in the earlier sections. In this section you will see evidence of informants: presenting reasons to participate (especially the emotional connections), describing the personal and professional benefits of MSTs, and alluding to the compulsive nature of participating.

One informant describes her story for recruiting fellow physicians and very frankly explains that she feels if people are honest, their reasons for participating are largely selfish.

> What I generally tell them, someone who I think is interested, is I try and give them the push because it's selfish. I mean you you know you ask people who do it why they do it and the answer is, I think if you're honest, because it feels good. (ID 203, Medical)

One informant describes the need for the care the teams provide, but also includes the life-altering emotional connection available for the potential participant.

> I probably expand it from ya know we're providing care that, um someone else a child desperately needs but his, whose parents had no way to provide it um and we provide an experience of a lifetime for you to come with us, whether you're a medical person or not, you will never be sorry you went on a medical mission. (ID 212, Non-Medical)

Another informant discusses how challenging the trips are, but follows that quickly with the benefits of the experience.

> It'll be the worst experience and the very best experience you've ever had, I do I do, I said I was ready to come home, I was crying, and it ended up being the very best of what we do, but it's still hard to recruit people to do it. (ID 216, Medical)

In the process of selling the organization to potential volunteers, several informants discuss how the trip, in their minds, is a rejuvenating escape from the problematic aspects of medicine as they practice it in the U.S.

> So I try and push them to say, you just know how good it will feel to use your skills in a place where people are appreciative and you know it's just pure none of the trappings of American healthcare with you. (ID 203, Medical)

> I said if you want to really practice nursing or practice medicine you come on a trip with us and spend a day, seeing 40 people in a day as a physician. Or working through a day as a, as a anesthesia care nurse and seeing 20 patients that you helped wake up and get out the door. I said you want to really do what you really trained for, then this is what you, this is what you come on and you figure out, you remember why you became a nurse, why you practice patient care versus um, making sure all the dots are dotted and t's are crossed and you don't get sued and you do everything that's just perfect and ya know you don't have a patient complaining about everything. … that's what I tell people, to really find out why you got into healthcare and to do practical patient care ya know, for people that can never repay you aside from thank you. Ya know we'll get people bring flowers in which is ya know wonderful ya know that's huge gratitude thing, especially in Europe? And stuff like that. That's what I always talk about is ya know, being able to do patient care versus having to document everything, I mean granted you do some charting and stuff like that, but it's not typing all this stuff ya know, spending all your time in front of your computer. It's hands on patient care and getting to know people and have relationships with them. (ID 208, Non-Medical)

Increasing the donor and volunteer bases for this organization represents a current challenge that the BOT recognizes and feels the need to address immediately. There are financial

challenges that limit some volunteers from participating or from participating regularly. Although it may be common for people to indicate an interest in participating in an MST within the medical community at large, engaging them and encouraging them to participate in their first trip is what many within the organization feel is the key to attracting them as regular participants. The general sense within the organizational leadership is that trips are so life-altering for volunteers that they will naturally "hook" those that get involved.

Discussion

Three themes seem to characterize the motives of MST volunteers and express the ways in which they experience these trips. Emotional connections, personal and professional rejuvenation, and the volunteer's dependency on participation can also be related back to their experiences at work in the U.S., especially among healthcare providers. Healthcare in the United States and many other high-income countries (HICs), over recent decades, has become increasingly bureaucratic. The informants in this study commonly describe dissatisfaction with the increasing number of tasks that remove them from patient care. Peckham asserts that this increase in job dissatisfaction as a result of the growth in bureaucracy is burnout (2013). The identification of burnout specifically requires an assessment that is beyond the scope of the current study; however, the informants in this study seem to be responding to a disconnection from the passion they once held for medicine (Maslach & Jackson, 1981). There is a need among this group to move back to the basics of medicine that include connections with patients and the delivery of care without the trappings of bureaucracy.

Medical professionals involved in these trips experience a sense of gratitude for their work that they may not experience at home. Some of the providers commented on this gratitude specifically stating that the hospital administration at home is not appreciative of their work and the patients in the MST setting express their gratitude in lieu of a payment, which is more

commonly the reward at home. This expression of feeling rewarded by nonmonetary means may be reflective of those that choose participate in these trips or it may be the result of participating and grounding providers back to their calling. MSTs may serve as an antidote to their job dissatisfaction and rejuvenate them about practicing medicine. Individuals that feel more burdened by bureaucracy and job dissatisfaction may be more likely to participate regularly in MSTs.

Commonly the fundraising events for this organization include an expression of gratitude to the providers that take vacation time from work to pay their own way to provide care on an MST. The informants in this study occasionally refer to this sacrifice, but they focus more often on the compulsion that these trips fulfill. The negative connotation of the term “addiction” makes this self-imposed reference somewhat troubling because of the potential for unidirectional benefits. Informants seem to answer questions about how this becomes a compulsion with discussions of gratitude, relationships, and the escape from the challenges and speed of life at home. The rejuvenating nature of these experiences seems to be a key component of the dependency.

Emotional connections and dependency may also contribute to a romanticized view of the relationships and benefits of MSTs. Informants describe strong connections to patients and members of the communities in which they serve in spite of the short-term nature of these trips. Building relationships with patients at home is challenging in the busy environment of healthcare and in these settings language and cultural barriers likely add to the challenge.

While there is a desire for professionalization, standardization, and measurement inside the organization from largely non-medical members of the BOT, there is a resistance at the ground level where the providers deliver care that makes this sort of change difficult. This is not

to say that providers are not interested in the outcomes for the care they provide, but rather to say that there may be something obscuring a critical view of the issues associated with their current practices.

Relating Emotional Connections, Rejuvenation, and Dependency to Evaluation

Given the high degree of commitment coupled with the significant financial and human resources going toward MSTs it is surprising that evaluation is not more of a priority. The lack of resources or interest in performing these activities provides the simplest explanation, but the reality seems more complex. Critical questions about the work could lead to conclusions that MSTs fail to achieve a life-changing positive impact on the patients they serve. Simple statistics totaling the number of individuals seen or treated by the team provide an outcome measure for the process of the provision of healthcare. Moving beyond measuring the process to the outcome of the intervention requires an acceptance of the possibility that the care provided has the potential for a positive or a negative impact on the patient or the community.

Motivated reasoning, a social psychology concept, suggests that people are often unconsciously motivated to think about information in a way that allows them to reach the conclusions that support their line of thinking (Kunda, 1990). Kunda argues that there are two categories of responses to this phenomena: those motivated by accuracy regardless of the conclusion and those motivated more by the desired conclusion or directional outcome than the accuracy of the information leading to the conclusion (1990).

In the context of MSTs, motivated reasoning may appear among those that invest substantially in MMSF. The high level of commitment of time and money motivates individuals subconsciously to identify successes in the work they perform rather than failures. Utilizing outputs rather than outcomes ensures that all of the trips have a positive impact on the needs of a

community. Pursuing information that might challenge the success of a trip would require key organizational members to be uncomfortable with the lack of certainty around this success. This discomfort must be large enough to motivate them to pursue accurate information rather than simply accepting the assumption that everything they do is good.

Frustration with the increasingly bureaucratic nature of healthcare delivery in HICs and the job dissatisfaction physicians and other providers experience as a result, may be a strong component of the motivations to participate in MSTs. That frustration may carry over as resistance to the implementation of evaluative tools in association with these trips. Seeking to satisfy a compulsion by participating in an MST could unintentionally lead volunteers to make decisions that shift the benefits of MSTs unilaterally away from the patients toward the volunteers. Emotional connections, feelings of rejuvenation, and the volunteer's dependency on participation may also cause individuals to choose motivated reasoning over systematic reasoning when considering the impact of MSTs on the communities they serve. The result could be the inability to consider fully the positive and negative impacts of short-term medical service trips on the communities they serve.

Strengths and Limitations

This is a case study of a single organization and therefore generalizability is not a goal for this work. The purpose of this study is largely hypothesis generation and would require extensive broad assessments with numerous groups and individuals to validate that these findings are not strictly limited to this single organization.

I only interviewed individuals within MMSF. I did not interview members of the recipient communities. Perspectives from patients and host providers could provide a completely

different view of the motivations of MST volunteers and the relationships they form during these trips.

The inclusion of nearly all eligible individuals in the current study allows for confidence that the sample is representative of the key organizational members. As key members of the organization, the informants are by definition highly invested in the work. The majority of these individuals are highly experienced members of medical service teams and consequently that experience provides some insight into their motivations to participate in MSTs, but it limits their perspective on their initial motivations for participation due to recall bias.

Their involvement in recruiting volunteers does provide a unique perspective on what they expect potential volunteers to find appealing. To my knowledge, there are no publications that include this perspective in the current literature. This study does not include the first hand perspectives of first time MST travelers, those planning to participate, or those that participate once and never return. Consequently, a full understanding of the reasons for participation in MSTs with this organization may have additional complexities or perspectives not presented here.

The inclusion of nearly all members of the BOT and trip leaders also allows for a unique perspective on the operations side of MSTs. This group represents the key decision makers regarding the continuation of trips or the planning of new trips. That perspective is important in discussions about the influence of emotional connections on decision-making in this context.

Future Directions

Future studies may include interviews or surveys of those that participate in only one MST and never return. Information about why individuals only participate once could provide an interesting perspective on the dependency component of these trips. It might also provide

information about the dynamics of the relationships within the teams that may draw some people to return and others to go only once. Finally, some that chose not to return might have a uniquely critical perspective of the work.

Future studies may also include qualitative work with patients that receive care from MSTs. There are a limited number of publications that explore this population and to my knowledge, few explore the reasons that patients seek care from MSTs. This may provide insight into the role MSTs play in the healthcare systems of these communities and the quality of the care provided. Additionally, understanding the recipient community's view of these activities could develop answers for questions about the reciprocity between donors and recipients. For instance, is the emotional connection between medical service teams and host communities bilateral or unilateral?

Conclusion

Medical service volunteers cite complex motivations for participation in MSTs. These motivations can be dualistic and include self-centered and selfless attitudes within the same individual. The informants in this study say they participate in MSTs because of the strong emotional connections made during MSTs with other volunteers and with members of the host communities. Additionally, they describe the personal and professional rejuvenation that comes from escaping the challenges of an increasingly bureaucratic healthcare system. Finally, the connections and rejuvenating nature of the trips contributes to the dependency that fuels participants to participate frequently and regularly in MSTs. These emotional connections and motivations seem to negatively influence the ability of some key members of the organization to critically evaluate the activities associated with the trips this organization facilitates.

Table 1. Demographics	n	%
Gender		
Female	19	70
Male	8	30
Role within the Organization		
BOT	22	81.5
Trip Leader	11	40.7
Staff	2	7.4
Occupation		
Healthcare Provider	16	59.3
Non-Medical	11	40.7

Table 2. Sample Characteristics	Median	Mean	Range
Amount of Time with the Organization (years)	10	8.9	0.6 – 17
Number of MSTs	8	9	0 – 25
Length of Interview (minutes)	48.8	53.3	20.7 – 95.4

Chapter 4: Fighting the Tension between Short and Long-Term Goals: Efficiency versus Partnerships on Medical Service Trips

Introduction

The privatization of humanitarian aid delivery has been coupled with growth in the rhetoric of partnership (Brinkerhoff, 2002). A poorly defined concept, there is a lack of agreement on the components of partnerships (Brinkerhoff, 2002; Lewis, 1998). Despite this lack of consensus, the development literature asserts the concept as the ethical standard and sustainable approach for service delivery (Brinkerhoff, 2002). The United Nations joined the rhetoric and arguably pushed it further by establishing millennium development goal eight (MDG 8), which aims to 'develop a global partnership for development.' Agencies and non-governmental organizations (NGOs) funding development efforts intend for partnerships to empower recipient communities. This represents a shift from theories of development based on the foreign aid model of the Marshall Plan to those based on capacity-building efforts. In other words, organizations are moving from transmitting assets to building self-reliance (Sahley, 1995).

Brinkerhoff, in her article describing government-nonprofit partnerships argues that mutuality and organizational identity are the two dimensions in the definition of a partnership (2002). Mutuality refers to the dependence of partners on one another (Brinkerhoff, 2002). Organizational identity refers more to the characteristics, values, and objectives of the members of the partnership (Brinkerhoff, 2002). Relationships that include high levels of mutuality and high levels organizational identity for all parties involved represent partnerships (Brinkerhoff, 2002). Alternatively, when those dimensions move in other directions relationships become contractual or domineering.

For more than five decades, healthcare providers from high-income countries (HICs) have been travelling to low- and middle-income countries (LMICs) to address healthcare needs. In many cases, this occurs under the auspices of short-term medical service trips (MSTs) or

"medical missions." There are numerous terms used to describe activities associated with these trips, but short-term MSTs consistently include three key components. First, they provide medical care for populations primarily considered medically underserved. Second, a volunteer workforce delivers healthcare as a service to these populations. Finally, the activities involved are short-term in duration, generally four weeks or less.

A central component of many MSTs is the development of a relationship with healthcare workers (HCWs) in LMICs. These affiliations provide an entry point into the healthcare system of the host community and provide access to patient populations and healthcare facilities. Among MSTs that include these affiliations, volunteers build relationships with their hosts that may positively or negatively influence the impact of activities on the communities they serve and the duration of that impact. Considering the medical nature of these encounters, issues of power, ethics, and morals underlie the critical exploration and evaluation of this aspect of medical service activities. Some authors have criticized relationships or partnerships between organizations in HICs and LMICs in aid sectors as asymmetric with regard to power balances (Dolan, 2011).

Several publications in the MST literature describe consortiums or partnerships between members of medical service teams from HICs and communities or hospitals in LMICs (Calisti, et al., 2011; Cohen, et al., 2001; Duenas, et al., 2012; Merrell, et al., 2007; Mitchell, et al., 2012; Novick, et al., 2008; Novick, et al., 2005; Nwiloh, et al., 2012; Uetani, et al., 2006). To my knowledge there is not any literature evaluating the composition or quality of relationships associated with MSTs.

The short duration of MSTs drives some to pursue treating the maximum number of patients possible during their visit, what critics have referred to as the "body count" or "head

count" (Dupuis, 2004; Mulliken, 2004). While maximizing services and efficiently delivering care are logistic objectives, they can come at the cost of quality of care and almost certainly reduce the quality of the educational experience (Dupuis, 2004). Organizations emphasizing the educational component of an MST must consider the balance of meeting the short-term goal of delivering care with the longer-term goal of educating a workforce that will manage future patients or the follow-up of MST patients.

This paper aims to explore the tension between the short-term goal of efficiently delivering quality healthcare in an MST model and the longer-term goal of developing a partnership between volunteers and HCWs in LMICs. Using descriptions extracted from in-depth interviews with MST volunteers, this paper presents narrative accounts volunteers give, which reveal their perspective and experiences with relationships in this setting. Volunteers express both short-term and long-term goals; however, the purpose for this paper is to describe how volunteers make choices that influence the balance between these goals.

This paper utilizes descriptions from key members of a medical service organization to define their relationships with HCWs in the LMICs served by MSTs, revealing their view of the value added by these relationships within accounts of their lived experiences. Three primary research questions serve as the framework for this paper: (1) how do volunteers use the partnership concept, (2) what are the levels of mutuality in the relationships volunteers describe, and (3) are the characteristics of the relationships within this organization consistent across sites.

Methods

The work presented here was part of a broader study aiming to understand how key members of medical service organizations perceive and explain the work they perform through MSTs. In Chapter 3 I provide additional details about all of the methods involved in this research. The initial research questions dictated the collection of in-depth perspectives and

experiences from key members of a medical service organization. Employing a case study approach, including qualitative methods, allows for the ability to explore complex questions in context and dense detail (Yin, 2008). The MST volunteer workforce ensures a dynamic organization with a culture and language grounded in its mission and development. This further emphasizes the importance of understanding the context and perspective of the members of the organization.

The goal was to apply the case study approach to a largely volunteer organization operating medical and surgical MSTs in multiple countries. I selected Midwest Medical Service Foundation (MMSF)[4] for this case study. Using in-depth interviews nested within the case study approach allows informants to express their ideas and perspectives in their own words. Cross-cultural relationships are complex and the significance of the context in descriptions of these relationships exemplifies the need for in-depth qualitative interviews (Creswell, et al., 2011).

A Board of Trustees (BOT) consisting of 29 members, including both medical and non-medical professionals, leads MMSF. At least two volunteers serve as trip leaders for the MSTs, serving as the mission coordinator and the medical director. Six to eight teams annually travel to locations throughout the world. Many of the trip leaders lead the same trip to the same location every year. The teams range in size from five to 76 volunteers (mean=35). Three full-time staff positions perform primarily administrative duties from within the United States.

Twenty-seven key members of the organization agreed to participate in the in-depth qualitative interviews. Members of the organization were eligible for participation if they were involved in the organization as a member of the BOT, a trip leader, or a staff member. One eligible member declined participation. I personally recruited, verbally consented, and interviewed every informant. Every interview was digitally recorded. My research assistant or I

[4]Midwest Medical Service Foundation is a fictitious name used to protect the anonymity of the case organization.

transcribed verbatim each recording. I reached data saturation following the twenty-third interview, but I scheduled the subsequent interviews prior to that time point and decided to proceed with those interviews for completeness.

Three interview guides based on the duties of the informant served as the basis for the interviews. I combined interview guides for those serving more than one role at the organization and removed any duplicate questions. Interviews averaged 53 minutes, ranging in length from 21 to 95 minutes. I took field notes during the interviews, board meetings, fundraising events, and data validation meetings during the study period from January to October 2013. I used study identification numbers to identify transcripts and descriptive data for the informants. Pseudonyms were assigned to any names included in the results section of this paper to preserve anonymity.

The informants for this study represent experienced MST volunteers with more than 75 percent participating in five or more trips with the organization. The two staff members traveled on their first MST after the completion of the interviews. The trip leaders have volunteered for an average of 14 trips with a range of four to 25 trips.

The constant comparative method guided the analysis process for this investigation (Charmaz, 2006; Glaser, 1965). Themes about relationships between volunteers and HCWs in the host communities primarily occurred during discussions about execution and planning of MSTs. Reviewing the transcripts throughout the data collection process provided me with the opportunity to explore emerging concepts and clarify any confusion during the member checking process.

I utilized Dedoose, a web-based mixed methods analysis software system, with this project (Dedoose). The software includes tables for informant specific descriptor data that is

associated with each uploaded transcript. I applied deductive and inductive themes to the text within the transcripts. Deductive coding required me to return to some of the early transcripts to apply the codes. After reviewing the transcripts multiple times I exported excerpts associated with the codes related to the transnational relationships and consolidated the codes that represented similar ideas. Some excerpts appeared in multiple codes of interest. I removed the duplicates and proceeded to clarify the emerging themes. The resulting themes provide the narratives to describe and analyze the relationships between MMSF volunteers and HCWs in LMICs.

Results

Establishing Relationships and Building Trust

Informants use several terms for the connections formed between the volunteers and the HCWs in the hospitals, clinics, and communities served by the MST. These terms include ‘relationships,’ ‘partnerships,’ ‘working relationships,’ and ‘collaborations.’ They also refer to the agents of these connections with similar terms like ‘partner,’ ‘host,’ and ‘local staff.' The use of these terms and the descriptions of relationships in the context of the MST could lend a perspective on the value the members of the organization place on these relationships.

There are no consistent patterns in the use of one term over the other. In other words, those using the term partner are no more likely to discuss relationships that include reciprocity than those using terms like relationship or host. The absence of a standard term may be indicative of the differences between relationships or it may simply be the isolated nature of each trip within the organization. Variance in terminology within informants may illustrate a moral tension between an idealistic relationship and the reality of the relationships they describe.

Relationships built in the recipient communities are commonly with local physicians that are practicing in or around the hospitals that the organization visits. Some of the trips experience

resistance or skepticism among physicians as they try to build these relationships. One informant describes a unique approach to developing those relationships with medical students that eventually graduate and become practicing physicians.

> In Ecuador, is we have gotten we got medical students to be translators for us, local Ecuadorian medical students and now because these trips have been going on for a few years, they have graduated and they're doctors now and so they are interested in coming back and working with us and helping us and so it's building in that way. We're not necessarily getting the old time docs to come but it's the younger ones. (ID 303, Medical)

Another trip has struggled with instability among the physician contacts and has found other hospital personnel to be a more stable and productive counterpart. The informant also indicates that the relationships are not limited to the two-week span of the trip and they communicate throughout the year.

> Within the hospital, probably the bigger relationships are with the hospital staff that we have and that's the nurse that runs the hospital, who's the daughter of the nurse that used to run the hospital when we first started going there. And the relationship of the woman that works at the front-desk within the hospital. And those two people have been there for years and years and years and they know all these groups and they know what we can do and they know what services we provide and so I think and we communicate with those guys throughout the year. … The doctors within the hospital have recently changed … so, I think the doctor relationships are a little bit more superficial within that group. (ID 301, Medical)

The following quote indicates that the informant believes the relationships are essential to a smooth trip. In this case, "smooth" refers specifically to the logistics of the MST, such as identifying patients and managing operating rooms or clinics.

> I felt like our relationships with the staff at the hospital's there were really good they they welcomed us, they worked alongside us um so that to me especially the more I do the more trips I do, I I know how important that is if you don't have that you know relationship and that open relationship and that trust it's very difficult to to have a smooth running you know mission. (ID 221, Medical)

Developing a relationship with HCWs capable of superseding skepticism about the members of an MST may in fact require trust. In most cases, that level of trust will require some

form of prior experience with the team members or the organization. Consistently including members returning to the same destination could be as important as any other factor in building trust. Establishing trust in the hopes of providing education to HCWs may require more trust than establishing a relationship that solely aids with increasing outputs.

The Nature of the Relationships: Partnerships or Logistical Support

MMSF's commitment to regular trips to the same area and the development of relationships with local HCWs has philosophical and practical justifications in the language of informants. The philosophical justifications seem to be rooted in the belief that sustained relationships with local HCWs represent a healthier and safer model for MSTs. The logistics of coordinating and organizing MSTs in a way that maximizes the volume of care they deliver seems to require local contacts in the destination countries and therefore the practical justification for the relationships places value on the services provided by the relationships.

Some of the teams have relationships with local HCWs that help the teams identify clinical and community needs, set priorities for the care and training that will be provided, and create an environment that allows for critical quality improvement. The relationships including these aspects seem to reflect the components of a partnership and this seems to be the dominant narrative among these informants. However, discussions about other relationships this organization maintains sounds more like a logistical support system than a partnership.

Logistical Support for the Short-term. While the dominant narrative around relationships seems to be largely collaborative, not all of the informants describe relationships that empower HCWs in the destination communities. The role of some contacts in the destination country can include logistical support for the incoming team. While these descriptions of logistical support are not isolated as the sole descriptors attached to these relationships, they do

often appear when the informants describe the requirements for continuing a trip or starting a new trip.

The logistics of organizing and executing MSTs require the commitment of time and resources from both the recipient communities and the medical service team. First, someone ensures the team is legally able to provide care, arrive safely, and has a place to stay. Second, the supplies and equipment need to arrive in a place where patients will be. Finally, someone makes sure that the community is aware of the care that will be available through various promotional means. Most of the teams rely on key relationships in the recipient communities to help with these logistics. Three informants describe the importance of these local "contacts" for those logistical concerns.

> Well the key to running a successful mission in any of these countries is having a strong contact within the country, which we do in all of them at this point, I think. But, in Uganda we definitely have a strong person because we need to get credentialed, we need to get through customs. (ID 210, Non-Medical)

> If there is a really willing partner who um has, is working alongside you and feel like they get it and they want to be better and they can help you with the logistics and ya know and all the credentialing and all that. (ID 212, Non-Medical)

> I can't imagine going into a place a different place year after year after year and not even knowing kind of what was going to be there and your baseline of getting set-up. Especially with surgeries, I think that's really key, that long-term relationship, most everything else is kind of in between. (ID 301, Medical)

Descriptions in some instances seem to indicate that the relationships serve to sustain entrée into the community and provide for a consistent destination. One informant believes that the need in these communities will always be there and consequently the need for relationships that allow MSTs to assist in those areas is essential.

> It takes so long to establish the relationship in these countries and the hospitals and the medical staff over there … you hope to establish a relationship where you can go there year after year uh you know I'm I'm not sure the need ever ends you

> know. Um and certainly, the mission to Africa just it's just unbelievable you know. (ID 218, Non-Medical)

Another informant uses the term partnership in the context of ensuring that the trip will continue, but there is no sense that this includes the components of a partnership described in the earlier in this paper. This relationship is really an afterthought beyond the task of providing a high volume of care.

> It's definitely short-term medical missions, um, high-volume [laughs], you know you go in, you go out, you have a plan, it's very hard work, it's you know it's 12 hour days, you serve as many people as possible. And hopefully forming partnerships wherever you go, so that it's not a one-time medical mission. That it's a building process. (ID 202, Medical)

In this short-term model of care, informants and other members of MMSF describe efficiency as an important aspect of the trips. Some relationships serve the MST when contacts play a role in increasing this efficiency, which in their minds allows them to deliver more care. Primarily these discussions cover two items, prescreening and follow-up for patients of the MST. The prescreening service allows the team to spend more time operating and less time in the clinic. The surgeons and anesthesiologists examine every patient prior to surgery, but the local HCWs identify the most likely candidates for surgery. Two informants describe the process at one of the Guatemalan sites.

> The partnership thing, I … when it works it works really really well. I really the partnership with the doctor in [Guatemala] is it's pretty amazing, I mean he will have when we go down, um, you know this in the next two weeks, um, he will have, lined up you know surgeries for us, things that he can identify as needs, and we have then are bringing the people to fill that gap for sure. So that's pretty amazing. (ID 202, Medical)

> I think Dr. Garcia really scouts out his own patients, it's not going out in a truck yelling that there's gonna be a mission. So, if they're Dr. Garcia's patients he actually has a good scenario. (ID 205, Non-Medical)

One informant describes a time when the local HCWs failed to meet the team's expectations for the prescreening process. The result was a scramble for patients and the subsequent concern about taking trips to this site in the future.

> One of the things that I was that I was surprised in the Philippines with is that when we got there um, the hospital we work with was supposed to have identified and screened X amount of cleft surgeries we were going to do and cross eyes we were going to fix and well I was there was not enough clefts and you're sitting there going, 'wait we're here and we're here for five days of surgery and we've got 18 people identified what are we going to do with the rest of the time?' So they started ya know APBing out into the villages ya know does anybody have a burn they need help on or whatever ya know it's like um that's not how you should do it but when you come back and they get asked for the report in that room then it's ya know everything's hyper-inflated how great it was and we had these clinics where we gave away medicine and we did and Sarah worked their giving out ya know medicine and doctors looked at ear nose and throat whatever ya know, take this and call me in the morning but ya know, somebody needs to have ya know a really, um really unbiased look at that and say okay why did we only get there and have only 18 lined up and we had to hustle to find more people to treat. (ID 209, Non-Medical)

A common critique for MSTs is the absence of follow-up care for patients treated by the team. This organization emphasizes their performance of procedures that require limited or no follow-up. One informant discusses the creation of a policy for tonsillectomy that ensured the cases were safe.

> Right well you need to do, you only need to do those cases that that are safe for a longer term for the short-term follow-up. I mean that's why we had this whole debate about doing tonsillectomies and we wouldn't do them in Guatemala without having a second team there for the second week because of the risk of the bleed so. I think it's pretty clear what we would do and what we wouldn't do. (ID 222, Medical)

When patients need follow-up, the teams take advantage of the relationships they have with local providers to provide an access point for follow-up on patients that return after the team has returned home. One informant is clearly aware of the criticisms that many MSTs face

regarding follow-up for their patients and describes the role local HCWs play in the follow-up process.

> Well it's not really true that they don't have any follow-up for instance I mean most of these people are being seen by a local physician uh and usually it's somebody that's very capable of you know taking care of those kinds of things. (ID 302, Medical)

The surgeons often provide their contact information to the local providers and encourage them to reach out with patient information after the team leaves. One surgeon describes this communication during the interview.

> I mean sometimes they've contacted us and said oh we've got this going on with this patient and you know so we email, we've had that occur. So they've given us follow-up and I've told some you know when I had the residents and they were seeing the patients and I said send me an email afterwards and let me know how they're doing. So I mean there's been communication. (ID 222, Medical)

This study focuses on a single organization, but even within this single organization, there is variance in the composition and nature of the relationships between medical service volunteers and local HCWs. The focus on the logistical support provided by relationships is often coming from informants that are or have been trip leaders and consequently these are often contained in areas of the conversation that relate to the challenges of leading teams.

Partnerships. Regular trips to areas may provide volunteers with an opportunity to build a relationship based on mutual trust, as discussed earlier. The mission coordinator for one trip is an immigrant from the destination country. Interestingly, the relationships in place at this site seem to include a slightly different level of trust. That level of trust provides the local physician with the opportunity to describe frankly the highs and lows of a trip. One of the members of the team that traveled to this site describes the experience of debriefing with the physician and the implementation of improvements to the trip following their discussion.

> I think our interview with the local physician and the conclusion of the mission when we sit down with him and he gives us his feedback and we really strive to make that a very real thing, we don't want it to be, with just with the culture differences, usually it's by the end of the week so we're past all of the niceties and you know him feeling like he owes us something or whatever. And we can talk really about, and we'll even kind of say, 'well here's some of the things that we saw that were good, here's some of the things that we saw that were not so good, you know that we did,' just to kind of open that up and say what did you think? What were your, what would you change? You know to really kind of probe what he would like to see. And we've changed over the years, he he's been asking for Gyn services for since we began and we've been trying to recruit for that and we haven't been able to and this year we finally are. And then the education component, um, we had a, we had been corresponding via email and are planning on trying to provide a scholarship for a nurse down there to go to nursing school, there's a nursing school in the area, so that he'll have more educated staff. And to hopefully get him this year to scrub in surgery with us, because he's not a surgeon, but would like to be. He's shown interest, he'll kind of stand there and watch, but he won't hop in, and so our goal this year is to get some resources to him and kind of further his knowledge and educate his staff too. (ID 207, Medical)

Teams from the organization have only been travelling to this location for four years, but this physician was present during the original scouting trip and remains actively involved with the teams. This is the only trip where all of the patients come from a single physician's patient population. The team relies on his opinions for needs assessments and then returns home to recruit providers that can serve in the specific capacity requested by the local physician.

Two informants describe how relationships with local HCWs help to identify needs and both see this as a source of pride for the organization.

> And then identify the needs what **he** [informant emphasized] wants what he's asking for and then trying to provide that. And I think that's very important and I see that we do that fairly well. Is that we wait to be asked instead of throwing something, we can do this. What do you need us to bring? (ID 202, Medical)

> At least with the ones that I have been involved with and I think it's pretty true, not 100 percent, but pretty true, that we bring the specialties that are are needed in the in the host countries, so we ask what what do you need? Everybody always needs orthopedics and for some reason it's very hard to get them, so we try, but…in Uganda we bring exactly what they have requested and we've been able to staff that. So, that is that is great. (ID 210, Non-Medical)

One of the anesthesiologists responsible for managing the operating room schedule on a trip describes the practical implications of this priority setting by the local physician for the team.

> My number one customer was the physician and the group of people who live there and you know the needs that they set out for us was they wanted certain kinds of cases done and uh you know I basically said well you know if we can't get those done then we're not doing what they're asking us to do so we have to get these certain cases done, it was hysterectomies um if we allow all the general surgery cases to fill up all the operating room time then their number one priority is no longer our number one priority. (ID 302, Medical)

On other trips, the teams remain sensitive to the influence of the local HCWs, but in a slightly less direct manner. One of the trip leaders describes the impact the relationship has on their clinical care and decision-making.

> We have learned over the years what our hospital wants us to do and not wants us to do, so if we find somebody that we think potentially has cancer, we do an aspirate or some kind of biopsy and find they have cancer that we refer them to a local hospital that can deal with a long-term complication. (ID 301, Medical)

A recent decision to eliminate the village-based clinical portion of a trip originated from the team leadership. The same informant from the previous quote describes the rationale that the clinic was probably not benefiting patients; rather it was providing an experience for the volunteers.

> Our goal here is to be working with with a group within the country and providing support that they're asking for and we're not doing that with our medical component. We're not providing support that anybody is asking for we're providing an experience for the people that are going on the trip, which probably isn't right. (ID 301, Medical)

Establishing reciprocal relationships requires a commitment from the team as a whole, but the culture of the team is likely a reflection of the leadership. Including an expatriate Guatemalan as the mission coordinator of one team creates a unique relationship that none of the other trips enjoy. However, the full influence of that fact is not decipherable from a single

instance in a single organization. Dividing the relationships into those that are partnerships and those that are not ignores the fact that these relationships are dependent on the components of the relationship and they likely exist on a continuum rather than a dichotomous scale.

"Teaching Them to Fish": A Long-Term Solution

Development narratives and conversations with members of this organization often refer to a cliché that states that giving a man a fish feeds him for a day and teaching a man to fish feeds him for a lifetime. The point is that teaching skills should result in a long-term solution whereas providing a service will only provide short-term relief. The volunteers for this organization have a vision for their future interactions with their partners that includes expanding the role of teaching on these MSTs. One informant mentions the plans to include an educational component in the trip this year. She describes the request from the nurses at the destination hospital for the training and the intention to establish some baseline expectations for care associated with the surgical interventions included in the trip.

> We're gonna have some classes for the nurses and try to set some basic expectations about how care would be given post-operatively here in the you know what we would expect it to be done here, how it would be, and try to integrate that there in a different way. Not to step on their toes, but to just kind of build a partnership of what, if we're gonna do this type of surgery, this is what we need to see the next day. Or this is what we want two days from now … And they were very receptive last year when we were there, there were some issues that we talked about and they were very interested and receptive and wanted to know. So it was almost, it was the now is the perfect time for us to step in with another, we're not telling them there was a 'we want to know more about this.' So, there's our opportunity to do a little more. (ID 202, Medical)

Further adding to the discussion about the organization's priority of education for local HCWs, several informants discuss the potential for training during operative cases. For one, this commitment to training is a key attribute for the organization.

> They just do so well because not only do they come in and bring their expertise and their knowledge but they they want to they want to give that you know along

> with doing the medical treatment they want to work alongside um the local medical team and and teach them and they want to leave knowing that they have advanced their medicine by their teaching. (ID 221, Medical)

One surgeon describes a specific instance of training local surgeons and how this changed the experience for her. Previously her experiences had included the provision of a high volume of care, but on this trip she provided less care and more training.

> I worked with four or five of their residents and it made the trip fabulous cause … they didn't really have anybody teaching them pediatric ophthalmology, here I had these young doctors that were so eager to learn but in terms of the patient care I just didn't really feel like I was making that same kind of difference that I previously had. So it was worth it for me to teach. Could I have done that in another capacity? Possibly. I mean I could have gone there … I guess from that standpoint it was good but I just didn't feel the same as … the previous time. (ID 222, Medical)

After asking her about how that trip may have felt a little different from previous trips she went on to describe the rewards and costs of training others to provide the care.

> It was really good doing that so and and see that's that's another thing if you're doing a lot of teaching maybe you are not doing as many cases but you are doing something probably much more valuable because you're instilling a sense of excitement and interest in the people that are going to take care of those individuals in their own country. (ID 222, Medical)

She continued to reflect during the interview, eventually settling into a perspective that she may not be interested in future trips that do not include training.

> You know one of the things that I have changed in my philosophy you know this is always probably subject to change but I feel pretty strongly about not going on a trip unless I've got other doctors, host doctors there that are number one going to take care of the patients and number two going to be involved in the actual procedures and the work. And that's one of the reasons why I like going back to the Philippines because we have a … group of local ophthalmologists that actually are doing those cases as part of the mission, working with us. (ID 222, Medical)

Another informant argues that the training provided for local HCWs expands the impact of the organization by extending efforts beyond the short trip, similar to the cliché discussed above.

> The local physicians are working alongside you and you can teach them how to do something that maybe they're not comfortable with and they carry that on. (ID 211, Medical)

Included in their discussion of training several informants describe paying for educational expenses for students in the local nursing schools and considerations for funding medical school in some cases. These descriptions represent a long-term commitment to the community, but some members of the organization hope that training will become an even more consistent part of the work they perform.

> I would like to see education being, and empowering the local people to kind of do it themselves and I'm definitely realizing that now, that we need to be doing that and doing it bigtime, whether that is sponsoring their education locally or um, whether it's uh teaching them while we're there in an unofficial capacity, but they're getting skills. (ID 207, Medical)

> I think ya know what can we do to help year after year help build infrastructure and teach and learn so that they can help provided for themselves. … I would really love to continue to see that educational focus to help teach that, teach um wherever we're going um make that part, I'd love to see that part of every mission, that teaching side. (ID 214, Medical)

In spite of the positive descriptions of these relationships and emphasis for the organization, some are skeptical about the potential impact of teaching on an MST. This comment presents the challenge of imparting knowledge in a short-term setting. The learning environment that allows learners to struggle while support is available to help them work through the challenges provides a higher likelihood of individual comfort with the steps of the process.

> I know there was um some training that they tried to do in Romania that just never quite you know caught on and it wasn't for lack of trying or lack of resources I think it was just, at the end of the day what the Romanian doctors were comfortable with when when we were there versus when we weren't there so you

> can hope that they take what we're teaching and go with it and then there's the you can only do so much. (ID 221, Medical)

During the interviews, informants reported that local HCWs welcomed the educational efforts of the team. A discussion of one specific site occurred at one of the fundraising events and the environment seems a little different. One of the interviewed members of the organization reported that when traveling to this site she noticed that many of the local surgeons took the opportunity to go on vacation when the team arrived. This may have been an isolated incident, but it certainly seems to represent an area where HCWs would not be interested in their educational efforts.

Moral Tension: Idealism versus Practical Reality

As described above, within the culture of the organization there is a value placed on the development of relationships with individuals in the host communities. Several informants believe that these relationships are an essential component for an MST and are part of the mission of the organization. Two comments seem to indicate a belief that these relationships influence the sustainability of their efforts.

> There is no reason to go if you don't have a partnership. It just there's no reason. If you're not, if you can't provide something you know, as far as, if you can't leave something behind as far as education or knowing that we can come back to follow-up something, if you can't do that I don't think there is a reason to go. (ID 202, Medical)

> It's uh inevitably in collaboration with some organization on the ground and I think over the years we said, over the years that I've been involved in the organization, that became increasingly obvious that that was a critical component of successful trips. (ID 215, Medical)

MMSF relies entirely on philanthropic contributions and thus spends significant resources on raising this money or obtaining donations of durable medical equipment, disposables, and other supplies. One informant responsible in part for this resource acquisition

discusses her pitch regarding the educational component of the relationships. This comment reveals a certain awareness of a tension that requires emphasis on the reciprocity of the relationship.

> I talk about the surgeries and how they're done and that it's a teaching mission. We don't go in and take over a hospital and then leave and come back and go we did this and everybody's there going what do I do with this person now. … And I always really stress that, that when we leave they are knowledgeable and I always throw in that we learn from them too because I just don't ever want it to look like they're idiots and we know everything. (ID 220, Non-Medical)

Informants also illustrate a sense of tension that requires representation of the organization as more than a group that only provides medical care. The belief seems to be that the care can produce benefits to individuals, but the lasting impact comes from educational and cultural exchanges hinging on strong relationships within the recipient community.

> In addition to doing clinical and surgical work, we have also done, started to do, education and I think we're more than just a uh medical mission group. I think we're more of education, growth and self-empowerment, is the way I see us. (ID 208, Non-Medical)

> In my way of thinking, finding locations, building relationships and going back year after year and and you know you not only, the way I see it you're not only leave you know the footprint that you leave is not just some repaired cleft lips and palates but if you can share knowledge with the local physicians and gain knowledge from them. (ID 303, Medical)

There is tension in the minds of some of the volunteers with the status quo for these trips that has a strong historical component including a certain model for behavior and activities. In one case a newer volunteer, that happens to be a healthcare executive domestically, challenged the standard approach of the team and met some resistance from another team member. The newer volunteer believes that coming into the community and ignoring the need for educational relationships within the community infrastructure will ensure only short-term benefits.

> I know when I went on my first trip … it's like wow … a lot of doing, … but there's so much underlying infrastructure; should we be doing more work for the

> infrastructure for the long-term … part of my frustration, I remember talking to Lindsey and she goes Ruth you remember we're here to do … what we can do and then leave. But … I was in a CEO role I'm going … I don't think that way, I think … what can we do to help year after year help build infrastructure and teach and learn so that they can help provide for themselves. … I would really love to continue to see that educational focus to help teach … wherever we're going … I'd love to see that part of every mission. … So that we just don't swoop in swoop out. (ID 214, Medical)

There is an underlying value statement about the importance of a long-term impact in this response. The informant's perspective rests on the idea that a long-term impact may rely on work beyond the traditional short-term model. This statement works nicely as summation of the ideas expressed in this section that illustrate tension between the perceived ideal model (including a sustainable effort with lasting long-term effects on the communities) and concerns about how the model the organization supports compares to that ideal model.

Discussion

Among development scholars, partnerships are part of the language surrounding the gold standard for development and aid distribution (Lewis, 1998). Capacity-building efforts rather than direct transfers of resources require relationships between donors or volunteers and recipient communities. The composition of these relationships and their ability for capacity-building can vary substantially. Efforts to establish partnerships or relationships between medical service teams and local HCWs face challenges of mutuality that mirror those of other development activities. The MST literature does not previously include evaluations of these relationships for their ability to establish reciprocity and local empowerment.

How do volunteers use the partnership concept?

The language key members of MMSF use to describe the development and nature of relationships with HCWs in the host communities presents a tension between idealism and practical reality as they relate to the value of the work performed by MSTs. The descriptions of

the relationships seem to identify two primary perspectives. One perspective illustrates a relationship that includes reciprocity or high mutuality. The other perspective reflects a service-based relationship where local HCWs help to facilitate the work performed by the visiting providers. This view offers little power for the local HCWs in the decision-making processes, including what services the team should provide.

The actual terms used for the relationships (i.e. partnership or relationship or host) are used somewhat interchangeably and the meanings seem to be more personal than universal. The relationships vary in their composition and therefore variations are also evident in their agenda, depth, and collaborative nature. Viewing the relationship through the eyes of the MST volunteer or member of the organization reveals only one side of the relationship; however, it provides an opportunity to reflect on the impact this may have on the healthcare delivered in this model.

What are the levels of mutuality in the relationships volunteers describe?

Several of the informants in this study seem careful to represent the organization and the relationships in a healthy light that is cautiously aware of the perception of neo-colonialism. While they may not be able to label neo-colonialism as their concern, they do seem aware that others question the motives of humanitarian aid including its potential use for manipulation or influence. There is an apparent tension between representing the reality of the activities the organization supports and the qualification of those activities with something that indicates empowerment of the host community. Negative experiences during MSTs with skeptical or resistant local HCWs may drive this reactive viewpoint or it may be in response to stories told within the organization of experiences like these. These perspectives may also be the result of the informants' level of commitment to MMSF and a concern that criticizing the organization may make them seem less committed to the mission of the organization.

There is a clear sense that the informants believe that the medical service team should take a supportive role in the provision of care in these environments. There are efforts made to establish mutuality by empowering the local HCWs and encouraging their participation in the work of the team. There is a movement among some members of the organization to expand the role of the team to emphasize education, participate in infrastructure support projects, or assist with other projects outside of the operating room and clinic.

The mission statement for MMSF emphasizes a desire to build relationships and to play a role in the education and development of infrastructure in the communities they serve. Executing this mission requires that medical service teams establish relationships with members of these communities to accomplish those educational and development goals. The value system evident in most of the informants indicates that they believe the quality of care available in the communities where they work is below that of the care they are able to offer in this short-term model. The commitment to educational components of the trips also asserts the idea that the hosts have something to learn from the visitors. There are general comments referring to the reciprocal nature of education on these trips, but only one informant cited a specific example of learning something from the local HCWs. The concept of trust, as discussed by the informants, often refers to the willingness of providers to enter the operating room and learn from the volunteers.

Creating environments suitable for the inclusion of education requires commitment. The commitment needs to include a consistent presence and a level of humility that accepts the potential for an existing local solution to be better suited for that environment than the suggestion from the HIC. Finally, the inclusion of education is almost always less efficient and

MSTs should be comfortable with a reduction in the case count if educating local HCWs is the goal.

The line between partnerships or relationships lacking the components of partnerships is rarely distinct. Most relationships contain elements that reflect a partnership and elements that reflect an agenda more closely aligned with that of the more dominant member. This appears to be the dominant narrative in the relationships described by the informants in this research. Evaluating the relationships against Brinkerhoff's definition of partnership would require the perspective of the non-MMSF members of the relationships. This is especially true in the evaluation of the organizational identity component.

Are the characteristics of the relationships consistent across sites?

It would be inaccurate to assume that trips to long-standing sites for the organization show signs of being stronger relationships; that is, relationships that display mutuality by empowering both parties to work collaboratively rather than in dominance or submission. The composition of teams and leaders on both sides of these relationships can change frequently. One relationship described by informants in this work seems to stand out as a potential model of mutuality. Interestingly, this relationship exists on a trip lead by an immigrant from the destination country. This single example is inadequate to support or refute hypotheses about the role of that trip leader in the development and nature of this relationship, but it does represent an area of potential research for the future. There is a lack of clear patterns in the data presented here. The differences between relationships may have more to do with the commitment individuals make to promote interactions that empower versus overpower local HCWs.

The relationships informants describe are inconsistent across the various sites. The organization clearly values the development of relationships with local HCWs, but there seems

to be little guidance on how to develop those relationships or what constitutes a strong or healthy relationship. This further supports the hypothesis that the quality or health of the relationships is dependent on the volunteer and their worldview or values.

Limitations

The view of relationships I present in this paper is unilateral. Questions about the perspective on relationships from the local HCWs in LMICs would provide a more complete picture of this concept, but this could be an area for future research.

Relationships formed in association with MSTs are not limited to those relationships between the MST volunteers and the HCWs in destination communities. There are numerous relationships built within the team between volunteers that several informants describe as extremely important. In some cases, the informants refer to those relationships as a contributing factor in their willingness and eagerness to participate in future MSTs (as discussed in Chapter 2). This paper does not explore these relationships in detail, but their influence could be a factor in the organizational culture surrounding the international relationships. Learned behaviors and attitudes are not measurable in this cross-sectional study design. A longitudinal study following new volunteers and the changes in their behavior could reveal information about how knowledge transfer occurs in this community.

Additionally, this paper does not explore the relationships between MST volunteers and other community members from the LMICs outside of the healthcare setting. During observations at fundraisers and during the member checking process several discussions came up about close ties to drivers, translators, and hotel workers. These relationships seem to deepen the connection to individual trip destinations and influence the consistency of the volunteer composition of teams. Again during the member checking process, one informant when

discussing these relationships indicated that this “makes it harder to come back [home] each year” and another informant agreed indicating that you see more of the “volume of needs and you know you could do more” (ID 211, Medical).

Future Directions

While healthcare activities may vary based on the needs of the destination community, lessons learned about relationships on various trips might benefit the planning activities and establishment of relationships in other communities. Some loyalty to individual trips and trip leaders among the volunteers has a tendency to isolate the trips into silos. In spite of originating from the same organization, there has not historically been knowledge sharing across trips especially as it relates to relationship building.

Additional research is necessary to understand the expectations or views of the relationships held by HCWs in LMICs of these efforts and their impact. Future research among MST volunteers could also test the hypothesis that the terminology used to describe relationships is interchangeable and non-specific. The collateral relationships between volunteers and non-medical community members could also be an area for future research.

Work aiming to develop constructs for the elements of relationships that represent reciprocal benefits and dual leadership in the context of MSTs may help to provide guidance for trip leaders and organizations aiming to establish healthy partnerships that maximize impact for individual patients, communities, and volunteers alike.

Conclusion

The actual terms volunteers use for relationships formed with HCWs in LMICs are inconsistent and the connotations are more personal than universal for the organization. Partnerships that maximize mutuality or reciprocity are widely held as the standard for interactions between humanitarian agencies and the recipients of aid. While this organization

encourages the development of relationships with local HCWs, those relationships do not uniformly reflect a balance of power. The relationships that do reflect that balance could serve as the basis for improving others. Historical and cultural barriers to the development of partnerships may be exaggerated by the short-term nature of MSTs and be difficult to overcome without a constant presence or consistent culturally sensitive communication.

Each relationship at each MST site is unique. There are no obvious consistencies within the organization regarding the nature of relationships with HCWs in LMICs. Individual team leaders serve to create a culture on the medical service team that either promotes interactions that empower or overpower local HCWs. Awareness of the lack of balance in power and the sociocultural impact of that imbalance may help medical service volunteers provide higher quality care in these settings.

References

Abenavoli, F. M. (2009). A new approach for humanitarian missions. *Plast Reconstr Surg, 124*(6), 461e-462e.

Asgary, R., & Junck, E. (2013). New trends of short-term humanitarian medical volunteerism: professional and ethical considerations. *J Med Ethics, 39*(10), 625-631.

Auluck, A., & Pai, K. M. (2005). Noma: life cycle of a devastating sore - case report and literature review. *J Can Dent Assoc, 71*(10), 757.

Aziz, S. R., Rhee, S. T., & Redai, I. (2009). Cleft surgery in rural Bangladesh: reflections and experiences. *J Oral Maxillofac Surg, 67*(8), 1581-1588.

Baran, C. N., & Tiftikcioglu, Y. O. (2007). Physicians for Peace and Interplast Turkiye: combined humanitarian surgical activities and conferences. *Plast Reconstr Surg, 119*(3), 1077-1090.

Barrs, D. M., Muller, S. P., Worrndell, D. B., & Weidmann, E. W. (2000). Results of a humanitarian otologic and audiologic project performed outside of the United States: lessons learned from the "Oye, Amigos!" project. *Otolaryngol Head Neck Surg, 123*(6), 722-727.

Belyansky, I., Williams, K. B., Gashti, M., & Heitmiller, R. F. (2011). Surgical relief work in Haiti: a practical resident learning experience. *J Surg Educ, 68*(3), 213-217.

Berger, J. (2003). Religious Nongovernmental Organizations: An Exploratory Analysis. *Voluntas: International Journal of Voluntary and Nonprofit Organizations, 14*(1), 15-39.

Bermudez, L., Carter, V., Magee, W., Jr., Sherman, R., & Ayala, R. (2010). Surgical outcomes auditing systems in humanitarian organizations. *World J Surg, 34*(3), 403-410.

Bouman, M. A., Marck, K. W., Griep, J. E., Marck, R. E., Huijing, M. A., & Werker, P. M. (2010). Early outcome of noma surgery. *J Plast Reconstr Aesthet Surg, 63*(12), 2052-2056.

Bradke, A. J. (2009). *The Ethics of Medical Brigades in Honduras: Who are we helping?* Master of Arts, University of Pittsburgh. Retrieved from http://d-scholarship.pitt.edu/8620/1/Bradke.pdf

Brinkerhoff, J. M. (2002). Government-nonprofit partnership: A defining framework. *Public Administration and Development, 22*(1), 19-30.

Brown, D. A., Fairclough, J. L., & Ferrill, M. J. (2012). Planning a pharmacy-led medical mission trip, part 4: an exploratory study of student experiences. *Ann Pharmacother, 46*(9), 1250-1255.

Buekens, P., Keusch, G., Belizan, J., & Bhutta, Z. A. (2004). Evidence-based global health. *JAMA, 291*(21), 2639-2641.

Burns, R., & McGuirk, C. (1993). *Robert Burns : selected poems*. London ; New York: Penguin Books.

Calisti, A., Belay, K., Mazzoni, G., Fiocca, G., Retrosi, G., & Olivieri, C. (2011). Promoting major pediatric surgical care in a low-income country: a 4-year experience in Eritrea. *World J Surg, 35*(4), 760-766.

Campbell, A., Sherman, R., & Magee, W. P. (2010). The role of humanitarian missions in modern surgical training. *Plast Reconstr Surg, 126*(1), 295-302.

Campbell, A., Sullivan, M., Sherman, R., & Magee, W. P. (2011). The medical mission and modern cultural competency training. *J Am Coll Surg, 212*(1), 124-129.

Chapin, E., & Doocy, S. (2010). International short-term medical service trips: guidelines from the literature and perspectives from the field. *World Health Popul, 12*(2), 43-53.
Charmaz, K. (2006). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*: SAGE Publications.
Chen, A. T., Pedtke, A., Kobs, J. K., Edwards, G. S., Jr., Coughlin, R. R., & Gosselin, R. A. (2012). Volunteer orthopedic surgical trips in Nicaragua: a cost-effectiveness evaluation. *World J Surg, 36*(12), 2802-2808.
Chen, L., Schink, J. C., Panares, B. N., Barbuto, D., & Lagasse, L. D. (1998). Resection of a giant aggressive angiomyxoma in the Philippines. *Gynecologic Oncology, 70*(3), 435-439.
Cheng, L. H., McColl, L., & Parker, G. (2012). Thyroid surgery in the UK and on board the Mercy Ships. *Br J Oral Maxillofac Surg, 50*(7), 592-596.
Chiu, Y.-W., Weng, Y.-H., Chen, C.-F., Yang, C.-Y., Chiou, H.-Y., & Lee, M.-L. (2012). A comparative study of Taiwan's short-term medical missions to the South Pacific and Central America. *Bmc International Health and Human Rights, 12*.
Chu, K. M., Trelles, M., & Ford, N. P. (2011). Quality of care in humanitarian surgery. [Review]. *World J Surg, 35*(6), 1169-1172; discussion 1173-1164.
Clarke, M. G., Oppong, C., Simmermacher, R., Park, K., Kurzer, M., Vanotoo, L., & Kingsnorth, A. N. (2009). The use of sterilised polyester mosquito net mesh for inguinal hernia repair in Ghana. *Hernia, 13*(2), 155-159.
Cohen, A. J., Tamir, A., Houri, S., Abegaz, B., Gilad, E., Omohkdion, S., . . . Schachner, A. (2001). Save a child's heart: we can and we should. *Ann Thorac Surg, 71*(2), 462-468.
Corbin, J. M., Strauss, A. L., & Strauss, A. L. (2008). *Basics of qualitative research : techniques and procedures for developing grounded theory* (3rd ed.). Los Angeles, Calif.: Sage Publications, Inc.
Creswell, J. W., Klassen, A. C., Plano Clark, V. L., & Smith, K. C. (2011). Best practices for mixed methods research in the health sciences. *Bethesda (Maryland): National Institutes of Health*.
Crump, J. A., & Sugarman, J. (2008). Ethical considerations for short-term experiences by trainees in global health. *JAMA, 300*(12), 1456-1458.
Davis, P. J., Wainer, Z., O'Keefe, M., & Nand, P. (2011). Cardiac surgery in the Pacific Islands. *ANZ J Surg, 81*(12), 871-875.
de Buys Roessingh, A. S., Dolci, M., Zbinden-Trichet, C., Bossou, R., Meyrat, B. J., & Hohlfeld, J. (2012). Success and failure for children born with facial clefts in Africa: a 15-year follow-up. *World J Surg, 36*(8), 1963-1969.
DeCamp, M. (2007). Scrutinizing global short-term medical outreach. *Hastings Cent Rep, 37*(6), 21-23.
DeCamp, M. (2011). Ethical review of global short-term medical volunteerism. *HEC Forum, 23*(2), 91-103.
Dedoose Version 4.10, web application for managing, analyzing, and presenting qualitative and mixed method research data (2013). Los Angeles, CA: SocioCultural Research Consultants, LLC (www.dedoose.com).
Del Rossi, C., Fontechiari, S., Casolari, E., Fainardi, V., Caravaggi, F., & Lombardi, L. (2008). Treatment of congenital anomalies in a missionary hospital in Bangladesh: results of 17 paediatric surgical missions. *Acta Biomed, 79*(3), 260-263.

Deonandan, R., Vineberg, B., Stulberg, R., Jaleel, M., Szecket, N., Sheila, D., . . . Zelcer, S. (2012). Health questions posed by Amerindians in Guyana's deep interior. *Global journal of health science, 4*(6), 43-46.
Dohn, M., & Dohn, A. (2006). Short-term medical teams: What they do well... and not so well. *Evangelical Missions Quarterly, 42*(2), 216-224.
Dolan, A. (2011). The Meaning of Partnership in Development: Lessons for Development Education. *Policy & Practice-A Development Education Review*(13).
Donabedian, A. (2005). Evaluating the quality of medical care. 1966. *Milbank Q, 83*(4), 691-729.
Duenas, V. J., Hahn, E. J., Aryan, H. E., Levy, M. V., & Jandial, R. (2012). Targeted neurosurgical outreach: 5-year follow-up of operative skill transfer and sustainable care in Lima, Peru. *Childs Nerv Syst, 28*(8), 1227-1231.
Dupuis, C. C. (2004). Humanitarian missions in the third world: a polite dissent. *Plast Reconstr Surg, 113*(1), 433-435.
Farmer, P. (1999). *Infections and inequalities : the modern plagues*. Berkeley: University of California Press.
Farmer, P. E., & Kim, J. Y. (2008). Surgery and global health: a view from beyond the OR. *World J Surg, 32*(4), 533-536.
Figus, A., Fioramonti, P., Morselli, P., & Scuderi, N. (2009). Interplast Italy: a 20-year plastic and reconstructive surgery humanitarian experience in developing countries. *Plast Reconstr Surg, 124*(4), 1340-1348.
Fisher, Q. A., Nichols, D., Stewart, F. C., Finley, G. A., Magee, W. P., Jr., & Nelson, K. (2001). Assessing pediatric anesthesia practices for volunteer medical services abroad. *Anesthesiology, 95*(6), 1315-1322.
Garbern, S. C. (2009/2010). Medical Relief Trips...What's Missing? Exploring Ethical Issues and the Physician-Patient Relationship. *The Einstein Jorunal of Biology and Medicine, 25/26*(1), 38-40.
Gil, J., Rodriguez, J. M., Hernandez, Q., Gil, E., Balsalobre, M. D., Gonzalez, M., . . . Parrilla, P. (2012). Do hernia operations in african international cooperation programmes provide good quality? [Comparative Study
Evaluation Studies]. *World J Surg, 36*(12), 2795-2801.
Glaser, B. G. (1965). The constant comparative method of qualitative analysis. *Social problems, 12*(4), 436-445.
Green, T., Green, H., Scandlyn, J., & Kestler, A. (2009). Perceptions of short-term medical volunteer work: a qualitative study in Guatemala. *Global Health, 5*, 4.
Heck, J. E., Bazemore, A., & Diller, P. (2007). The shoulder to shoulder model-channeling medical volunteerism toward sustainable health change. *Fam Med, 39*(9), 644-650.
Horlbeck, D., Boston, M., Balough, B., Sierra, B., Saenz, G., Heinichen, J., & Duckworth, L. (2009). Humanitarian otologic missions: long-term surgical results. *Otolaryngol Head Neck Surg, 140*(4), 559-565.
Huijing, M. A., Marck, K. W., Combes, J., Mizen, K. D., Fourie, L., Demisse, Y., . . . McGurk, M. (2011). Facial reconstruction in the developing world: a complicated matter. *Br J Oral Maxillofac Surg, 49*(4), 292-296.
Hunt, M. R. (2008). Ethics beyond borders: how health professionals experience ethics in humanitarian assistance and development work. *Dev World Bioeth, 8*(2), 59-69.

Jewell, G. (2007). Contextual empowerment: the impact of Health Brigade involvement on the women of Miraflor, Nicaragua. *J Transcult Nurs, 18*(1), 49-56.
Kobal, S. L., Czer, L. S., Czer, P. C., Feldsher, Z., Hamilton, R., & Siegel, R. J. (2004). Making an impossible mission possible. *Chest, 125*(1), 293-296.
Kunda, Z. (1990). The case for motivated reasoning. *Psychol Bull, 108*(3), 480-498.
Langowski, M. K., & Iltis, A. S. (2011). Global health needs and the short-term medical volunteer: ethical considerations. [Introductory]. *HEC Forum, 23*(2), 71-78.
Lehnerdt, G., van Delden, A., & Lautermann, J. (2005). Management of an "Ear Camp" for children in Namibia. *Int J Pediatr Otorhinolaryngol, 69*(5), 663-668.
Lewis, D. (1998). Development NGOs and the challenge of partnership: changing relations between North and South. *Social policy & administration, 32*(5), 501-512.
Lofland, J. (2006). *Analyzing Social Settings: A Guide to Qualitative Observation and Analysis*: Wadsworth/Thomson Learning.
MacIntosh, R. B., Herman, L. T., Shivapuja, P. K., & Echeverri-Arguello, R. C. (2013). Volunteer cleft surgery in Colombia: an 18-year perspective. *J Oral Maxillofac Surg, 71*(10), 1742-1751.
Magee, W. P., Jr., Burg, R. V., & Hatcher, K. W. (2010). Cleft Lip and Palate as a Cost-effective Health Care Treatment in the Developing World. *World Journal of Surgery, 34*(3), 420-427.
Maine, R. G., Hoffman, W. Y., Palacios-Martinez, J. H., Corlew, D. S., & Gregory, G. A. (2012). Comparison of fistula rates after palatoplasty for international and local surgeons on surgical missions in Ecuador with rates at a craniofacial center in the United States. *Plast Reconstr Surg, 129*(2), 319e-326e.
Mainthia, R., Tye, G. W., Shapiro, J., Doppenberg, E. M. R., & Ward, J. D. (2009). A model for neurosurgical humanitarian aid based on 12 years of medical trips to South and Central America Clinical article. *Journal of Neurosurgery-Pediatrics, 4*(1), 4-9.
Maki, J., Qualls, M., White, B., Kleefield, S., & Crone, R. (2008). Health impact assessment and short-term medical missions: a methods study to evaluate quality of care. *BMC Health Serv Res, 8*, 121.
Marck, R., Huijing, M., Vest, D., Eshete, M., Marck, K., & McGurk, M. (2010). Early outcome of facial reconstructive surgery abroad: a comparative study. *Eur J Plast Surg, 33*(4), 193-197.
Mariano, E. R., Ilfeld, B. M., Cheng, G. S., Nicodemus, H. F., & Suresh, S. (2008). Feasibility of ultrasound-guided peripheral nerve block catheters for pain control on pediatric medical missions in developing countries. *Paediatr Anaesth, 18*(7), 598-601.
Martiniuk, A. L., Adunuri, N., Negin, J., Tracey, P., Fontecha, C., & Caldwell, P. (2012). Primary care provision by volunteer medical brigades in Honduras: a health record review of more than 2,500 patients over three years. *Int J Health Serv, 42*(4), 739-753.
Martiniuk, A. L., Manouchehrian, M., Negin, J. A., & Zwi, A. B. (2012). Brain Gains: a literature review of medical missions to low and middle-income countries. *BMC Health Serv Res, 12*, 134.
Maslach, C., & Jackson, S. E. (1981). The measurement of experienced burnout. *Journal of Organizational Behavior, 2*(2), 99-113.
Matta, N. S., Singman, E. L., McCarus, C., Matta, E., & Silbert, D. I. (2010). Screening for amblyogenic risk factors using the PlusoptiX S04 photoscreener on the indigent population of Honduras. [Evaluation Studies]. *Ophthalmology, 117*(9), 1848-1850.

McQueen, K. A., Hyder, J. A., Taira, B. R., Semer, N., Burkle, F. M., Jr., & Casey, K. M. (2010). The provision of surgical care by international organizations in developing countries: a preliminary report. [Review]. *World J Surg, 34*(3), 397-402.
McQueen, K. A., Magee, W., Crabtree, T., Romano, C., & Burkle, F. M., Jr. (2009). Application of outcome measures in international humanitarian aid: comparing indices through retrospective analysis of corrective surgical care cases. *Prehosp Disaster Med, 24*(1), 39-46.
Meo, G., Andreone, D., De Bonis, U., Cometto, G., Enrico, S., Giustetto, G., . . . Vergnano, G. (2006). Rural surgery in southern Sudan. *World Journal of Surgery, 30*(4), 495-504.
Merrell, J. C., Tien, N. V., Son, N. T., An, L. N., Sellers, D., Russell, R., . . . Orgill, D. P. (2007). Introduction of microsurgery in Vietnam by a charitable organization: a 15-year experience. *Plast Reconstr Surg, 119*(4), 1267-1273; discussion 1274-1265.
Mitchell, K. B., Balumuka, D., Kotecha, V., Said, S. A., & Chandika, A. (2012). Short-term surgical missions: joining hands with local providers to ensure sustainability. *S Afr J Surg, 50*(1), 2.
Moher, D., Liberati, A., Tetzlaff, J., & Altman, D. G. (2009). Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. [Guideline
Research Support, Non-U.S. Gov't]. *PLoS Med, 6*(7), e1000097.
Montgomery, L. M. (1993). Short-term medical missions: Enhancing or eroding health? *Missiology: An International Review, 21*(3), 333-341.
Montgomery, L. M. (2007). Reinventing Short-term Medical Missions to Latin America. *Journal of Latin American Theology*(2.2), 84-103.
Moon, W., Perry, H., & Baek, R. M. (2012). Is international volunteer surgery for cleft lip and cleft palate a cost-effective and justifiable intervention? A case study from East Asia. *World J Surg, 36*(12), 2819-2830.
Mulliken, J. B. (2004). The changing faces of children with cleft lip and palate. [Comment]. *N Engl J Med, 351*(8), 745-747.
Niska, R. W., & Sloand, E. (2010). Ambulatory Medical Care in Rural Haiti. *Journal of Health Care for the Poor and Underserved, 21*(1), 70-80.
Novick, W. M., Stidham, G. L., Karl, T. R., Arnold, R., Anic, D., Rao, S. O., . . . Di Sessa, T. G. (2008). Paediatric cardiac assistance in developing and transitional countries: the impact of a fourteen year effort. *Cardiol Young, 18*(3), 316-323.
Novick, W. M., Stidham, G. L., Karl, T. R., Guillory, K. L., Ivancan, V., Malcic, I., . . . Di Sessa, T. G. (2005). Are we improving after 10 years of humanitarian paediatric cardiac assistance? *Cardiol Young, 15*(4), 379-384.
Nwiloh, J., Edaigbini, S., Danbauchi, S., Babaniyi, I., Aminu, M., Adamu, Y., & Oyati, A. (2012). Cardiac surgical experience in northern Nigeria. *Cardiovascular Journal of Africa, 23*(8), 432-434.
Oken, E., Martinez Stoffel, E., & Stern, L. J. (2004). Use of volunteer medical brigades to assess growth in Honduras. [Research Support, Non-U.S. Gov't]. *J Trop Pediatr, 50*(4), 203-208.
Oliveira Cruz, V., & McPake, B. (2011). Global Health Initiatives and aid effectiveness: insights from a Ugandan case study. *Global Health, 7*(1), 20.
Ott, B. B., & Olson, R. M. (2011). Ethical issues of medical missions: the clinicians' view. *HEC Forum, 23*(2), 105-113.

Ozgediz, D. (2009). Voluntarism and the global unmet need for surgery. *Arch Surg, 144*(3), 291-292; author reply 292.
Panosian, C., & Coates, T. J. (2006). The new medical "missionaries"--grooming the next generation of global health workers. *N Engl J Med, 354*(17), 1771-1773.
Patton, M. Q. (2001). *Qualitative Research & Evaluation Methods*: SAGE Publications.
Peckham, C. (2013, March 28, 2013). Does Burnout Affect Lifestyle? *Physician Lifestyles - Linking to Burnout: A Medscape Survey* Retrieved Febuary 22, 2014, from http://www.medscape.com/features/slideshow/lifestyle/2013/public#1
Pezzella, A. T. (2006). Volunteerism and humanitarian efforts in surgery. *Curr Probl Surg, 43*(12), 848-929.
Pham, A. M., & Tollefson, T. T. (2007). Cleft deformities in Zimbabwe, Africa: socioeconomic factors, epidemiology, and surgical reconstruction. [Case Reports]. *Arch Facial Plast Surg, 9*(6), 385-391.
Politis, G. D., Brill, J., & Jones, J. (2005). Use of low-dose rocuronium for intubation of children during volunteer surgery abroad. *Paediatr Anaesth, 15*(8), 648-652.
Priest, R. J. (2008). *Effective Engagement in Short-term Missions: Doing It Right!* : William Carey Library Publishers.
Ramsey, K., Iliyasu, Z., & Idoko, L. (2007). Fistula Fortnight: innovative partnership brings mass treatment and public awareness towards ending obstetric fistula. *Int J Gynaecol Obstet, 99 Suppl 1*, S130-136.
Ravishankar, N., Gubbins, P., Cooley, R. J., Leach-Kemon, K., Michaud, C. M., Jamison, D. T., & Murray, C. J. (2009). Financing of global health: tracking development assistance for health from 1990 to 2007. [Research Support, Non-U.S. Gov't]. *Lancet, 373*(9681), 2113-2124.
Reaves, E. J., Schor, K. W., & Burkle, F. M., Jr. (2008). Implementation of evidence-based humanitarian programs in military-led missions: part I. Qualitative gap analysis of current military and international aid programs. *Disaster Med Public Health Prep, 2*(4), 230-236.
Reeve, M. E., Groce, N. E., Persing, J. A., & Magge, S. N. (2004). An international surgical exchange program for children with cleft lip/cleft palate in Manaus, Brazil: patient and family expectations of outcome. *J Craniofac Surg, 15*(1), 170-174.
Robinson, O. G., Jr. (2006). Humanitarian missions in the Third World. *Plast Reconstr Surg, 117*(3), 1040-1041; author reply 1041.
Rowberg, R. G. (1960). An evaluation of medical mission work in Africa. *Arch Intern Med, 106*, 591-595.
Rumstadt, B., Klein, B., Kirr, H., Kaltenbach, N., Homenu, W., & Schilling, D. (2008). Thyroid surgery in Burkina Faso, West Africa: experience from a surgical help program. *World J Surg, 32*(12), 2627-2630.
Sahley, C. (1995). *Strengthening the capacity of NGOs: Cases of small enterprise development agencies in Africa*: Intrac Oxford.
Schechter, W. S., Navedo, A., Jordan, D., Dominguez, C., Hall, S., Kichuck, M., . . . Delphin, E. (1998). Paediatric cardiac anaesthesia in a developing country. Guatemala Heart Team. *Paediatr Anaesth, 8*(4), 283-292.
Scheffler, R. M., Liu, J. X., Kinfu, Y., & Dal Poz, M. R. (2008). Forecasting the global shortage of physicians: an economic- and needs-based approach. *Bull World Health Organ, 86*(7), 516-523B.

Schmitz, J. W., Davis, K. D., & IvcClatchey, S. K. (2012). Intraocular lens power calculation for humanitarian missions based on partial biometry. *Journal of Cataract and Refractive Surgery, 38*(7), 1187-1191.

Sharp, H. M., Canady, J. W., Ligot, F. A., Hague, R. A., & Gutierrez, J. (2008). Caregiver and patient reported outcomes after repair of cleft lip and/or palate in the Philippines. *Cleft Palate Craniofac J, 45*(2), 163-171.

Sherr, K., Mussa, A., Chilundo, B., Gimbel, S., Pfeiffer, J., Hagopian, A., & Gloyd, S. (2012). Brain Drain and Health Workforce Distortions in Mozambique. *Plos One, 7*(4).

Sieg, P., Hakim, S. G., Jacobsen, H. C., Saka, B., & Hermes, D. (2004). Rare facial clefts: treatment during charity missions in developing countries. *Plast Reconstr Surg, 114*(3), 640-647.

Smith, H. W., Keen, M., & Edwards, E. (1991). Cleft lip and palate surgery in La Ceiba, Honduras. *Arch Otolaryngol Head Neck Surg, 117*(12), 1356-1359.

Sorfleet, C., Vaillancourt, R., Groves, S., & Dawson, J. (2009). Design, development and evaluation of pictographic instructions for medications used during humanitarian missions. *Canadian Pharmacists Journal, 142*(2), 82-88.

Spencer, J. K., & Adler, R. S. (2008). Utility of portable ultrasound in a community in Ghana. *J Ultrasound Med, 27*(12), 1735-1743.

Suchdev, P., Ahrens, K., Click, E., Macklin, L., Evangelista, D., & Graham, E. (2007). A model for sustainable short-term international medical trips. *Ambul Pediatr, 7*(4), 317-320.

Sykes, K. J., Le, P. T., Sale, K. A., & Nicklaus, P. J. (2012). A 7-year review of the safety of tonsillectomy during short-term medical mission trips. *Otolaryngol Head Neck Surg, 146*(5), 752-756.

Tefuarani, N., Vince, J., Hawker, R., Nunn, G., Lee, R., Crawford, M., & Kevau, I. H. (2007). Operation Open Heart in PNG, 1993-2006. *Heart Lung Circ, 16*(5), 373-377.

Uetani, M., Jimba, M., Niimi, T., Natsume, N., Katsuki, T., Xuan le, T. T., & Wakai, S. (2006). Effects of a long-term volunteer surgical program in a developing country: the case in Vietnam from 1993 to 2003. *Cleft Palate Craniofac J, 43*(5), 616-619.

Ver Beek, K. A. (2006). The impact of short-term missions: A case study of house construction in Honduras after Hurricane Mitch. *Missiology, 34*(4), 477-495.

Wall, L. L., Arrowsmith, S. D., Lassey, A. T., & Danso, K. (2006). Humanitarian ventures or 'fistula tourism?': the ethical perils of pelvic surgery in the developing world. *Int Urogynecol J Pelvic Floor Dysfunct, 17*(6), 559-562.

Withers, M., Browner, C. H., & Aghaloo, T. (2013). Promoting volunteerism in global health: lessons from a medical mission in northern Mexico. *J Community Health, 38*(2), 374-384.

Yeow, V. K., Lee, S. T., Lambrecht, T. J., Barnett, J., Gorney, M., Hardjowasito, W., . . . Wilson, L. (2002). International Task Force on Volunteer Cleft Missions. *J Craniofac Surg, 13*(1), 18-25.

Yin, R. K. (2008). *Case Study Research: Design and Methods*: SAGE Publications.

Methods Appendix

Study Design

With the paucity of information available about medical service organizations, a case study can help to act as the first step for the establishment of hypotheses surrounding the work of these organizations. For this case study the goal was to identify an organization that, beyond the obvious need for the organization to be actively involved in medical service trips (MSTs), also included three main characteristics: (1) operating MSTs that include both a medical and surgical component, (2) functioning as a relatively small organization with minimal full-time professional staff, and (3) performing MSTs in multiple countries and regions of the world annually. The desire to include an organization that employed medical and surgical interventions came from an interest in identifying any differences between motivations or expectations as they relate to these treatment approaches. The significance of the second characteristic comes from an interest in organizations that are more grassroots in nature. The final characteristic addresses the need for an organization with a broad view of the world that allows for examination of differences in cultures, politics, and challenges related to travel. The following section describes the selected organization that met all of these criteria.

According to Lofland, taking a holistic look at a phenomenon located in a specific time and space may necessitate a case study (2006, p. 21). Case studies allow researchers to explore hypotheses when the goal is not to create generalizable knowledge rather to explore theoretical concepts in an area lacking substantial theories (Yin, 2008). Yin goes further to define the case study as an inquiry into a phenomenon in depth and within its real-life context (Yin, 2008). In the case of medical service organizations, which are predominantly composed of volunteer agents, the reality of interactions between members of the organization, constant changes in membership, and the dynamic nature of the work they intend to perform, creates a perfect opportunity for case study research. The case study approach allows for a description of the

organization in detail, holistically, and in context (Patton, 2001, p. 55). This approach is particularly useful in a setting where the researcher has no control, but hopes to develop an in-depth understanding of the organization (Yin, 2008).

Midwest Medical Service Foundation (MMSF) and Entrée

In 1996, two doctors founded MMSF in an effort to provide healthcare for patients, especially children, in low- and middle-income countries (LMICs). Since its founding, the organization has sent 74 teams to 12 countries. With headquarters in the Kansas City Area, this 501 (c)(3) non-profit organization relies predominantly on local donors and four annual fundraising events for financial support. The 2010 990 IRS Forms indicated net assets approaching one million dollars. Experiencing a steady growth over time these figures are up significantly from their 2002 value of approximately $200,000.

At the time of this study, twenty-nine Board of Trustees (BOT) members from varied backgrounds formed the primary leadership of the organization. There were three full time staff positions within the organization; the Communications and Development Coordinator position was vacant at the time of the study. The organization operates six to eight medical service trips (MSTs) annually. The teams of volunteers for these trips include medical and non-medical personnel and historically these range in size from five to 76, with a mean of 35 members. Each team includes a Mission Director and a Medical Director that often organize the same trip every year. These trip leaders play a key role in executing the organization's mission and purpose.

I have a prior working relationship with this organization and I have performed research projects in association with several of their MSTs, including one published study that I have referenced in the systematic review paper of this dissertation. This relationship provided access to the potential informant pool and built on the previous rapport of successful work within the organizational environment. After approaching the Executive Director of the organization to

discuss this project, I met with the Co-Presidents of the BOT to obtain preliminary approval to present my proposed project at a BOT meeting. Following this presentation, the BOT granted me approval and allowed me to proceed with the study.

Ethics Review

Prior to beginning this study, I submitted all necessary documents and applications for review by the University of Kansas Medical Center (KUMC) Human Subjects Committee (HSC). The HSC is designated as the Institutional Review Board (IRB) for KUMC, as required by 45 CFR 46 and 21 CFR 56. The HSC is responsible for reviewing, approving, modifying, rejecting and monitoring research involving human subjects. The HSC granted approval for this project February 13, 2013 and the HSC approved the study for continuation on January 8, 2014. The approval documents appear later in this appendix.

Procedures

Recruitment and Data Collection

The Executive Director of the organization provided me with a spreadsheet of the names of the BOT members and their contact information. A mass email went out from the Executive Director following our interview, to notify the BOT and the trip leaders that I would be contacting them in the near future about participating in the study. This email re-introduced me and briefly explained the project while also encouraging participation.

I scheduled interviews primarily via email. I sent out requests for interviews in groups of three or four to aid with my scheduling flexibility. I gave all of the potential informants the option to select the location for the interview, with the only caveat being that the location should be relatively quiet to aid with my own concentration and recording.

Data collection began March 1, 2013 and continued through May 22, 2013. I personally conducted every interview and began each by presenting the letter approved by the institutional

review board (IRB) and allowing the participant to ask questions about the project. I asked for their consent to record the interviews and to contact them later if I needed clarification on anything covered during the interview. All of the informants consented to participation and I digitally recorded each interview.

My first interviews were with the organization's staff for three reasons. First, neither of the staff members had participated in an MST. Second, one goal for these interviews was to better orient me to the organizational vocabulary and structure, the dynamics of various BOT and staff interactions, and to explore the policies and procedures of the organization. Knowing more about the organization prepared me for discussions with the board members and the trip leaders. Finally, these informants were also the most accessible, which ensured re-interviewing would be relatively easy, if necessary. This was particularly important given my limited experience with qualitative interviewing. Ultimately, this seems to have been a good decision as the familiarity with concepts prevented the need to have informants spend time with lengthy explanations of relatively simple concepts and this information informed my observations in the BOT meetings.

After completing the interviews with the staff, I added the names of the current trip leaders to the spreadsheet and began to contact the list of potential informants to schedule interviews. I began with the Co-Presidents and several Executive Committee Members that I met at the initial BOT meeting hoping that personal knowledge of my project would motivate them to participate early and create a referral system for other BOT members. The newest members of the BOT were elected at the beginning of 2013 and therefore when I began the interviews this group of individuals had only been on the board for two months. I chose to move these members to the bottom of the scheduling list with the hypothesis that their limited experience with the

organization would make it difficult for them to answer some of the questions about the structure and history of the organization.

After scheduling the first few interviews with BOT members, I moved alphabetically through the list to send emails with the exception of the newest members. While attending board meetings, several members that I had not interviewed reached out to me to schedule interviews. This active pursuit showed some enthusiasm and I complied by scheduling those interviews at that time or by promoting them up my contact list. In some cases, I scheduled interviews two months ahead and consequently the order of interviews does not necessarily follow the order in which they were scheduled.

As I made my way beyond the halfway point of the contact list, I shifted my focus to concentrate on scheduling the trip leaders. I wanted to include someone from every trip and therefore I increased my efforts to contact those individuals. All of the trips were represented in the sample by at minimum the medical director or the mission coordinator for the trip. In most cases, I was able to include both the medical director and the mission coordinator. The current mission coordinator from the Romania trip did not respond to my three attempts (by phone and email combined) to contact him and thus I excluded him from the sample.

Interview Settings

As stated above, participants were encouraged to select a location that was convenient for them and allowed for a comfortable setting for the interviews. For 14 (52%) of the informants we met in their office. Eight (30%) of the informants chose to meet me at local coffee shops for the interview. Three met me in my office at the university and the remaining two invited me to their home for the interviews.

Sample Characteristics

Of the 35 individuals that make up the BOT, the staff, and the trip leaders, I interviewed 27 (77%). There is no evidence of bias with regard to those that agreed to participate. While the newest board members were moved to the bottom of the list initially, I included one in the sample that actively sought out at a meeting and one that prior informants suggested could provide an important perspective as the youngest BOT member. I reached out to him via email prior to reaching out to the others. The first of these two had been involved in the organization for many years as a participant prior to joining the board. As hypothesized, the second of these two struggled with many of the questions that would require a more in-depth understanding of the history and activities of the organization. This perspective often limited his answers, but he was able to provide some insight from generational knowledge, prior travelling experience with the group, and experience with another organization.

One potential informant indicated that they were planning to resign from the BOT and declined participation. Another questioned his ability to contribute given his only marginal participation in the organization and his lack of participation in the actual mission trips. This perspective intrigued me and I attempted to reach him by phone and email again. After three attempts to contact him, I stopped trying. I saw him at a subsequent BOT meeting and he offered to participate noting his extremely busy work schedule as the earlier problem, but by that point I had made the decision to stop interviewing due to data saturation.

Following 20 interviews, I began to see evidence of data saturation. This became increasingly evident by the end of the twenty-third interview. At this point, I had already scheduled the remaining four interviews and I did not wish to cancel them.

I assigned identification numbers to each interview based on the group that best represented their duties in the organization (100s for staff, 200s for BOT members, and 300s for trip leaders). Two (7%) of the informants were staff members, 22 (81%) were BOT members, and three (11%) were trip leaders. Eight (36%) of the 22 BOT informants participated in MSTs as a trip leader in addition to their role as board members. I used a combination version of the interview guides for these individuals that included all of the unique questions and excluded any repetition.

Table 1. Sample Characteristics	**Median**	**Mean**	**Range**
Amount of Time with the Organization (years)	10	8.9	0.6 – 17
Number of MSTs	8	9	0 – 25
Length of Interview (minutes)	48.8	53.3	20.7 – 95.4

Table 2. Demographics	**n**	**%**
Gender		
Female	19	70
Male	8	30
Role within the Organization		
BOT	22	81.5
Trip Leader	11	40.7
Staff	2	7.4
Occupation		
Healthcare Provider	16	59.3
Non-Medical	11	40.7

Modifications to the Interview Guides

At the completion of the first five interviews, I discussed the interview guide with the informants and queried them about any areas that were unclear. There were only minor suggestions about one of the questions that asked about ranking the importance of outcomes for the organization. I took note of this concern and modified the framing of that question with all of the future informants.

Originally, the interview guides included background questions, which I believed would warm the informants up and provide an introduction into the process. After the first three interviews, I moved these questions into the meeting confirmation emails or phone calls. The primary reason for this decision was a feeling that beginning the interview with short answer questions was hindering my ability to lead informants toward rich narratives because of the rhythm initiated by these simple questions. Additionally, this reduced the amount of time spent in introductory remarks that hold less narrative value.

Transcription of the Interviews

I personally transcribed the first 10 interviews and reviewed four of these transcripts with the Chair of my Dissertation Committee. This initial review served to ensure that my interview skills were improving and allowed my Chair to guide me in areas where my habits may have limited the responses or left some interesting comments unexplored. I also transcribed two more of the remaining 17 interviews, totaling 13 (48%) interviews by the completion of data collection. A research assistant transcribed the remaining 15 interviews after a brief training regarding the importance of verbatim transcription, the inclusion of indications of emphasis or non-verbal dimensions of interaction, and formatting of the documents. I personally reviewed every transcription for accuracy and made any necessary corrections for the sake of consistency.

Credibility of the Data

After completing some of the interviews several of the informants offered to contact those members of the potential pool that were more difficult to contact. Establishing rapport and trustworthiness with the informants aided, in my opinion, aided with their willingness to assist me in the process of gathering the sample. The potential informants responded quickly to these members and I believe the references helped them feel comfortable about being honest during our interview. The recorder made some informants seem hesitant to share certain concerns with individuals or aspects of the organization that concerned them; however, they continued on with the conversation and shared their feelings in what appears to be an honest and open manner.

Naturalistic Observation

Over the course of this study, I observed BOT meetings and fund raising events. These events helped me to understand more fully how the organization functions and to observe the informants in their natural setting as members of the organization. BOT meetings occur monthly with the exceptions of June and July. I attended five of these meetings between February 2013 and October 2013. The fund-raising events allowed me to view the organization in the midst of development activities. I attended three of the major fund-raising events for the organization in 2013. There was one small fund-raising event that I was unable attend.

While attending the BOT meetings and the fund-raising events it was impossible for me to disappear and be a non-participant observer. All of the events occurred after my formal introduction to the organization and consequently it is possible that my presence introduced a form of bias that impacted these activities in some way. This is less likely at the fund-raising events due to the number of attendees. I did not speak during the BOT meetings or publicly at

the events and I tried to distance myself from those that knew me or knew my role in an effort to minimize this influence.

Review of Records

As a part of the case study, I reviewed the records of the organization. These records included financial statements for each trip and the organization as a whole, the pre- and post-trip reports that trip leaders present to the BOT for their review, the minutes for previous BOT meetings, the website, and the promotional materials produced by the organization. The largely volunteer nature of this organization created substantial inconsistencies in these records. The minutes from BOT meetings are extremely vague and provided little insight into the activities of the board. Observing this increased my interest in attending BOT meetings in person, as I knew the minutes would provide an extremely limited view of these meetings. Financial reports from the trips use a standardized form that makes those records more reliable, but beyond the financials the reports do not include a standardized style or format.

The analysis of these records is not formally included in the three papers that make up this dissertation in large part due to their inconsistencies. However, these records did influence my perspective on statements made by informants and the overall environment of the organization that influences the collective behaviors of the members. These records illustrate the organization's reliance on its volunteers and this plays a role in the perception of the decisions and functions of the organization. This is especially relevant in the discussions of establishing goals and objectives for the organization and then evaluating progress toward these goals and objectives. Implementing evaluative measures will require significant effort by volunteers that already invest themselves substantially in the organization.

Data Analysis

Using the constant comparative method of qualitative analysis, I analyzed the transcribed interviews and arrived at themes inductively (Glaser, 1965). The constant comparative method generates several properties and hypotheses about a phenomenon through comparisons of incidents that fit within the theme, integration of the themes and their components, defining the theme, and finally ending with a better understanding of the phenomenon (Corbin, et al., 2008; Glaser, 1965). As the interviewer and analyst, questions and interests emerged during the interviews. These interests served as the catalysts for the themes and later reviews of all of the transcripts further evaluated them (Corbin, et al., 2008). On several occasions, recollection of specific discussions from interviews provided a specific point to return to and identify relevant illustrations.

Coding and Mixed Methods Software

The full transcripts and associated descriptor data for each interview were uploaded into a web-based mixed methods analysis software system (Dedoose). Dedoose is the product of a group of social science researchers that were unhappy with the currently available mixed methods software packages. They developed this web based product to assist with collaborative work and to guarantee the most current version of the software is available to all of the users regardless of when they purchase access to the software.

I began the analysis with approximately 15 codes. I used five of these codes for stratification of the transcripts based on informant characteristics (i.e. membership in the BOT, staff, or trip leader categories). Ten of those codes were codes that I began developing during the review of the initial transcripts. After uploading my transcripts into the system I applied these codes to specific text within the transcripts. Moving through the transcripts additional codes

emerged and I began to develop those codes further. This required several trips back to previously coded transcripts for recoding.

After reviewing the transcripts multiple times I settled on the final codes and moved on to collecting the excerpts. I exported these excerpts and identified overlapping concepts that I could collapse into themes. These themes became the core of my data chapters. Several times after exporting the excerpts I went back to the transcripts to re-read the context surrounding the excerpt to ensure that my interpretations fit with the intended meaning of the narrative, especially when informants utilized pronouns. Additionally, I re-read the transcripts to ensure that I captured all of the excerpts related to the final themes.

Member Checking

The initial analysis of the findings was validated through member checking during three separate meetings with informants that participated in the interviews. The first meeting included a trip leader, the second two trip leaders who are also BOT members, and the final meeting included two BOT members and a paid staff member. During these meetings, I briefly discussed the items of interest that I felt were emerging from the data analysis. We discussed how I was interpreting the comments about relationships with the medical communities in the recipient communities, the role of emotions in the organizational decision-making, and the concept of dependency that many of the informants listed as a motivating factor in their participation. These meetings prompted further clarifications and added depth to my understanding about each concept.

Funding

No specific funding was available for this research. Personal funds covered the cost of the qualitative analysis software and transcription of interviews. The Department of Otolaryngology – Head and Neck Surgery Foundation at The University of Kansas Medical

Center covered the cost of digital recording devices and computers utilized for writing and analysis.

Interview Guide for Trip Leaders

Introduction and Background

As a part of my dissertation, I am interviewing individuals involved in medical service trips aiming to better understand how a medical service organization functions. We have a decent picture of the activities involved in medical service trips, but we don't know much about the organizations that run the trips. I will ask you a number of questions regarding your perceptions and feelings about the work the organization does as a part of their short-term trips.

Background Questions

1. What is your occupation?
2. How long have you been involved in any way with the organization?
3. What is your current role at the organization?
4. How long have you held this role?
5. Have you been on a short-term medical service trip before?
    - If yes, was the trip taken with the organization?
    - If not with this organization, with whom?
    - When and where was that trip? What was your role on the trip?

History and Goals

1. Will you tell me how you got involved with the organization?
   Probes:
    - How long ago?
    - Did you immediately get involved in the organization?
    - What attracted you to the organization?
    - What influenced you to get involved?

2. Please describe the work done by the organization?
   Probes:
    - Areas of the world
    - What areas, populations, or conditions are their priority?

3. What do you feel is the primary goal or mission for the organization's work?
   Probes:
    - How have the goals changed during the time you have been involved with the organization?
    - Have the goals changed with the composition of the board or with the leadership of the organization?
    - Have the goals changed in response to a specific health need or area of interest?

Specific Questions for the Volunteers/Trip Leaders

1. How many MSTs have you been involved with through the organization or other groups?
   Probes:
   - Where have you been?
   - What organizations other than the organization have you travelled with for a MST?
   - (If more than one) How do trips differ based on the skillsets or personalities of the volunteers?

2. Describe for me the strengths of the organization's approach to MSTs

3. What about the limitations to the organization's approach to MST, can you describe those?

4. How were you selected or approached to lead a trip for the organization?
   Probes:
   - How many trips have you led and where have you led them?
   - What challenges do you face as a leader for one of these trips?
   - Do you feel like there are specific things the organization should be doing to alleviate these challenges?

5. What specific things would you like to see the organization do in the future?
   Probes:
   - Would you like to see a domestic or local presence from the organization? If yes, how should the organization be involved in the domestic or local community?
   - Is there a specific country in which you would like to see the organization work?

Evaluation for Success

1. In general, how are the trips evaluated?

2. Can you describe the most important factors in determining if a trip was a success, a failure, or somewhere in between?

3. Can you tell me the most important factors in determining the success, failure, or something in between of a procedure or intervention with a patient?

4. Will you tell me about a trip that you think was less successful? What do you think contributed to any problems?

Wrapping Up

1. Will you describe any treatments or procedures that you feel should be off-limits for these types of trips? Why?

2. We have been focusing on the success of the organization. When the organization publicizes its activities, do you think that it is more important to focus on the short-term success or long-term success of individual missions? For example, short-term success could be the number of safe procedures performed. Long-term success could report how the trajectories of lives were changed by surgery or how the health status of a community improved.

3. If you had to place that on a numerical scale with 1 being short-term and 10 being long-term where would you score the focus of resources?
   Probes:
   - Why would you rate it that way?
   - Should resources be dedicated specifically for this work?

4. Is there anything you expected me to ask that I have not mentioned?

5. When you tell other people about the organization what do you think is the most important thing for them to know about the organization?

Interview Guide for Board of Trustees Members

Introduction and Background

> As a part of my dissertation, I am interviewing individuals involved in medical service trips aiming to better understand how a medical service organization functions. We have a decent picture of the activities involved in medical service trips, but we don't know much about the organizations that run the trips. I will ask you a number of questions regarding your perceptions and feelings about the work the organization does as a part of their short-term trips.

Background Questions

1. What is your occupation?
2. How long have you been involved in any way with the organization?
3. What is your current role at the organization?
4. How long have you held this role?
5. Have you been on a short-term medical service trip before?
    - If yes, was the trip taken with the organization?
    - If not with this organization, with whom?
    - When and where was that trip? What was your role on the trip?

History and Goals

1. Will you tell me how you got involved with the organization?
   Probes:
    - How long ago?
    - Did you immediately get involved in the organization?
    - What attracted you to the organization?
    - What influenced you to get involved?

2. Please describe the work done by the organization?
   Probes:
    - Areas of the world
    - What areas, populations, or conditions are their priority?

3. What do you feel is the primary goal or mission for the organization's work?
   Probes:
    - How have the goals changed during the time you have been involved with the organization?
    - Have the goals changed with the composition of the board or with the leadership of the organization?
    - Have the goals changed in response to a specific health need or area of interest?

Roles within the Organization

1. What do you feel is the role of the board at the organization?

2. What about the role of the staff?

3. How does someone get on the board?

4. How does the organization build its donor base? Would you classify any of those to be large donors?

Continuing the Present Missions and Planning New Trips

1. How does the board decide to continue a trip or cancel future trips to a specific mission site?
   Probes:
   - From your perspective, can you describe the most important determining factor for how you will vote?

2. Along the same lines, how does the board decide to add a new site to the organization's schedule? Again, what is the most important factor in your mind?

Evaluation for Success

1. In general, how are the trips evaluated?

2. How is the performance of the organization evaluated?
   Probes:
   - Can you describe for me any established goals and objectives for the organization?

3. Can you recount for me a specific trip or story recently that was successful or something accomplished on a trip that made you proud?

4. Will you tell me about a trip that you think was less successful? What do you think contributed to any problems?

Wrapping Up

1. If we lay out the idea of success or impact in general, do you think it's best to come into a new trip or a current trip thinking you want to look for long-term success or for short-term success? Maybe you define short-term success as the number of safe procedures performed or the number of patients seen and long-term success could be the number of lives changed, that is the life trajectories were altered in some way or maybe the change in the general health status of a particular community in which you are working.

2. Taking it further, if I asked you to place the importance of measuring short-term outcomes on a scale of 1 to 10, with 1 being the least important and 10 being the most important, where would you rate that value? What about long-term outcomes on the same scale?
   Probes:
   - Why would you rate it that way?
   - Should resources be dedicated specifically for this work?

3. Is there anything you expected me to ask that I have not mentioned?

4. When you tell other people about the organization what do you think is the most important thing for them to know about the organization?

Interview Guide for Staff Members

Introduction and Background

> As a part of my dissertation, I am interviewing individuals involved in medical service trips aiming to better understand how a medical service organization functions. We have a decent picture of the activities involved in medical service trips, but we don't know much about the organizations that run the trips. I will ask you a number of questions regarding your perceptions and feelings about the work the organization does as a part of their short-term trips.

Background Questions

1. What is your occupation?
2. How long have you been involved in any way with the organization?
3. What is your current role at the organization?
4. How long have you held this role?
5. Have you been on a short-term medical service trip before?
    - If yes, was the trip taken with the organization?
    - If not with this organization, with whom?
    - When and where was that trip? What was your role on the trip?

History and Goals

1. Where did you work before working here? How did you end up at the organization?
   Probes:
    - What training do you have?
    - Were you involved in the organization prior to becoming an employee?

2. Can you tell me what you know about how the organization began?

3. Please describe the work done by the organization?
   Probes:
    - Areas of the world
    - What areas, populations, or conditions are their priority?

4. What is the role of the board in this organization?

5. How do the teams that choose to participate in each mission vary?
   Probes:
    - How do trips differ based on the skillsets?
    - How do the personalities of the volunteers vary?

6. What do you feel is the primary goal or mission for the organization's work?
   Probes:

- How have the goals changed during the time you have been involved with the organization?
- Have the goals changed with the composition of the board or with the leadership of the organization?
- Have the goals changed in response to a specific health need or area of interest?

7. How do you see the organization developing or changing in the future?

8. Will you please describe the process for adding a new site to the organization's schedule?

Evaluation

1. How are the trips evaluated?

2. Can you tell me about the process for distributing results of the trips to donors or volunteers?
   Probes:
   - Will you describe how post-trip reports are presented to the board?
   - Will you describe what is contained in these reports?
   - Is there a standard format or list of information to include in post-trip reports?

3. How is your individual performance evaluated?
   Probes:
   - Who is involved in these evaluations?
   - Who establishes goals and objectives for your position?

4. How is the performance of the organization evaluated?
   Probes:
   - Who is involved in these evaluations?
   - Who establishes goals and objectives for the organization?

Wrapping Up

1. On a scale of 1 to 10, how important do you feel it is to look for the long-term results of these trips? (with 10 being the most important)
   Probes:
   - Why would you rate it that way?
   - Should resources be dedicated specifically for this work?

2. Is there anything you expected me to ask that I have not mentioned?

3. When you tell other people about the organization, what do you think is the most important thing for them to know about the organization?