

AmeriCares



Medical Outreach: Best Practices Study

A Literature Review

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Executive Summary

Background: International medical volunteerism among US practitioners is increasing each year, yet there is no single professional group, society or published universal framework for conducting such programs to ensure quality, effectiveness, and/or sustainability. This review seeks to assess existing literature that might inform a set of medical outreach best practices to enhance teams' ability to improve health outcomes, increase local health care capacity, and create sustainable partnerships.

Methods: A literature review of relevant studies and articles published online and in print on best practices, frameworks, and guidelines for effective international humanitarian medical outreach programs and trips was conducted. Twenty-five relevant articles were selected from the review of over 400. Seven articles that were most closely aligned with study objectives were reviewed for common elements and recommendations.

Results: The review of available literature yielded a variety of guidelines and several consistent themes on conducting medical outreach missions, such as: having measurable goals, collaborating with partners within the target population, creating educational opportunities on both sides, and building a sustainable, impactful program.

Conclusions: Although there are few examples of best practices that cite concrete evidence, this review has resulted in a list of recommendations or themes found throughout this literature that indicate what may constitute a successful and sustainable medical outreach program. These will be incorporated into a survey of medical outreach teams with regard to their current practices to obtain data on how teams actually operate in the field.

Introduction

The practice of medical outreach consists of a growing and diverse community of medical professionals passionate about improving global health. Medical outreach programs are appealing because of their "unique combination of philanthropy and direct approach to patient care" (Maki et al, 2008). However, programs that are transient in nature and lack long-term follow-up care have drawn the criticism

of many (see Smoot et al, 1992). Their individual efforts yield varying degrees of success in improving health outcomes, and are burdened by the complex tasks of funding, equipping, and managing team logistics in addition to evaluating local needs, and avoiding continued dependency on outside sources of medical care.

The regulation of medical outreach teams is limited in scope in the United States, and teams are not currently subject to specific international rules or laws that pertain to all their activities. As such, existing data on medical outreach programs are difficult to find, and published statistics differ on every variable, from the number of US-based teams conducting outreach trips each year to measures of impact.

This literature review will inform the research design for the AmeriCares Medical Outreach Best Practices Study, funded by the Godley Family Foundation. It will develop a framework of elements to improve health outcomes and local health care capacity, and enhance teams' ability to address longer-term community health through sustainable partnerships.

Methods

A broad scoping search was initiated to identify key terms for this review, to assess the depth of current literature and to establish a review structure. This literature review looks at qualitative recommendations, but not quantitative data; it was not intended to be a meta-analysis of statistical results from short-term medical outreach programs. We did not conduct a systematic review with listed inclusion/exclusion criteria, and did not perform data extraction to collect specific information from each article. Instead, we sought to identify gaps in the literature and categorize assumptions about best practices in global medical outreach.

The current literature uses a variety of terms for medical outreach to a foreign country, including "medical outreach programs," "volunteer trips," "medical brigades," and "humanitarian assistance." Candidate articles were found by searching PubMed and Google Scholar, and inclusion criteria were set to articles published in English in the last 10 years (2003-2013) that included any of the key words in their titles or abstracts.

The keywords used in searching these databases and websites were any combination of: medical, outreach, brigades, volunteerism, short-term, trips, humanitarian, assistance, international, foreign, overseas, service-learning, aid, low-resource settings, low-and-middle income countries. This initial search yielded over 400 unique articles. After including additional keywords (best practices, framework, guidelines, standards, and competencies) and searching the reference lists of those articles already found, the resultant search yielded 25 articles which came through our title and abstract review process. The overwhelming majority of articles found during this search focused on trip reports rather than critiques or models of successful program interventions. Since the purpose of this review is to inform a framework of best practices in medical outreach programs, articles that assessed programming efforts and suggested guidelines, standards, or best practices were included, while articles that strictly described outreach programs were not. News stories, blog entries, books, and other sources that were not from published peer-reviewed journals were read for additional material, but not included in this review.

Titles and abstracts from the 25 articles were assessed for relevance and seven papers were identified as excellent candidates for this literature review. The seven articles were reviewed for common elements and recommendations, and will be discussed below in alphabetical order by first author. These articles were chosen because they discussed or presented field-tested frameworks or best practice guidelines for medical outreach, and varied in their focus (from overarching guidelines to surgical guidelines, and to ethical frameworks).

It is worthwhile noting that the initial search phase resulted in the discovery of many pre-existing frameworks on related subjects that may prove useful to Medical Outreach teams. Topics for such frameworks or guidelines included: emergency and disaster response, surgical care, public health preparedness, pre-departure training, accountability and quality management in humanitarian affairs, monitoring and evaluation, and codes of conduct for international work. Of these, the World Economic Forum's "Guiding Principles for Public-Private Collaboration for Humanitarian Action" and the World Health Organization's "Guidelines on

International Foreign Medical Teams" were quite applicable within the scope of this literature review, as they outline principles that are important for effective humanitarian action and contain strategic frameworks establishing a foreign medical assistant program. Additionally, the Plastic Surgery Educational Foundation's "Guidelines for the Care of Children in the Less Developed World" and the "Guiding Principles for Conducting Monitoring and Evaluation (M&E) for Medical Stability Operation (MSOs)" by the US Navy Medicine's Humanitarian Assistance/Disaster Response (HA/DR) Work Group's Evaluation Committee proved useful, albeit specific to one medical field. Large documents and institutional frameworks such as those listed above were not included in this review because they were not based on specific program examples, but they are attached as an Appendix for reference.

Results: Review of papers

Chapin and Doocy (2010) assessed the practices and challenges of 40 people who previously participated in short-term medical service teams, using questionnaire based interviews. Their report listed variables in individual experiences and statistical profiles of teams and trips. Though data was acquired on a number of different topics, of interest to this literature review were the percentage of trips that were planned with a health-affiliated organization in the host country (53%), trips that focused on surgical interventions (28%), teams that provided medical training to locals (42.5%), donations that were left with health organizations or professionals (80%) and teams that involved nationals with patient care (77.5%). Using their findings from the interviews and a review of current literature, Chapin and Doocy developed six guidelines for international short-term medical trips: mission, collaboration, education and capacity building, provider qualifications, appropriate donations, and cultural sensitivity and understanding.

DeCamp (2011) argues that medical volunteerism is intrinsically ethical, and presents a set of principles that will help ensure that ethically sound decisions are being made at every step of the process. He argues that short-term medical volunteer work is not "primarily an enterprise of charity," but that "obligations of charity can share many features traditionally assigned to obligations of justice" and

that many charitable and non-profit organizations have ethical guidelines (p. 95). Thus, creating a framework of ethical guidelines is an integral step in DeCamp's eyes, and he sets out to do so in his article.

DeCamp works off the models presented by Suchdev et al (2007) and Emanuel et al (2004) to create his own set of ethical principles to guide short-term medical outreach programs, which include: a statement of purpose, establishing of a collaborative partnership, fair site selection, benefits of social value, education of local community and team members, building local infrastructure capacity, evaluation of outcomes, and engaging in frequent ethical review. DeCamp's most important concepts are the input of the target community at the outset of any programming and the engagement of frequent ethical review (analogous to clinical research). Though this literature review does not have the same focus on ethics as DeCamp, it still recognizes the importance of ethical considerations and principles in all facets of medical outreach.

The article by Eberlin et al (2008) pertains to establishing and maintaining Quality Assurance (QA) in surgical outreach programs. They present a set of detailed guidelines for surgical outreach teams to reduce the "risk of unnecessary medical complications" from outreach missions that are forced to contend with "the realities inherent to providing healthcare abroad" including inadequate medical supplies and short trip duration (p. 246). Eberlin et al believe that many of the complications seen on international outreach trips can be prevented with adequate planning and detailed perioperative care plans. It is their belief that QA guidelines can be integrated into any surgical program by following the natural structure and progression of an organization's medical mission. Though their guidelines are structured around surgical interventions, they are pertinent and applicable to any team that conducts treatment screenings in a host country. The guidelines described by Eberlin et al are based on the authors' knowledge resulting from over 20 years of critical observation of their own programming efforts, and are broken into three stages: preoperative (including goals for site selection, site visits, and trip preparation), perioperative (including goals for preoperative screening, case selection, and operative care), and postoperative (with goals for screening and follow-up).

Maki et al (2008) designed and implemented an assessment tool to measure objective parameters of quality of care in short-term medical missions (STMMs). Their project hoped to create a way of evaluating the performance of STMMs that would foster self-analysis and improvement within medical outreach teams themselves, rather than involving outside monitoring or evaluation. Their survey tool was tested on outreach team personnel and patients to give the study a 360-degree evaluation of factors identified as critical to quality of care. According to Maki et al, the six major factors associated with quality of care in medical outreach programs are: cost, efficiency, impact, preparedness, education, and sustainability.

In another article looking at the ethical aspects of international medical outreach, Powell et al (2010) create a model for transformative and sustainable development through a variation on the Community Engagement Model. According to the authors, programs that produce "long-term transformative change rather than transient relief" will have more of a sustainable impact on their target communities (p. 54). The article explores characteristics of successful partnerships in medical and health outreach, and introduces a new model for building and sustaining collaborative relationships and solutions.

Powell et al argue that when they are not built as long-term interventions, short-term medical interventions generally provide more benefit to visiting practitioners than to their target communities. Participation in medical outreach programs can "increase cultural competence, sensitivity, and self-efficacy, improve critical thinking and problem-solving skills, and promote personal growth" for teams placed in low-resource countries, but teams must also work to be as beneficial to patients and host communities (p. 56). Recognizing the importance of community engagement in the quest for an equally-beneficial program, Powell et al recommend using a modified framework of the Community Engagement Model (derived from the *IAP2 Spectrum of Public Participation*), and apply it specifically to a case study of a nursing school outreach program. The new model is cyclical because the authors see community engagement as a cyclic process as new challenges and stakeholders enter the equation. The new framework contains five phases for long-term partnerships for international medical/health outreach, including

steps to “inform, consult, involve, collaborate, and empower” (p. 59).

Suchdev et al (2007) create a model for short-term medical trips based off of the teams’ experience developing an international medical program that supports ongoing public health interventions and sustainable medical care in El Salvador. The authors created a list of guiding principles for short-term trips that will help future participants create a positive impact in their target communities, which are based around several key phrases: mission, collaboration, education, service, teamwork, sustainability, and evaluation. Suchdev et al maintain that many of the challenges commonly seen in international medical outreach programs can be overcome when decisions are guided by their model, and the article stresses the importance of “partnering with the community and working within the existing medical and public health infrastructure” (p. 317).

Wilson et al (2012) review current statistics on international health project participation while discussing the lack of universal pre-requisite education in global health. The authors believe that education (of program participants and local providers) is “a key element to ensure a lasting benefit” to everyone involved in medical outreach (p. 616). The article details potential benefits to team members and actions that can produce harm to recipients, and stresses the importance of creating safe, sustainable programs that help progress toward local autonomy and quality medical care. Wilson et al produced four fundamental principles that should be considered in the development of any program: service, sustainability, professionalism, and safety. The authors go on to detail ethical considerations program leaders should focus on for each principle, and stress the importance of a sustainable public health focus in medical outreach efforts.

Discussion

Taking information from each of the seven articles into consideration, a table of key elements in successful medical outreach programming was created (Table 1). The table shows what factors each article focused on, and supports the conclusion that there is some common agreement on components to include in successful and sustainable outreach programs.

Common key terms found in a majority (four or more) of articles in this review are “goal/mission, collaboration, education, sustainability, and evaluation.” Other factors like “quality assurance, research, safety, and service” were discussed in some articles, but they were not present in most frameworks. This evidence of dissimilarity between frameworks highlights the complexity of the task at hand to develop best practice guidelines and the variability of current literature. It is interesting to observe that only DeCamp mentioned “outcomes” in his suggested framework as a key element. Maki mentioned “comparing measurable outcomes” as a way to estimate efficiency or productivity, and Wilson briefly noted that establishing “systems for measuring outcomes” was integral to a sustainable program, but neither explicitly stated that collecting data was an integral practice. Additionally, despite the fact that four articles include “evaluation” in their key terms, only one article explicitly mentions the need for “monitoring” (Eberlin), and only in the context of monitoring surgical anesthesia levels and equipment.

When looking at the results of this review with a wide lens, the key elements presented in the seven articles can be combined into one overarching framework for medical outreach programs. However, the nature of the program and target population will undoubtedly change from program to program as needs, resources, and scope of the program may be different, and the framework of a medical outreach program will vary depending on the goal (ex. surgery, vs. preventative care). The aim of this literature review is to highlight themes and best practices that can be applicable to a range of outreach teams, representative of those supported by the AmeriCares Medical Outreach Program.

Five key elements necessary for any medical outreach program to be effective can be extracted from the seven articles:

1. Goals

The development of an impactful and sustainable medical outreach program requires the clear and detailed identification of goals, objectives, and evaluation systems that can be established within the existing healthcare infrastructure. As the primary objective of medical outreach is to “avoid the development of any sense of external dependency or learned helplessness,” any stated goal or

mission should be based on community input and collaboration (Wilson et al, p. 614). DeCamp (2011) points out that a clear objective also “provides accountability to the endeavor” (p. 97).

2. Partnerships

Chapin and Doocy (2010) acknowledge that dependency on short-term medical assistance is a concern, and advise that “identification of an appropriate collaborating partner that is an active member of the local health infrastructure is essential to the success and impact of medical service trips” (p. 50). According to DeCamp (2011), a successful partnership will “empower the local community and reduce, if not eliminate, the sense that they are mere recipients of aid” (p. 97).

Collaboration aids in ensuring applicability and community acceptance of the program, and lays the foundation for other key elements. Powell et al (2010) note that “each partner has unique powers and capabilities that are needed to achieve collectively desired outcomes,” and that the disengagement of either partner will diminish the chance of program success (p. 65). Results from the survey conducted by Maki et al (2008) in which over 80 percent of teams reported working within the local health care system support the idea of working with in-country partners for current and follow-up care.

3. Education

According to Wilson et al (2012), education has a “pivotal role” in medical outreach (along with sustainable healthcare interventions), and can complement a focus on patient care (p. 615). “Education” will foster learning and growth on both sides of a medical outreach program by teaching trip participants about the community they hope to help and teaching recipients of aid about medical practices and advances. Most articles agree that education needs to start before an outreach team leaves their home country, in that they need to “understand how the sociopolitical context of a partner community affects its predominant medical problems and to identify evidence-based solutions” so that resources can be focused appropriately (Suchdev et al, p. 318).

As DeCamp explains, “education is a cornerstone of increasing awareness as a way to foster long-term change” in the target community (p. 98). However, educational components are not always part of

current medical outreach programs. *Less than half* of teams in the study by Chapin and Doocy (2010) provided training to local professionals, though 25 percent “stressed that capacity building and education were important considerations” (p. 51).

4. Sustainability

Suchdev et al (2007) maintain that a sustainable project will focus on long-term goals rather than intensive short-term experiences. Working in a single location for successive trips will build an ongoing relationship with partners. Working within existing healthcare systems “allows the group to work with the community rather than providing care to them,” and a sustainable program will eventually shift responsibility for community health improvement to the community itself (p. 319).

Looking at it differently, DeCamp states that “one hopes for non-sustainability of the short-term project—assuming that means the medical volunteers are no longer needed” (p. 97, original formatting).

5. Evaluation

Maki et al (2008) point out that “without proper evaluation standards, issues of patient safety, quality control, and impact assessment are easily overlooked” since many medical outreach trips are short-term and privately funded (p. 2). Even in long-term or sustainable projects, periodic evaluation is “important for measuring a project’s effects and improving its design and implementation” (Suchdev et al, p. 319). Importantly, if the evaluation concludes that objectives have not been met, DeCamp (2011) suggests that “modifications to the work should be pursued” (p. 99).

Conclusions

The existing literature contains a general consensus about the structure and purpose of medical outreach teams or missions. Recommendations for teams include incorporating pre-determined, measurable goals; collaboration with local partners within the target population; conducting training exercises with community members and local medical staff; building a sustainable program through frequent trips and long-term partnerships, and periodically evaluating programs to ensure that community needs are understood and are in fact being met.

Additional research on how elements are implemented needs to be conducted to ensure some universality in the framework of various types of medical outreach teams and healthcare structures. To test these key elements, they will be put into a detailed framework of best practices informed by the conclusions of this literature review.

Once this framework is developed and reviewed it can be used to assess current medical outreach teams in the field. The Medical Outreach program plans to test the framework by surveying current and past teams on how they conduct their own outreach missions to determine the extent to which the conclusions of this review (i.e. the updated best practices framework) actually reflect their current practices.

The framework of guiding principles or evidence-based best practices, can help to create sustainable programs with lasting positive impacts on health outcomes in a target population, local healthcare capacity, and strengthen sustainable partnerships.

AmeriCares Medical Outreach:

We support over 1,200 teams traveling to more than 80 countries each year with donations of medicines and supplies. We see incredible work as well as the need to connect efforts and share best practices. The Medical Outreach Exchange provides comprehensive resources for your medical work as well as opportunities to connect with and learn from others.

View inventory and resources on the Exchange at medicaloutreach.americares.org

Table 1: Elements/key words from each article:

	Key Word	Goal	Preparation			Partnerships		Plan				Sustainability		Evaluation	
	Elements from Sources	Goal / Mission	Pre-trip Assessment	Prepare / Inform	Safety / Logistics	Professionalism	Collaboration/ Partnerships	Screening	Education	Research	Service	Efficiency	Sustainability / Follow-up	Quality Assurance	Evaluation / Review
Source	Chapin	X				X	X		X				X		
	DeCamp	X					X		X	X	X		X		X
	Eberlin	X	X				X	X					X	X	X
	Maki			X					X			X	X		X
	Powell			X	X		X						X		
	Suchdev	X					X		X		X		X		X
	Wilson					X	X				X		X		

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