

## Strengthening Short-Term Medical Mission: Insights from Caribbean Experience

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### Abstract

Short-term medical missions [STMM] remain popular among providers, despite concerns about the limited time spent treating patients and the high cost associated with these missions. Many physicians remain motivated to volunteer, driven by the fulfillment of serving communities with limited access to healthcare. Participating in STMM is often a transformative experience for volunteers, who frequently report heightened empathy and a renewed passion for their profession. STMMs are generally not well-integrated into the local health sector, lasting from a few days to a few weeks, and encompass a wide range of services, depending on the volunteers' resources, including humanitarian aid, primary care outreach, and educational programs. When thoughtfully planned, such initiatives are welcomed by host providers, foster collegial and community partnerships, and serve as gateways to lasting friendships and long-term collaborations. For these efforts to result in successful and sustainable partnerships, it is essential to center the priorities of host countries. One proposed strategy is for host countries to implement a registration system to track and align incoming foreign medical teams with ongoing healthcare initiatives.

**Keywords:** Short-Term Medical Missions; Continuing Medical Education; Collaboration; Cultural Sensitivity; Health Care; Capacity Building

### 1. Introduction

For many healthcare professionals from low- and middle-income countries (LMICs) who have built careers in higher-income nations, giving back to their home communities is more than a professional endeavor—it is a heartfelt commitment. STMM trips offer a gateway to volunteering, connecting with colleagues in developing countries. The dilemma many volunteers face is how to continue helping when their next visit may be a year away. Many volunteers are motivated by strong cultural and familial ties to a particular region. They are encouraged to assist after direct observing gaps in healthcare and discussion with local colleagues, who have identified areas where volunteers possess the necessary skills and capabilities to make a meaningful contribution. STMM remains a popular option among US providers, with more than 16% of US doctors participating in medical missions annually. Between 2004 and 2012, approximately 800,000 to 1,100,000 US individuals volunteered internationally, including on mission trips driven by a desire to assist underserved populations [1]. A significant amount of time and resources have been spent on STMM, with the US leading the effort, equivalent to 5,800 physician full-time equivalents, and an estimated \$3.7 billion in resources is invested annually [2]. More structured guidelines have become available to aid in planning for an effective mission [3]. In a 2012 review of medical mission publications spanning 25 years, Martiniuk et al. found that healthcare professionals often reconnected with the core motivations that led them to pursue a career in medicine, viewed the

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transfer of skills and knowledge to local counterparts as a fundamental aspect of their role, and were generally welcomed by communities that expressed hope and anticipation for future visits [4]. Medical missions are deeply satisfying and rewarding to the providers and volunteers [5]. Volunteer presence can lead to the establishment of a professional connection with the host country, thereby cultivating meaningful relationships, establishing networks, and creating educational opportunities that extend beyond short-term relief. They are also criticized for several reasons, including the limited time allocated for care and the lack of follow-up and monitoring to ensure long-term positive outcomes. A lack of understanding and respect for local customs, language, medications, and beliefs can lead to misunderstandings and potentially harmful practices, as these are often unregulated and poorly integrated into the regional healthcare system [6].

Successful missions comprise multiple essential components. It is crucial to avoid arriving with preconceived assumptions about the necessity of external expertise; instead, volunteers should remain open to local solutions and offer support where it is genuinely needed. Key concepts to incorporate include:

- **Mutuality**—recognizing, respecting, and integrating local providers and their expertise into the team to optimize patient outcomes; and
- **Continuity**—ensuring follow-up care for patients and maintaining sustained relationships with local providers, volunteers, and host organizations to allow for ongoing collaboration and feedback.

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## 2. Material and Method

The first two authors, B.P. and A.K., have participated in numerous medical mission trips to the Caribbean due to cultural and family connections. We reflect on some of our experiences of community engagement, thanks to the established relationships, and offer recommendations for planning a mission trip. The overarching goal of these efforts is to support local providers by addressing resource limitations through educational initiatives, inter-organizational collaboration, the provision of specialized equipment, and the transfer of clinical skills - ultimately contributing to the strengthening of the local health system without creating a state of dependency.

Author A.K. is dedicated to advancing gastroenterology education and cancer prevention, particularly on colon cancer awareness in the Caribbean. The incidence of colon cancer is rising worldwide in the younger population, including the Caribbean region [7]. However, the Caribbean region lacks the same level of health resources and trained specialists to tackle this problem. By conducting a series of medical missions and collaborating with local providers in Jamaica, he shares knowledge freely and provide essential endoscopic equipment and teach technical skills to perform endoscopic procedures - addressing a national health concern while fostering capacity building.

During the COVID-19 pandemic, Caribbean countries faced a critical education gap due to the disruption of in-person educational activities due to quarantine restrictions. In response, the primary author, BP, in collaboration with US and Caribbean organizations, created the Internal Medicine Learning Collaborative Lecture Series (IMLC), a free online lecture series to provide educational support to Caribbean physicians during this unprecedented time [8]. Notably, 80.84% of local physicians gained new medical knowledge that led to practice changes.

In 2023, the *Guyana Chronicle* highlighted the alarmingly high prevalence of hypertension in Guyana, affecting 24.5% of men and 21.5% of women [9]. This widespread issue contributes to numerous health complications, including cardiovascular diseases, strokes, and early renal failure. A collaboration with the local Rotary Club led to a free educational campaign aimed at addressing this national health concern. Education materials in the form of an electronic poster were distributed free of cost, leveraging the widespread availability of WhatsApp, to empower individuals with the knowledge to manage and mitigate hypertension effectively.

### 2.1. Medical Student Perspective

Medical missions are now integrated into many medical school rotations, enabling students to gain overseas experience in cultural awareness and working in underserved areas, as well as exposure to global health [4]. Co-author DN, a second-year medical student at Campbell School of Osteopathic Medicine (CUSOM), Lillington, North Carolina, who participated in her first overseas medical mission in 2023, joined her school's annual trip to the Dominican Republic. Her motivation for engaging in a medical mission stemmed from a desire to provide free medical care and explore medicine in a different cultural context. The experience proved to be an invaluable lesson in working within a resource-limited setting. However, several challenges emerged during the mission. Limited resources became a pressing concern as the supplies brought along quickly depleted. Another significant issue was the language barrier. Despite being in a Spanish-speaking country, the population served primarily spoke Haitian Creole. Communication relied on untrained

interpreters, resulting in a complex translation between English, Spanish, and Haitian Creole. This raised concerns about miscommunication, patient confidentiality, and privacy violations. Lastly, the short duration of the mission made follow-up care nearly impossible, leaving a gap in continuity of care.

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### 3. Results and Discussion

While these experiences can be rewarding, volunteering to provide health care for the underserved comes with serious responsibility. There are many criticisms of short-term medical missions, and I recommend that volunteers read and educate themselves, recognizing their strengths and limitations is essential.

A book that I have found very helpful is “Hoping to Help- The promise and pitfalls of global health volunteering” by Judith Lasker [14]. The Author examined the three principal players in STMM — the Volunteers, Patients, and Host countries — and analyzed multiple factors, including motives, benefits, impact, and costs.

The pitfalls that the medical students encounter are not unique and are frequently observed when proper planning and input from the host country are lacking. Volunteers often face cultural and linguistic barriers, limited time with patients without follow-up care, short term medication dispensing, which can potentially harm patients. Local providers welcome collaboration with foreign colleagues, as they can offer immediate assistance, transfer knowledge, skills, and equipment. However, they recommend that more education and capacity building are needed, focusing on culturally relevant and educational projects that benefit the host countries [15,16]. Medical missions should complement and collaborate with local healthcare systems, rather than replace them, by focusing on prevention through the integration of their skills into existing national projects. This approach should be sensitive to language and cultural barriers, as well as aware of local health regulations [17].

Organizing medical missions involves significant time, resources, and expenses. A team of approximately 20 volunteers, in our conservative estimate, can incur costs exceeding USD 30,000, including airfare, accommodation, food, transportation, supplies, and donations when travelling to the Dominican Republic from the United States. Approximately 60% of the budget is allocated towards airfare and hotel expenses, which do not benefit the host country. Helping does not always require in-person activity, following the initial visit and needs assessment, ongoing financial and material support can be provided to established health projects, making the effort more cost-effective and sustainable. However, in-person collaboration with host country providers offers additional benefits, including a personal enriching experience of local culture and health practices, fostering collegial relationships, identifying gaps in healthcare where we can assist, heightening empathy, and a renewed passion for medical work [18,19]. The desire of many volunteers to connect personally and contribute directly to those in need is a driving force behind their decision to volunteer their skills, time, and finances, based on our experience.

A significant limitation of STMM is that they are conducted during the volunteer vacation time, which may not align with the schedule of the patient and host countries. STMMs are expensive and time-consuming to organize properly. Based on our experience, we offer recommendations for planning an efficient medical mission trip, summarized using the acronym H.E.L.P.

#### 3.1. Humility

Be humble and know your limitations. If you can't do it at home, you should not do it overseas.

Maintain the same standards of professionalism during overseas medical missions as you would in your daily practice [3]. Short-term missions, as the name implies, are brief visits, typically lasting one to a few weeks. It takes time to understand the local healthcare sector, its limitations, and the approaches that are effective in the regional context. Foreign volunteers are to use this initial visit to identify gaps in education and healthcare, and learn how they can assist, incorporating local culture and knowledge into their efforts.

#### 3.2. Educate

Educational projects are widely welcomed and are one of the most effective ways to make a lasting commitment that continues beyond the life of the mission [8,11]. They are inexpensive to initiate and can be easily maintained using freely available video technology to maximize effectiveness. Create educational flyers that incorporate local language and culture, this material can be easily shared on social media, reaching a large segment of the population.

### 3.3. Leadership

Organizing a foreign medical mission requires careful planning, including recruiting volunteers, securing necessary resources and financial support, obtaining permissions, and partnering with a reliable host organization and local collaborators. Assign team leads and establish clear agenda to address any issues that may arise during the mission. Clearly sharing your mission's goals with the host organization fosters collaboration as well as open discussion of potential conflicts.

Not all assistance is beneficial—carefully assess volunteer skills to ensure they are contextually appropriate. A significant portion of the team often consists of nonmedical personnel who should not be providing medical care.

### 3.4. Planning

Successful overseas medical missions require a strong host partner, which is sometimes the most complex piece of the planning puzzle. A reliable local host provides information on healthcare gaps, conducts a needs assessment, recommends organizations and providers to collaborate with, and offers a range of logistical support, including securing transportation, obtaining a permission letter, and guidance on accessing cost-effective local medications. Collaboration with the local medical societies and civic organizations, such as the Lions and Rotary Clubs, is invaluable [12]. These organizations have members who are often professionals, offering an opportunity to network. They are often aware of education and disease gaps needing to be addressed, aligning with national health strategies and providing opportunities for support and integration.

It is essential to obtain permission from the local Health Department to conduct the mission and include local providers in the treatment team as they are familiar with locally available medications, which are often more affordable and better understood by both providers and patients. Involving local providers helps address the lack of follow-up care, a frequent criticism of short-term medical missions. Feedback from local providers plays a pivotal role in planning follow-up missions; their engagement often leads to improved health outcomes and increased medication adherence [13].

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## 4. Conclusion

Host communities welcome overseas mission trips as they serve as gateways to lasting friendships, community engagement, and assisting with healthcare gaps, where meaningful contributions can be made. Although medical missions require significant financial and logistical investments, they continue to attract physicians who find personal fulfillment in this work. For a successful and sustained relationship, it is essential to foster mutuality by incorporating the priorities of host countries and implementing projects that are culturally and linguistically appropriate. Continuity of care remains a critical area that requires improvement, with collaboration between foreign medical teams and local providers presenting a viable solution.

Foreign medical teams should obtain permission, adhere to local regulations, help based on identified needs to maximize benefits, and avoid fostering dependency. One proposed strategy is for host countries to implement a registration system to track and align incoming foreign medical teams with ongoing healthcare initiatives. Such a system would enhance coordination, ensure that visiting teams contribute meaningfully to existing efforts, facilitate objective assessment of their impact, and promote sustainable health outcomes.

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## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

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