



Timmy Global Health Capstone Final Report

SPEA V600 Spring 2016

Anna Archer
Ricardo Bello
Kayleigh Burgess
Dan Clerget
Yasmine El-Gohary
Andrea Grabner
Katie Larson
Maxine Laszlo
Shelby Lemons
Taylor Martin
Mark Mitchell
Roberta Osmani
Laura Strawmyer
Bravo Taylor

Under the Supervision of Professor Beth Gazley
bgazley@indiana.edu

Submitted: April 19, 2016

Executive Summary

Timmy Global Health (Timmy) is an Indianapolis-based nonprofit, committed to expanding access to healthcare and empowering students and volunteers to tackle today's most pressing global health challenges. Timmy's five-year plan prioritizes engaging volunteers in a way that fosters a life-long commitment to humanitarianism, cultivating strong partnerships, and delivering sustainable, data-driven programs.

Timmy has recently experienced rapid growth, expanding from 15 student chapters in 2009 to over 50 student chapters today. As the organization expands, it faces questions of responsible growth and sustainability. Timmy approached the Indiana University School of Public and Environmental Affairs for assistance developing a responsible growth model.

Research methods employed to address responsible growth included a stakeholder analysis, literature review, comparative analysis, direct observation and staff interviews. Research focused primarily on the following:

1. A transition to service learning,
2. The development of a comprehensive Community Health Worker program,
3. Alternative models for community engagement, and
4. Processes of evaluation.

Timmy can position itself ahead of the curve by focusing on key aspects of organizational and programmatic sustainability. We offer three over-arching recommendations: *responsible engagement for global empowerment, human capital investment, and evidence-driven decision-making.*

Responsible Engagement for Global Empowerment

Timmy Global Health strives to empower the next generation of global leaders and to distinguish itself from "voluntourism" organizations. To further these objectives, it is recommended that Timmy use the tools and prescribed practices of a community-based service learning model. Such engagement of student leaders and volunteers will further empower these future leaders. Our research further emphasized the need to engage communities at every step of the Timmy process. This will build local capacity and help to ensure the long-term empowerment of communities, beyond primary care provision. Special considerations include how Timmy enters and exits communities and how local Community Health Workers are incorporated into the Timmy model.

Investing in Timmy's Key Stakeholders

Timmy identifies in-country and domestic partnerships as one of their greatest strengths, further identifying an opportunity to expand these partnerships and the organization's volunteer base. Our research findings underscore the need to invest in Timmy's partners through activities such as alumni engagement, student chapter support and in-country partnership building.

Evidence-driven decision-making

By 2018, Timmy hopes to be conducting full evaluations of its health programs and health services. To do so, they are currently working to develop program measurement criteria and tools to be put in place over the coming year. Our research concludes that in order to ensure the quality of care, decisions need to be backed with data provided by mission-critical constituents.

Contents

- Executive Summary 2
- Introduction 5
 - Statement of Needs 5
 - Vision for Sustainability 6
 - Where Timmy is Now 8
 - Roadmap 9
 - Methodology 10
 - Literature Review 10
 - Comparative Analysis 10
 - Primary Data Collection 11
- Service Learning 12
 - Needs 12
 - Where Timmy’s Service Learning Program is Now 12
 - Definition & Proposed Model for Service Learning 13
 - Timmy’s Definition of Service Learning 13
 - A Model of Sustainable Service Learning for Timmy 14
 - Recommendations 25
 - Implementation 27
- Service Provision: Entering and Exiting Communities 28
 - Overview 28
 - Proposed Method for Community Entry and Exit 29
 - Gaps in Strategies 34
 - Recommendations 34
 - Implementation 35
- Service Provision: Community Health Workers 38
 - Overview 38
 - Best Practices by Program Area 41
 - I. Pre-Program Assessment 41
 - II. Program Development 42
 - III. Recruitment 43
 - IV. Training 46
 - V. Compensation 47
 - VIII. Supervision 49
 - Gaps in CHW Programming Areas 51
 - Recommendations 52
 - Implementation 52

Service Provision: Service Implementation Alternatives..... 54

 Overview..... 54

 Proposed Model..... 54

 Best Practices 55

 Service Implementation Strategies 57

 Gaps 59

 Recommendations..... 59

 Implementation..... 60

 Plan for Alternative 1: Health Arm..... 60

 Plan for Alternative 2: Health Coordinator 61

Monitoring and Evaluation..... 63

 Overview..... 63

 Model..... 64

 Types of Quantitative Program Assessment..... 64

 Process Evaluation..... 64

 Best Practices 65

 Recommendations..... 68

 Implementation..... 70

 Impact Evaluation Plan of Students who Participate on a Trip..... 70

 Monitoring Plan for Student Chapters and Alumni Network 71

Appendix 1. Glossary of Service Learning Terms 74

Appendix 2. Literature Review of Best Practices for Service Learning..... 77

Appendix 3. Alumni Survey..... 80

Appendix 4. Competitor Entrance Strategy Details..... 84

Appendix 5. Exit Strategies “Tips for Practitioners” 85

Appendix 6. Aggregated Chapter Member Survey Responses 89

Appendix 7. Dominican Republic Chapter Survey..... 105

Appendix 8. Stakeholder Analysis 108

Introduction

Since 1997, Timmy Global Health (Timmy) has committed to expanding access to healthcare and empowering students and volunteers to tackle today's most pressing global health challenges. With a \$5+ million budget, Timmy maintains 10 community-based project sites in Ecuador, Guatemala, Nigeria, and the Dominican Republic, serving 59 underserved communities. Timmy's unique model prioritizes continuity of care, returning to the same locations multiple times per year to deliver primary health care services and offer referrals.

A key element of Timmy's operations is its student chapter model. Student chapters at universities and high schools nationwide raise funds for Timmy and organize medical mission trips. Timmy has recently experienced rapid growth, more than tripling from 15 student chapters in 2009 to over 50 student chapters today. As the organization expands, it faces questions of responsible growth and sustainability.

As Timmy plans for continued growth, the organization is seeking a clear strategy for expanding programs and resources. Timmy tasked the School of Public and Environmental Affairs (SPEA) Master of Public Affairs Capstone program with creating a comprehensive sustainability plan to identify components of this strategy. Through our research and conversations with Timmy, we have identified several key areas to focus our work:

1. Strengthening the service learning component of Timmy's volunteer program;
2. Improving quality of care in communities where Timmy currently works, by identifying opportunities to partner and build local capacity
3. Identifying ways that Timmy can expand into new communities, as well as exit communities
4. Creating evaluation metrics across Timmy's programs

Recommendations from these key areas are presented in the chapters that follow.

Statement of Needs

An organization designed to tackle global health challenges, Timmy Global Health (Timmy) serves remote communities lacking access to health-related services in Central America, South America, and Africa. Since 1997, Timmy has transformed the lives of more than 84,000 individuals by delivering the promise of healthy futures. Although Timmy has helped thousands, there is still a large disparity between the number of people who lack access to healthcare and the number of people Timmy serves. Addressing the large gap will require the organization to develop capacity to expand into new areas and ensuring that each new partnership fosters sustainable operations.

Timmy currently introduces services in new communities as the opportunity arises through the organization's network; there is concern this approach lacks strategy. Without an expansion strategy, the organization risks selecting communities that lack the support or the infrastructure needed for a sustainable program. Additionally, Timmy faces the potential to disrupt local economies of the communities it serves by inadvertently competing with local doctors. Thus, the

organization needs to identify key community indicators for establishing sustainable programs and develop the metrics to ensure their success.

Timmy operates under a model that has been successful over the last two decades. In light of the current shift of international development initiatives from a focus on episodic interventions to sustainable community-led development programs, organizations with medical missions are reevaluating their programming models to ensure they are providing the highest quality of care without jeopardizing the specific needs of the communities they serve. The shift towards sustainability as a cornerstone of all development requires Timmy's awareness of the future landscape in order to remain competitive in the field.

Furthermore, Timmy's volunteer model is not designed to empower students long-term—to ensure they take away sufficient lessons from their brief medical trips to tackle today's most pressing global health challenges. By primarily focusing on the needs of the volunteers, Timmy also risks harming the communities it serves by sending volunteers who lack the proper preparation and motivation to learn from the host communities. In other words, Timmy has not established a distinction between “voluntourism” and reflective, community-based service learning. The distinction is critical to the Timmy mission. Enhancing its current curriculum and adopting best practices of service learning will lead to more effective engagement and preparation of volunteers for a life-long commitment to health equity.

It is also in Timmy's best interest to work on building an alumni network of long-term supporters, global health advocates, and potential donors. Currently, Timmy risks exerting unnecessary resources in search of new stakeholders. To create a more sustainable model and better allocate resources, Timmy should invest in long-term relationships with volunteers by stewarding those who have already shown interest and linkage with the organization.

Our report addresses the sustainability of the current model and potential alternatives to better serving Timmy's constituents; we suggest expanding vertically by enhancing services in current communities and horizontally to expand into new areas. The next steps for Timmy are to use this information to create a strategic plan that focuses on capacity building to ensure Timmy's success in the future competitive landscape in the global health service provision field.

Vision for Sustainability

Incorporating sustainability into strategic operations will position Timmy as one of the leaders in the global health sphere. The industry considers a sustainable nonprofit organization as one that is “able to sustain itself over the long term, perpetuating its ability to fulfill its mission.”¹ In order for Timmy fulfill its mission, it must continue to adopt practices of successful global health nonprofits. While Timmy can and should chose its own definition of sustainability, for this report we have identified three major trends of sustainable international development organizations: responsible empowerment, stakeholder investment, and evidence-driven decision making.

¹ National Council of Nonprofits. (2016). "Nonprofit Sustainability."
<https://www.councilofnonprofits.org/tools-resources/nonprofit-sustainability>

Responsible engagement for global empowerment is ethically empowering both volunteers and communities by giving them autonomy, decision-making power, and ensuring that all decisions reflect the needs of the most vulnerable constituent in each scenario.² A key theme of responsible volunteer empowerment is social justice. While definitions of social justice may vary, the fundamental work of social justice is “the pursuit of a society in which everyone can reach his or her full potential.”³ A social justice-centered approach is distinct from a charity-centered approach, which focuses on alleviating immediate problems. Social justice-centered approaches focus on finding long-term sustainable solutions. We suggest utilizing service learning, which employs a social justice approach by equipping young volunteers with the tools to develop as global health leaders in finding these long-term sustainable solutions.

Our research also showed that empowerment for communities means active engagement and decision-making power at every step of Timmy’s process. This approach relates to how the community interacts with Timmy as it enters the community, how Timmy shifts responsibilities to local providers throughout the partnership, how Community Health Promoters (CHPs) are incorporated in communities, and how the community can eventually operate and sustain a community health program independent of Timmy. This process empowers communities to take an active role in their own health, and ultimately leads to more impactful outcomes.

To serve a mission is to serve others, and to serve others is to invest in their success. Timmy’s operations invest in the success of volunteers, CHPs, partners and people who lack access to healthcare. Because these stakeholders are the heart of Timmy’s operations, it is important to allocate resources to reflect this importance. This shift may include hiring more staff, focusing on chapter engagement to improve volunteer experiences and provide context and avenues to foster long-term engagement with global health issues, and investing in a standardized CHP training program so all communities are best equipped to address their health needs.

Evidence-driven decision making will ensure that Timmy’s resources are efficiently and effectively allocated to reflect the needs of the mission. Data can help Timmy promote optimal outcomes for health service implementation as well as establish a standard of patient care. This focus ensures that the care provided matches patients’ needs, so Timmy does not overspend in areas where constituents are not benefitting from the program. Strategically monitoring Timmy’s work transcends continuity of care and focuses on the *quality* of care. Additionally, data collection through student surveys can provide useful detail regarding student volunteers and their experiences abroad. Overall, data gives insight into how mission-critical stakeholders perceive operations, which will lead to more effective services.

² Robert Chambers. 1995. “*Rural Development: Putting the Last First.*”

³ Sumka, S., Porter, M. C., & Piacitelli, J. (2015). *Working side by side: Creating alternative breaks as catalysts for global learning, student leadership, and social change.* Sterling, Virginia: Stylus Publishing, LLC, pp. 18.

Where Timmy is Now

In efforts to achieve this mission, Timmy operates a network of volunteer-led chapters throughout the United States. Chapters utilize a model called the “Timmy Triangle” to guide their programming.⁴ The Timmy Triangle consists of Fundraising, Advocacy, and Service.⁵ Timmy is structured to have their US Programs Manager and the Medical Service Trip Coordinator be the primary contact for Timmy chapters.⁶ Currently, Timmy provides chapter leaders with educational resources to supplement their hands-on service and advocacy activities. The Global Health Modules, chapter materials, and other resources educate and prepare students to be global health advocates on campus. These resources also ensure that students traveling on a medical service trip grasp the complexities of global health disparities. The current resources offer students a foundation of understanding that is enhanced through students’ hands-on application in service activities, chapter events, and meaningful dialogue.

Although chapters are given resources and materials to guide their fundraising and advocacy behaviors, they are given autonomy to determine which initiatives and strategies to use to accomplish their goals.⁷ Timmy staff serves as a point of contact for chapters, but they primarily serve an “as-needed” role and answer questions that chapters may have on specific issues.⁸ Timmy’s chapter structure requires staff to collaborate with chapter leaders in order to structure learning opportunities for participants.

Timmy’s role overlaps with the role that a school campus traditionally plays, which is to equip students to responsibly address community problems and foster a sense of civic responsibility.⁹ However, most Timmy students do not enroll in a course to go on a medical service trip. Students learn through participating in hands-on service rather than lectures with a professor in a classroom setting. This context requires Timmy to provide structure, support, and resources to student leaders in order to facilitate the learning. Through the autonomy given to chapters, chapter leaders employ a variety of different service-learning models and approach service-learning differently.

Timmy faces several significant challenges when it comes to implementing an enhanced service leaning approach. The first is that Timmy has limited access to student leaders on campus. Students check in occasionally with Timmy staff, but it is not realistic or ideal for Timmy staff to play a large role in the day-to-day operations at a chapter level. Furthermore, Timmy must balance the right amount of responsibility to place on students. Being an active Timmy member is a significant commitment, and asking more of students could discourage their involvement. Timmy wants to support the personal development and growth of student leaders, which means entrusting them to implement the educational curriculum in the best way they can. This again requires the right balance of challenge and support.

⁴ Timmy Global Health. (n.d.). Timmy Global Health College Chapter Handbook.

⁵ Ibid.

⁶ A. Rossodivita, E. Bissett, phone interview with service learning group on March 4th, 2016.

⁷ Timmy Global Health (n.d.). Timmy 101.

⁸ Timmy Global Health (2015). A Path Forward: Strategic Plan Overview.

⁹ Gazley, B., Bennett, T. A., & Littlepage, L. (2013). Achieving the Partnership Principle in Experiential Learning: The Nonprofit Perspective. *Journal of Public Affairs Education*, (3). 559.

Timmy must also manage the balance between challenge and support of its client communities. Timmy's patient services to this point have largely focused on health service provision through medical mission trips, patient record management, and patient referral systems.¹⁰ Timmy partners with a local organization in each community and provides financial and in-kind support to help with follow-up care. Timmy's community health promoter programs and on-the-ground-staff promote health education in health education.¹¹ Timmy has piloted some programs that specifically address long-term health improvement, such as the safe water initiative and the nutrition program.¹²

Opportunity has been the method of choice for Timmy's current community and partner selection, and while many of these decisions have yielded positive results for the organization, they are now at a point where strategic growth should be priority. For Timmy, opportunistic growth means deciding on next steps for program growth and expansion based on opportunities that present themselves, such as deciding to enter into a partnership with an organization because it happens to be a convenient match with Timmy's goals and works out in regards to implementation.

Timmy Global Health currently uses CHPs intermittently in its programs across Ecuador, Guatemala, and the Dominican Republic, and each CHP program has different levels of responsibility and training. Also, while Timmy is responsible for running the CHP program in some sites, Timmy's partners are responsible for others. Guatemala currently does not have CHPs, the Dominican Republic CHP programs are orchestrated by the partner organizations (Banelino and 7elementos). Ecuador has two site with CHPs that are compensated and trained by Timmy and their partners.

Timmy has established procedures for collecting two types of data: patient health information and student learning experiences following a medical service trip. The patient health information is stored in TimmyCare, Timmy's EMR System. While Timmy wants to improve these processes, the organization lacks the staff capacity to advance data collection methodologies and monitor programs for evaluation purposes. Furthermore, this capacity constraint is evident in the lack of regular chapter oversight throughout the year. Apart from the bi-annual conference call, there is a lack of uniform and consistent program monitoring procedures. Lastly, Timmy's true strength is in their volunteer base. However, Timmy does not have an alumni database or engagement mechanism with Timmy alumni to retain them as volunteers or potential donors.¹³

Roadmap

Our report focuses on three main areas that mirror Timmy's mission and goals: how Timmy engages volunteers (Service Learning, Section 1), how it expands access to healthcare (Service Provision, Sections 2-4), and how to best track data across operations (Evaluation, Section 5). Throughout this report, we provide the baseline for where Timmy's operations currently stand, a literature and evidence review of best practices in the both service learning and medical mission trips, and an assessment of where Timmy is in relation to best practices. Finally, based upon the

¹⁰ Timmy Global Health (n.d.). Our Global Work

¹¹ Ibid.

¹² Timmy Global Health (n.d.) Board Orientation: Programs 101.

¹³ S. Hollis, email communication with service learning group on February 11th, 2016.

gaps in Timmy's current model, we will provide a set of specific recommendations and action steps Timmy can take to reach best practices and become a model of sustainability.

Methodology

We utilized three primary tactics when evaluating Timmy's current operations and potential for growth: best practices from literature, comparative practices from similar organizations, and primary data collection.

Literature Review

In order to compile the literature review portions of this report, we assessed literature to identify best practices laid out by peer-reviewed journals, books, technical notes, case studies presented by the most frequently cited articles and written by the most recognized organizations, and resources from other nonprofits in developing our models. Additionally, we utilized many resources provided both directly and indirectly by Timmy to ensure relevance of our research including Timmy's website, strategic plan, and board orientation materials. Last, interviews with Timmy staff supplemented our research.

Comparative Analysis

The comparative analysis portions of this report build upon the work produced by Sherris Consulting (Sherris) for the February 22 Timmy Board of Directors meeting. This information was used to conduct both a Service Provision and Service Learning analysis. All information comes from organizational websites, blogs, Guidestar profiles, and 990 forms (IRS information returns), with some information originating from news articles. Therefore, it is important to note the conclusions drawn about the organizations' practices result mostly from the organizations' self-presentation rather than direct observation.

The Service Provision analysis focused on the top twenty organizations Sherris identified as most similar to Timmy. We gathered information on how each organization was structured, how the organization expanded into new communities, and whether or not there was an exit strategy in place. Throughout the process it became evident that not all organizations provide the same core services as Timmy. Therefore, there are limitations within the comparative analysis that Timmy's board and staff should consider when making direct comparisons to Timmy's operations.

Most of the organizations identified by Sherris are included in the Service Learning analysis, with two dozen additional organizations selected through Guidestar keyword searches matching 'service learning', 'medical mission', and/or 'student chapter'. The full Service Learning analysis compares organizations with both a service learning/student chapter approach and some aspect of service trips or service project management. In the selection process, it became clear that some organizations have aspects of chapter management but not trip planning, or medical missions by individuals rather than chapter-affiliated volunteers. Such organizations are analyzed in separate Excel tabs according to relevant metrics. The Service Learning and Medical Mission analysis includes most of the metrics identified in the Sherris analysis with several additional indicators related to service learning and medical mission trips in particular and is the basis for identifying industry trends and best practices.

The following sections will highlight unique and innovative practices discovered in the review that can be integrated into Timmy's operations. The complete Comparative Analysis charts, submitted as a separate file, may be used to identify further insights into the industry.

Primary Data Collection

A member of our capstone team administered surveys and conducted interviews to collect primary data in accordance with Indiana University Human Subjects regulations¹⁴ during a medical service trip to Las Canas, Dominican Republic in March 2016. All student volunteers who participated in the service trip were surveyed. Statistical analysis on the data was not feasible due to the small sample size, which consisted of 13 surveys and 13 interviews. The qualitative data supported our team's research on best practices and also assisted in configuring stronger recommendations for Timmy service learning programming.

¹⁴ Capstone: A Sustainability Plan for Timmy Global Health; Survey Data Collection for Program Evaluation. The study was conducted under IRB protocol number 1603062377, principal investigator Beth Gazley (2016).

Service Learning

Overview

The purpose of this section is to provide Timmy with an evidence-driven model for sustainable service learning. This section begins by describing Timmy's current practices for student volunteer engagement, followed by a model for sustainable service learning. We present and discuss a service learning model that consists of five principles: meaningful service, reflection, preparation and partnership, from charity to social justice, and reorientation. We will close with a full set of recommendations for how Timmy can implement this model.

Needs

Given the importance of both parts of Timmy's mission and its desire to implement sustainable practices, Timmy has engaged this capstone group to assess how their student and volunteer chapters can best implement service learning practices. As discussed on pages 7-8, Timmy staff expressed their need to ensure that their operations do not fall under the category of "voluntourism" and highlighted their dedication to responsible short-term service learning experiences. Timmy's stated needs and our research indicate that Timmy can improve by implementing evidence-driven practices, empowering their staff and volunteers responsibly, and investing in the communities and partners that they serve.

Where Timmy's Service Learning Program is Now

Timmy's network includes about 40 university chapters across the country.¹⁵ Approximately two thirds of these chapters are for undergraduate students and the rest are graduate or professional students.¹⁶ Timmy recommends each chapter complete a service project with a local partner, raise \$3,000 for Timmy, and send students on a trip each year.¹⁷ According to the 2015 annual report, 513 students participated in trips and 210 students traveled to a partner country.¹⁸ Based upon these numbers, approximately 60% of students did not attend a trip. During the 2012-13 academic year, Timmy chapters raised approximately \$73,000 and increased that total to \$115,000 in 2014-15.¹⁹

Timmy provides basic materials and technical skills through advocacy training. These trainings include lessons on running effective meetings and how to structure decision making.²⁰ Chapters are in charge of setting up their own advocacy events.²¹ As chapters expand, there is an opportunity for Timmy to increase revenue streams and advocacy campaigns. The Timmy Chapter Handbook highlights domestic service completed with partners such as Habitat for Humanity and an organization called Garden on the Go.²² These appear to be one-time volunteer events for large groups of students at organizations that address issues of poverty, yet have a tenuous connection to Timmy's mission of empowering students to be leaders in the global health landscape.

¹⁵ A. Rossodivita, E. Bissett, phone interview with service learning group on March 4th, 2016.

¹⁶ Ibid.

¹⁷ Timmy Global Health (n.d.). Timmy 101.

¹⁸ Timmy Global Health (n.d.). 2014-2015 Annual Report Snapshot.

¹⁹ Timmy Global Health (n.d.). State of the Organization Presentation.

²⁰ Krueger, E, Timmy Global Health Board Chair. (2015). Advocacy and Leadership: How to Run an Effective Meeting.

²¹ Timmy Global Health (n.d.) Timmy 101.

²² Timmy Global Health (n.d.). Timmy Global Health College Chapter Handbook.

Definition & Proposed Model for Service Learning

Timmy's Definition of Service Learning

Service learning can be challenging to define since it has been widely adopted and diversely applied to programs from field research to internships.²³ The breadth of application and continuing evolution of service learning as a practice adds to the complexity of prescribing a “one-size fits all” model. This context allows Timmy to adapt its own approach that fits with the learning experiences and goals of the organization. We recommend that Timmy consider incorporating the following elements into the organization's definition of its service learning program:

- provide service work that meets a community-identified need,
- integrate reflection,
- prepare students to work alongside community partners, peers, and professionals in their service,
- provide transferable skills, and
- foster a lifelong commitment to humanitarianism.

A sample service learning definition that incorporates these elements:

Timmy engages in service learning through providing service opportunities while *simultaneously* educating and empowering volunteers to be aware of and committed to erasing global health disparities.

A strong example of a service learning model comes from Bridges to Community, a nonprofit organization that provides service learning opportunities to its volunteers through a service trips.

Service learning is at the heart of the Bridges to Community mission and volunteer experience. We train our staff and prepare for our trips to ensure that volunteers get the most out of their time other than simply constructing a project in another country. Volunteers live in the community, eat local food, work alongside community members, and engage in local activities with the community. We offer guided reflections, hold conversations with representatives from local families and organizations, and organize participatory activities to engage volunteers in the hard work of considering the full complexity of the world in which we live.²⁴

We recommend Timmy adopt a similar model that highlights the unique aspects of Timmy's work and commitment to developing the next generation of global health leaders. The following section will discuss an evidence-driven model that Timmy can adopt to fit their organizational culture and goals.

²³ Eyler, J., & Giles, D. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass, 1999.

²⁴ “Service Learning.” *Bridges to Community*. Bridges to Community, n.d. Web. Retrieved from <https://www.bridgestocommunity.org/volunteer/service-learning>

A Model of Sustainable Service Learning for Timmy

Numerous resources and scholars prescribe effective models for service learning. The purpose of this section is to provide Timmy with identifiable goals for creating/implementing a sustainable service learning model. The proposed model includes the components of service learning that we believe are important to Timmy. The following sections includes a set of specific recommendations that Timmy can implement to begin pursuing this model.

Timmy’s model will build upon practices prescribed by leading higher education experts, Eyler and Giles, and a national nonprofit that is committed to developing high quality alternative break experiences, Break Away. The main emphasis will be on Break Away’s prescribed practices because of their expertise in service trips and Timmy’s expressed interest in using Break Away as a resource. For additional research on the benefits and theory of an effective service learning model and a glossary of related terms, please see Appendix 1.

Break Away refers to alternative break programs as short-term service learning experiences. They advocate integrating two service learning hallmarks—education and reflection—into service activities. Break Away uses “The Triangle of Quality Community Service” (Figure 1) to illustrate the relationship between direct service, education, and reflection. All three components are interrelated and must be completed in tandem to result in high quality service learning.

Building upon the Break Away principles, Timmy can reshape their student chapters. The five principles outlined below are consistently identified as central components of effective service learning programs.²⁵ When these principles are incorporated into service learning programming, Timmy can make a significant difference in student’s learning outcomes.²⁶

The Triangle of Quality Community Service



Figure 1: Triangle of Quality Community Service

²⁵ Eyler, J., & Giles, D. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass, c1999; Break Away;

²⁶ Eyler, J., & Giles, D. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass, c1999.

Timmy can implement this model using aspects of similar programs. Organizations which present impressive models of proper service learning related to their medical missions and global health include GlobeMed, MedLife, Manna Project International, Bridges to Community (discussed above) and Global Brigades. Examples of organizations which display exemplary chapter management, yet are not specifically medical-mission focused, include Camp Kesem and Movement Exchange.

GlobeMed appears to be a model organization for combining service learning approaches and medical service trips. They require an extensive application process to found a GlobeMed chapter, and founders must follow a training schedule before their chapter may begin work. GlobeMed encourages students from all disciplines to be involved in its chapters. GlobeMed has created a year-long curriculum in collaboration with a variety of experts. GlobeMed also has a developed alumni engagement program. This approach has allowed GlobeMed to expand from one to 57 university chapters since 2007, with a 98% chapter retention rate and student-reported improvements in leadership skills.²⁷ Timmy can build upon its current chapter relations using the five-principle model to allow for similar results.

Table 1: Principles of Sustainable Service Learning²⁸

Meaningful Service	Whether on a service trip or doing direct service in your local community, students will participate in strong direct service that addresses a community-identified need.
Reflection	Students reflect on service activities to help them synthesize the learning and experience.
Preparation & Partnership	Timmy students take an active role in preparing for service activities and work alongside community partners.
From Charity to Social Justice	Understand how to address the root causes of social issues.
Reorientation	Connect global experiences to the local community and continue learning about and engaging in efforts to improve global health disparities.

Sustainable Service Learning Principle 1: Meaningful service

The first principle of effective service learning is meaningful service. Eyler and Giles emphasize that the quality of student engagement is essential to the success of the program:²⁹ “Before any other considerations, service learning practitioners must pay attention to establishing community connections that will provide productive situations for students as well as genuine resources useful for the community.”³⁰ While the educational connections are also critical for success in service learning, service is the foundation.

²⁷ "Leadership Development | GlobeMed." GlobeMed. N.p., n.d. Web. 10 Apr. 2016.

²⁸ Eight Components of a Quality Alternative Break. (n.d.). Break Away. Retrieved from <http://alternativebreaks.org/wp-content/uploads/2014/08/Eight-Components-of-a-Quality-Alternative-Break.pdf>

²⁹ Eyler, J., & Giles, D. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass, c1999.

³⁰ *Ibid*, p. 169.

Break Away takes this principle a step further, encouraging **strong direct service coupled with community interaction** throughout the duration of the trip.³¹ In practice, this means that first-hand experiences with host communities should be meaningful and impactful, both for the students and the community. Meaningful service includes work that allows students to take initiative and responsibility while working alongside peers and community members.³² High quality service with community partners has the following characteristics:

- Students do meaningful work.
- Students work directly with community partners.
- Students receive support and feedback from agency staff (community partner).
- The service continues over a sustained period.³³

On a service trip, service can be viewed as an anchor for participants, connecting the pre-trip preparations with the post-trip transfer of lessons learned to continue engagement. When planning service on a learning experience, the service must align with the intended outcomes of the trip as well as benefit the community members and participants. Some key concepts to consider when planning community service include:

- *Build capacity:* Service work is at its best when it builds capacity for the community or an organization, rather than perpetuating a long-term dependency with temporary service.
- *Do no harm:* Participants should avoid an attitude of knowing how to solve or “fix” problems for the community in a way that perpetuates paternalism. It is essential that students practice communication and humility while following community members’ lead.
- *Avoid displacing local labor or threatening local systems:* Service planners must ensure that participants do not harm local communities by exhausting important resources and working in unstable political and environmental situations. Service work should be done in partnership with local nonprofit organizations and community members.
- *Don’t get in over your head:* The requirements of the service should fit the level of training and skills of the volunteers. Students should not be involved in service that they would not be qualified to do in their own home country.³⁴

Sustainable Service Learning Principle 2: Provide structured opportunities for students to reflect critically on their experience

Reflection is a powerful tool to help students expand their learning, empathy, and effectiveness.³⁵ Because of its value, reflection is integral to experiential and service learning pedagogy.³⁶ Reflection has been described as the link that ties students’ experiences in the community to the

³¹ Eight Components of a Quality Alternative Break. (n.d.). Break Away. Retrieved from <http://alternativebreaks.org/wp-content/uploads/2014/08/Eight-Components-of-a-Quality-Alternative-Break.pdf>

³² Eyler, J., & Giles, D. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass, c1999.

³³ Ibid.

³⁴ Sumka, S., Porter, M. C., & Piacitelli, J. (2015). *Working side by side: Creating alternative breaks as catalysts for global learning, student leadership, and social change.* Sterling, Virginia: Stylus Publishing, LLC.

³⁵ Ibid.

³⁶ Ibid.

learning outcomes.³⁷ Barbara Jacoby (1996), a prominent service learning scholar, captures the importance of incorporating reflection into service learning experiences:

As a form of experiential education, service-learning is based on the pedagogical principle that learning and development do not necessarily occur as a result of experience itself but as a result of a **reflective component explicitly designed to foster learning and development.**³⁸

According to Break Away, time should be set aside for reflection to occur daily, both individually and as a group.³⁹ On a service trip, reflection is typically student-led. In order for reflection to be successful, student leaders must be prepared to facilitate reflection, provide structure and content, and understand the value and purpose of reflection.⁴⁰

When planning a service activity, it is recommended that the facilitator consider “whether reflection would be enhanced by including the following elements:

- Opportunities to reflect on expectations before the service begins,
- Frequent opportunities for discussion of service,
- Critical reflection that challenges student assumptions⁴¹
- Assessment of students own limitations, expectations, and capacity to serve,⁴²
- Opportunities to involve community partners when possible.

Sustainable Service Learning Principle 3: Preparation and Partnership

Service learning is most effective when students are prepared for their service experience and when community partners act as co-educators throughout the process.⁴³ The following list includes key aspects and outcomes of service learning preparation:

- Effective preparation is illustrated when students are equipped with the attitudes, knowledge, skills, and materials they need to serve effectively.⁴⁴ Some students might enroll in a course to gain these skills and perspectives, such as the Timmy class at Indiana

³⁷ Eyler, J., & Giles, D. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass, c1999.

³⁸ Jacoby, B., & Associates. (1996). *Service-Learning in Higher Education: Concepts and Practices*. San Francisco, CA: The Jossey-Bass Higher and Adult Education Series, p. 6.

³⁹ Eight Components of a Quality Alternative Break. (n.d.). Break Away. Retrieved from <http://alternativebreaks.org/wp-content/uploads/2014/08/Eight-Components-of-a-Quality-Alternative-Break.pdf>

⁴⁰ Sumka, S., Porter, M. C., & Piacitelli, J. (2015). *Working side by side: Creating alternative breaks as catalysts for global learning, student leadership, and social change*. Sterling, Virginia: Stylus Publishing, LLC.

⁴¹ Eyler, J., & Giles, D. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass, c1999.

⁴² "Principles of Ethical and Effective Service." *Haas Center for Public Service*, 2014. Web. Retrieved from <https://haas.stanford.edu/about/mission-and-principles/principles-ethical-and-effective-service>

⁴³ Tomkovick, C., Lester, S. W., Flunker, L., & Wells, T. A. (2008). Linking collegiate service-learning to future volunteerism: Implications for nonprofit organizations. *Nonprofit Management Leadership Nonprofit Management and Leadership*, 19(1), 3-26.

⁴⁴ "Principles of Ethical and Effective Service." *Haas Center for Public Service*, 2014. Web. Retrieved from <https://haas.stanford.edu/about/mission-and-principles/principles-ethical-and-effective-service>

University-Bloomington. For non-curricular experiences like service trips, it is best practice to set a minimum requirement for the number of meetings attended by the trip participant. These meetings are critical for the success of the program, as they introduce participants to important themes, orient them to group members, and help them learn about the host community.

- Students understand the context in which the service experience is embedded. Information and resources that provide current and historical information about the partner organization and communities, and the influence of political, economic, environmental, and social contexts are shared with the students.⁴⁵ These resources include Timmy's Global Health Modules.
- Community partners advise what content to present to students and are involved in preparing or training students, when possible.⁴⁶
- Students are oriented to the mission of the organization with which they will be working.⁴⁷
- Students understand how their personal life choices are connected to the social issues they will be addressing through their service experience.⁴⁸

When it comes to developing meaningful relationships with community partners, Break Away recommends working with community partners instead of a top-down approach. An equal partnership ensures that the partnership is mutually beneficial. This approach requires regular assessment of the impact of the work on the community and examination of additional steps that can be taken to fill any gaps in service.⁴⁹ Additional research from a nonprofit management perspective sheds light on what creates successful relationships for partner organizations. When asked to consider what factors foster effective service learning partnerships, nonprofit managers reported that clear and ongoing communication (39%), a student's understanding of the agency's mission (32%), and match of student skills to agency needs (30%) were essential.⁵⁰ Comparator organizations which stress the significance of student-local partnerships include Child Family Health International, Community-Campus Partnerships for Health, MedLife Fund, and GlobeMed. GlobeMed delivers programs differently from Timmy and most of the comparative organizations; each prospective student chapter, once accepted, is matched with a prospective partner organization which has also gone through a rigorous application process to be considered. Project ownership is placed in the hands of the student chapter rather than the national organization, which acts purely as a facilitator and resource hub. Students and partners communicate often, and chapters communicate with nationals every other week.

While Timmy is unlikely to be able to implement the adopt-a-project model of GlobeMed, they may consider how to increase student agency and communication within the chapter-local partner relationship. Tomkovick et al. (2008) found that service learning was more effective and

⁴⁵ Ibid.

⁴⁶ Ibid.

⁴⁷ Eight Components of a Quality Alternative Break. (n.d.). Break Away. Retrieved from <http://alternativebreaks.org/wp-content/uploads/2014/08/Eight-Components-of-a-Quality-Alternative-Break.pdf>

⁴⁸ Ibid.

⁴⁹ Sumka, S., Porter, M. C., & Piacitelli, J. (2015). *Working side by side: Creating alternative breaks as catalysts for global learning, student leadership, and social change*. Sterling, Virginia: Stylus Publishing, LLC.

⁵⁰ Gazley, B., Bennett, T. A., & Littlepage, L. (2013). Achieving the Partnership Principle in Experiential Learning: The Nonprofit Perspective. *Journal of Public Affairs Education*, (3). 559.

led to future volunteering when service was structured to benefit both the service learner and the organizational partner.⁵¹ Additionally, if students receive personal benefits as a result of their service-learning experience, they are more likely to volunteer.⁵² A challenge that Timmy will face is identifying a project(s) that will benefit all students within a group. Rather than having one group work with an organization, it may make more sense to have fewer volunteers.

The Timmy Chapter Handbook highlights local service as a way in which they participate in the chapter. Part of the description of local service includes working with partners in their domestic communities that seek to eliminate health disparities.⁵³ Timmy reports students having “natural exposure” to their local partners during service trips, including seeing local people at clinics, possible interactions with the community health workers, and having dinner with a partner representative. There is also the potential to stay in the same facilities as local doctors.⁵⁴ These interactions are not sufficient to satisfy the proposed principle of Preparation and Partnership. The proposed model includes greater communication between partners and student chapters both before and during the service learning experience. There could also be opportunities for non-trip chapter members to interact with partners during chapter meetings via Skype or a similar platform. If the language barrier is an issue, students or advisors with Spanish skills could take advantage of the opportunity to serve as a translator.

The idea of “partnership” can be further applied to Timmy chapters’ communicating with the national headquarters and with each other. By creating strong relationships between national chapters and the individual chapters, there is an opportunity for Timmy to facilitate bridging social capital opportunities across chapters. The concept of bridging social capital can be summarized as a loose connection that connects people from different locations or backgrounds through a common association.⁵⁵ In Timmy’s case, cross-chapter collaboration and resource-sharing can serve as a way to utilize bridging social capital and to increase the overall strength of local chapter programs.

Sustainable Service Learning Principle 4: From charity to social justice

Training students on concepts of social justice is a critical part of service learning and high quality service trips.⁵⁶ The emphasis on social justice is a more recent development within service learning pedagogy. Some literature refers to service learning that takes an explicit aim towards social justice as a “critical” approach to service learning.⁵⁷ A critical approach works to “redistribute power amongst all participants in the service-learning relationship, developing authentic relationships in the classroom and in the community, and working from a social change perspective.”⁵⁸ A service learning model that introduces students to systems of power and

⁵¹ Ibid.

⁵² Ibid.

⁵³ Timmy Global Health (n.d.). Timmy Global Health College Chapter Handbook.

⁵⁴ A. Rossodivita, E. Bissett, phone interview with service learning group on April 11th, 2016.

⁵⁵ Putnam, R. D. (2000). *Bowling alone: The collapse and revival of American community*. New York: Simon & Schuster.

⁵⁶ Sumka, S., Porter, M. C., & Piacitelli, J. (2015). *Working side by side: Creating alternative breaks as catalysts for global learning, student leadership, and social change*. Sterling, Virginia: Stylus Publishing, LLC.

⁵⁷ Mitchell, T. (2008). Traditional vs. critical service-learning: Engaging the literature to differentiate two models. *Michigan Journal of Community Service Learning*, Spring 2008, p 50-65.

⁵⁸ Ibid.

privilege that create and sustain inequalities can help students understand how to address the root cause of social issues.

Break Away calls this principle of service learning “From charity to social justice” and recommends that programming incorporate this norm into all aspects of service planning. Embracing this ideal requires an approach that values broader social outcomes of service, like equity and social change. Break Away’s Active Citizen Continuum is used as a teaching tool to demonstrate the ability of volunteers to move towards active citizens by discovering the root cause of social issues and making community a priority in their life.⁵⁹

The Active Citizen Continuum

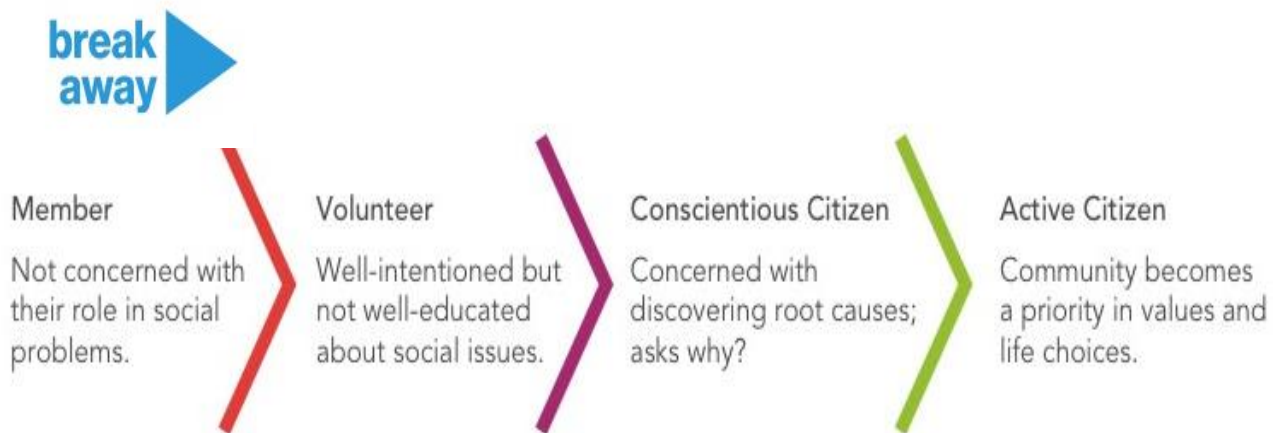


Figure 2: The Active Citizen Continuum

Approaching service work as a means to social justice also requires an examination of the way that service trips are branded. It is considered best practice for service trips be marketed as an educational **experience** and not as a **trip** to recruit students passionate about working alongside community members and understanding social issues, and avoid those with more superficial intentions (like the lure of an international trip).⁶⁰ Timmy brands their experiences as “medical service trips” as an intentional alternative to “medical brigades” or “mission” and especially “voluntourism”.⁶¹ The Break Away model encourages the integration of the word “experiences” as a further step away from colonialist or vacation-focused language.

⁵⁹ “The Active Citizen Continuum.” (n.d.). *Break Away*. Retrieved from <http://alternativebreaks.org/wp-content/uploads/2014/06/Active-Citizen-Continuum-2014.pdf>

⁶⁰ Sumka, S., Porter, M. C., & Piacitelli, J. (2015). *Working side by side: Creating alternative breaks as catalysts for global learning, student leadership, and social change*. Sterling, Virginia: Stylus Publishing, LLC.

⁶¹ A. Rossodivita, E. Bissett, phone interview with service learning group on April 11th, 2016.

Sustainable Service Learning Principle 5: Reorientation

One of the most challenging and important components of effective service learning is motivating students to apply the knowledge they gain during service activities to their lives upon returning to their home communities, a process formally known as reorientation⁶² Through the reorientation process, students learn how to transfer all lessons learned during a service experience to service with local organizations for continued education and volunteerism.⁶³ Students must be equipped with the tools and resources they need to process their intense service experience and get involved in their home communities. A hallmark of an effective service trip experience is one that teaches students how to connect global issues to local ones.

Ideally, reorientation plans are established before or during the trip. Some organizations intentionally schedule big events after a service trip to keep participants engaged.⁶⁴ Another way groups maintain organizational engagement is to dedicate a reflection activity during the trip to identifying ways that students can stay engaged with the work after they return home. Break Away advocates for students to join associations (on campus or in the community) they can join that allow students to transfer their experiences into community action⁶⁵.

The reorientation principle is the least robust in Timmy's current programming. To maintain further organizational engagement and student leadership, Timmy can include student leadership in its governing activities. Comparator organizations emphasize student governance through either establishing a Student Advisory Board (SAB) of 10-15 exemplary student leaders, and/or including 2-3 students on their Board of Directors. The SAB strategy would reemphasize cross-chapter communication and allow Timmy to respond directly to student needs and concerns.

Increasing organizational engagement with graduated student volunteers is another aspect of reorientation. Timmy takes a passive rather than a systematic approach to alumni engagement.⁶⁶ For example, Timmy communicates indirectly with graduated student volunteers through an alumni e-newsletter and alumni-focused posts on social media. These communications typically contain opportunities for alumni to get involved and updates about the organization.⁶⁷ Timmy does provide steps for involving alumni in chapters in their "Guide for Growing and Scaling your Chapter" resource, stating, "an alumni network is a great way to strengthen fundraising activities, connect current chapter members with people in their fields of interest, and find medical professionals for your international trips."⁶⁸ From this statement, it is clear that alumni can add human resources capacity and increase chapter potential. However, it is the responsibility of each chapter to reach out to alumni, and these practices are not required for each chapter.

⁶² Ibid.

⁶³ Eight Components of a Quality Alternative Break. (n.d.). Break Away. Retrieved from <http://alternativebreaks.org/wp-content/uploads/2014/08/Eight-Components-of-a-Quality-Alternative-Break.pdf>

⁶⁴ Movement Exchange. (n.d.). Movement Exchanged: University Chapter Handbook 2015-16

⁶⁵ Break Away. (n.d.). Big Picture Reorientation. Retrieved from <http://alternativebreaks.org/big-picture-reorientation/>

⁶⁶ S. Hollis, email communication with service learning group on February 11th, 2016.

⁶⁷ Ibid.

⁶⁸ Timmy Global Health. "Guide for Growing and Scaling your Chapter."

Rubric - High Quality Service Learning Program

The following section compiles all of our research into a rubric of sustainable service-learning practices. The rubric can be used to rate Timmy on several components including:

- Pre-Trip Education,
- Orientation,
- Reflection,
- Local service initiatives,
- Cultural Competency,
- Security and Safety,
- Charity vs. Social Justice, and
- Reorientation.

The rubric also includes four rating levels that include descriptions of what would lead to each recommendation. Based upon our research and our knowledge of Timmy's operations, we have ranked Timmy on each of these components. Following the rubric, a detailed explanation of Timmy's ratings are discussed. We suggest Timmy staff use the rubric as a guide in their efforts to reach "exemplary" along all components.

Table 2: Rubric - High Quality Service Learning Program⁶⁹

Criteria	Begin	Developing	Accomplished	Exemplary	Timmy
Pre-Trip Education	Pre-trip meetings consist of video watching and group bonding activities	Site leaders share articles, resources at pre-trip meetings but discussion of is superficial	Site leaders plan educational sessions and discussions that are carried out in pre-trip meetings	Team shares responsibility in education, focusing on local or broad issue in weekly meeting, learns basic language skills, grasps issue context	Developing
Orientation : Host Community	Quick Google search of the community where team is serving	Team has devoted time to researching host community	Team allocates time during pre-trip meetings to share and discuss understandings of the host community	Team has a grasp of how political and economic systems affect host community	Beginning
Reflection	Site leaders trust team to process alone	Reflection is focused on processing emotions	Reflection is tied to issues and experiences; goes beyond highs and lows	Programs have built in time for individual/ group reflection using critical dialogue perspective-taking, & problem-posing	Developing
Local service Initiatives	Local service initiatives are sporadic and unrelated to social issue	Local service occurring with related organization activities still sporadic, limited to direct service	Local service is occurring regularly in conjunction with advocacy activities	Team has a strong relationship with a local community partner	Beginning
Cultural Competency	Express attitudes and beliefs as an individual from one-sided view; demonstrates little awareness of own assumptions and bias about self and others	Begins to explore own assumptions and bias; has some awareness that attitudes and beliefs are different from those of other cultures and communities	Reflects on how own attitudes and beliefs are different from those of other cultures and communities.	Demonstrates adjustment in attitudes and beliefs because of working within and learning from diversity of communities and cultures; demonstrates ability to assess impact of assumptions, judgments, and/or biases related to own, other cultures	Developing/ Accomplished
Security and Safety	Team is oblivious to any security concerns	Significant security issues but team has strong plans to mitigate risk	Minor security concerns; team strong plans to mitigate risk	Team and host partner have worked closely to understand security and safety to supplement existing policies	Exemplary
Charity vs. social justice	Direct service to people and agencies; only conscious of how things are and “should be”	Responding to immediate need but starting to consider root causes of social issues	Service makes a difference; sense of efficacy and agency; responding to long-term need	Community partner and students addressing both immediate needs and long-term solutions; work in solidarity; systemic change	Beginning/ Developing
Reorientation	Once the service is over, it’s over	Team shares what they learned with others	Team follows up with host partner to learn about ways they can continue their service locally (i.e. fundraising, advocacy)	Organization has planned post-trip activities to encourage further advocacy, education, and service. Team has developed a local partner to continue work	Beginning/ Developing

⁶⁹ Cipolle, S. B. (2010). *Service-learning and social justice: Engaging students in social change*. Lanham, MD: Rowman & Littlefield Education, Porter, M. (2012), Weber State University. weber.edu/ccel/cel-toolkit.html

Pre-trip Education (preparation): Developing – Timmy currently shares articles and resources with medical service trip leaders who organize meetings and distribute resources for trip participants. While discussion and exploration of global health occurs more broadly during the trip, discussion and exploration of the issues specific to the host communities is superficial, as many resources do not explore the issues or their causes specific to the communities in which Timmy serves. Furthermore, given the limited information of the pre-trip leader relative to the country the trip participants travel, the discussions and exploration of the social, political, and economic factors related to the specific communities that they serve is limited.

Orientation to Host Community (preparation): Beginning – There are limited pre-trip resources available to the student participants in the host communities. A presentation on the host community is integrated into the pre-trip meeting which covers history, culture, language, current health issues, and information on patients that students will encounter.

Reflection: Developing – Timmy identifies reflection as an important activity for student volunteers on the service trips. The Timmy trip booklet identifies two scheduled, thirty-minute reflections; one reflection takes place at the beginning of the week and the other at the end. In Las Canas, 7elements presents their mission, objectives, and other development initiatives to mitigate problems facing the communities where they work. 7elements also provides additional reflections opportunities for students during the evenings where they can engage in discussions about problems and potential solutions for the communities. In comparison, the reflections incorporated by Timmy focus on processing the emotions and reactions as a group, while also encouraging individual participants to journal.

Local service initiatives: Beginning – Local service initiatives highlight Timmy’s dedication to a student-led model of their chapters. Timmy chapters’ local service initiatives may or may not be directly related to the social issues of the communities that those chapters serve. Local service initiatives may be recurring or may be driven by the main interests of the chapter demographic during that academic term.

Cultural Competency: Developing/Accomplished – There is a general awareness that assumptions and biases of other cultures and places exist. The trip provides an opportunity to discover and engage in discussions about those assumptions and biases. During the trip, this perspective manifests itself in differences between socioeconomic statuses of the visiting students and community members.

Security and Safety Concerns: Exemplary – The medical service trip team and 7elements had information on the security and safety expectations for the trip prior to departure. 7elements reiterated these protocols during orientation about proper protocols and persons to contact in case of emergency, and the team was briefed on security procedures as well.

Charity vs. social justice: Beginning/Developing – Timmy is aware of issues facing the communities and works with 7elements to provide resources to mitigate negative health outcomes. Timmy participants donate their time and services to help the members of the communities they serve by providing brief checks to diagnose, treat, and/or refer. Timmy participants are aware of health disparities between people in the communities and themselves. However, Timmy is not addressing the long-term need to empower people in the communities to be the health leaders of tomorrow because their current model focuses more charity than social

justice. Timmy does provide assistance and improve health outcomes for some patients, but students have started to consider the causes, social issues, and impacts for the communities. Providing tools and resources that are locally produced to local people to mitigate health disparities would create a more sustainable framework aligned with social justice.

Reorientation: Beginning/Developing – After the trip, no reorientation materials or discussion forums are provided to trip participants. During the following week, there is heavy use of social media for pictures and memories, but little engagement after that. Individual chapters may have a briefing to their members at a meeting following the trip or there may be a fundraiser/event where participants are given the opportunity to share their experience with others. The post-trip surveys provide a framework for reorientation as well through reflection on what they experienced and their interest in further participation.

Rubric Gaps

To summarize our assessment of Timmy's service learning as noted on the rubric, most components received ratings of beginning or developing. This shows that Timmy is making strides to improve its service learning initiatives, but has not evolved to meet the standards of best practice research we laid out in the prior section. Specifically, Timmy has room to improve pre- and post-trip education, orientation into the host community, reflection, local service initiatives, cultural competency, and moving from charity to social justice. For both pre-trip education and orientation, there is a gap between providing general materials and truly immersing students in the culture of the community.

Recommendations

1.1 Develop a shared definition of service learning

Establish a definition that adds the elements and activities that Timmy will use in its service learning practice. This definition should be known and referred to by all staff members when discussing service learning initiatives.

1.2 Implement a sustainable model of service learning

Using the principles of sustainable service learning (meaningful service, reflection, preparation and partnership, from charity to social justice, and reorientation) Timmy should adopt a model that fits with the organization's goals and culture. The model can be applied broadly to all Timmy chapter activities and narrowly to the student experience on medical service trips. Timmy should be intentional in how trips are framed. Service learning experiences are an opportunity to develop critical skills and knowledge to positively affect global health. Words like vacation or trip should be avoided to communicate a commitment to service, engagement, and learning.

1.3 Increase the amount of reflection during service experiences and service activities

We recommend that Timmy require daily reflection on service experiences and after any chapter-led service activity. Reflection can be peer-led by student leaders. Prior to the reflection, student leaders facilitating reflection should understand the intended learning outcomes of the reflection. Purposeful reflection will help students make meaning of the service activity. Successful reflection includes deep conversations that are issue-focused (global health) and help students contextualize service experiences.

1.4 Invest in developing chapter leaders

We recommend that Timmy provide more strategic and structured support to chapter leaders throughout their network. Timmy can increase the effectiveness of their formal mentor relationships between staff and chapter leaders to ensure that the leaders have two-way communication of issues. This open forum will enable Timmy to hold chapter leaders to their goals. Setting up short bi-monthly calls with chapter leaders will enable Timmy to ensure that the leaders have the necessary resources to best operate their chapter and engage their members.

The second component of this recommendation will include connecting chapter leaders across the network of Timmy chapters. By having staff engage more with chapter leaders, staff can identify common issues that chapters are facing and connect leaders to each other to come up with collaborative solutions. Additionally, Timmy can create a Student Advisory Board comprised of student leaders from 10-15 chapters, and/or can allocate 2-3 seats on Timmy's governing Board of Directors that would allow for students to be more connected to the inner workings of the organization and for the board to have a better understanding of the chapter experience. Finally, Timmy can support these relationships by increasing awareness and participate on in their annual student leadership conference and help to continue connecting students through this channel.

1.5 Invest in strategic engagement of non-trip going chapter members

Service experiences are just one aspect of the Timmy chapter experience. To sustainably and responsibly engage future health leaders through Timmy chapters, Timmy Headquarters can better engage all members through their fundraising, advocacy, and local service work. We recommend Timmy strengthen local partnerships that improve health access in the communities where Timmy has chapters. Timmy staff may consider potential national partners that would have branches in most college communities. Staff may take strategic steps to build partner relationships on campuses and strategically structure the way students volunteer with health access organizations in their local communities.

1.6 Invest in long-term relationships and direct engagement with graduated student volunteers (alumni)

Timmy can directly engage alumni by having chapters find at least one committed alumni mentor at the beginning of each school year. **Alumni mentors** can provide useful fundraising and trip-planning insight for chapters. A list of alumni mentors can be provided by Timmy's Headquarters. Chapters should formulate a communication schedule with their mentor to determine when and how often they will meet and the chapter's goals for the year. Chapters can further engage alumni by sending a quarterly or monthly newsletter, inviting alumni to fundraisers or advocacy events, or requesting alumni speakers for banquets or events. Furthermore, **Alumni clubs** will provide Timmy with more involved and invested network of Timmy's long-term supporters, advocates, and potential donors. These clubs will allow alumni to continue to feel involved in Timmy and provide opportunities for alumni to meet and mingle with other participants in their area. Alumni clubs can sponsor various events, from networking events to fundraising initiatives for Timmy. The clubs can use Facebook groups to recruit new members, provide club information, and alert members to upcoming events. As alumni can initiate and lead the alumni clubs, these clubs can autonomously function without much guidance from Timmy Headquarters. Last, Timmy should annually collect detailed information on alumni (Please see the Monitoring and Evaluation portion of this report for more information).

Implementation

1.1 Implementation

- Identify how best practice research applies to Timmy's goals for service learning
- Request input from student leaders on their perception of and goals for service learning
- Engage staff on what service learning means to them and how it should be implemented
- Draft 3 sample definitions for discussion
- Vote and decide on definition
- Integrate definition into chapter materials and Student Leadership Conference

1.2 Implementation

- Develop consistent language for how service learning is branded throughout Timmy
- Audit chapter materials to ensure service learning is branded consistently
- Begin integrating the principles of sustainable service learning into chapter and trip activities and assess ways to enhance current activities that align with the principles
- Use the rubric as a guide to strengthen existing activities and elements of service learning
- Identify meaning ways to integrate community partners into all aspects of the medical service trip (pre-trip, during trip, and reorientation)

1.3 Implementation

- Include training on guiding reflection in trip leader duties
- Create and disperse resources on relevant reflection techniques
- Evaluate trip leader/chapter leader use of reflection during bimonthly communications

1.4 Implementation

- Develop a formalized leadership development plan consistent with research on high engagement chapters (projected 40 hour/month commitment of Timmy staff)
- Assess staff capacity to implement plan
- Select staff to be chapter leader mentors
- Include communication structure into role descriptions for selected staff
- Create a Student Advisory Board or allow 2-3 seats on Timmy's Board of Directors

1.5 Implementation

- Identify potential national global health partners with branches in most chapter sites
- Identify and take strategic steps to build partnerships on campus with student life departments

1.6 Implementation

- Collect contact information of graduating student volunteers and compile in listserv
- Provide list of alumni mentors and contact information to chapters
- Require chapters find at least one committed alumni mentor
- Have chapters formulate a communication schedule with their mentor to determine when and how often they will meet and chapter goals for the year
- Follow up with chapters to assess progress in finding and engaging mentor
- Communicate with alumni via newsletter and social media posts
- Encourage alumni to establish alumni clubs and provide resources as needed (e.g. logos for Facebook groups, email communications, etc.)

Service Provision: Entering and Exiting Communities

Overview

Since its founding, Timmy's process for selecting new communities and partners has been rooted in opportunistic growth. For Timmy, opportunistic growth means decisions regarding program growth and expansion are based on opportunities presented, not opportunities sought out or evaluated. While this strategy has yielded generally positive results for the organization, Timmy is now at a stage of development that, in order to efficiently and effectively expand services with a mind for sustainability, it needs more systematic processes for selecting and exiting communities to better serve Timmy's constituents.

Timmy recognized the need for a new strategy early in this Capstone process and tasked The IU School of Public and Environmental Affairs with identifying new ways to expand into communities.⁷⁰ Our research concluded that Timmy not only needed a new strategy on how to select communities, but also a process to ensure sustainable collaborations with their partners and the communities at large. After researching best practices and consulting with global health professionals, we identified Timmy needed more concrete entrance and exit strategies.⁷¹

More than ever, international development organizations are being scrutinized for their programmatic sustainability. More constituents and donors want assurance that the nonprofits they support have strategic entrance and exit operations. Through our research we identified the following elements of sustainable entrance and exit strategies:

- 1) Responsibly empowering communities, meaning Timmy engages communities that are invested in this partnership, and these communities have some autonomy and decision-making power;
- 2) Investing in partners and communities, which happens by building capacity and strengthening the partners on the ground so the community can eventually operate with less of Timmy resources as well as initially choosing partners that best fit with Timmy's services; and
- 3) Using evidence-driven decision-making to decide which communities Timmy's services are best suited for and what indicators are needed for Timmy to eventually withdraw from the community upon program success and completion.

When we look at Timmy's current operations, we see the organization considers the existing health infrastructure within communities and then decides to enter those that already have some sort of health care provision in place (weak or otherwise) through which Timmy can operate. Timmy has informally mentioned to some partners that the organization may eventually exit the community, but there is no procedure in place that benchmarks when or how the exit may occur.

This section briefly discusses the current processes Timmy uses for selection of communities and partners with which to work, identifies competitors' methods for entering communities, discusses best practices for developing and implementing an exit strategy for use in all of Timmy's partner

⁷⁰ Wright, Nancy. Meeting with Nancy Wright regarding Timmy's priorities and needs; Jan 25, 2016.

⁷¹ Lenz, Dean. Meeting with Dr. Lenz regarding sustainable global health clinics; Feb 11, 2016.

communities, examines gaps in Timmy’s processes, and provides recommendations for Timmy about their next steps.

Proposed Method for Community Entry and Exit

This section outlines best practices and similar organizations’ strategies for entering and exiting communities. We will introduce these methods and how this affects Timmy’s operations. Please see the Methodology section for specifics on how we conducted this comparative analysis.

Community Selection: Competitors’ Strategies and Literature Best Practices

When expanding into communities, the organizations that publicized their expansion strategies either had an application process, were invited by that community, completed a needs assessment of community indicators, or expanded opportunistically. To explore the benefits of each strategy, please see Appendix 4. For more in depth information about specific organizations and the link where the information was found, please see attached spreadsheet titled “Comparative Analysis of Service Providers.”

Table 3: Breakdown of Competitors’ Methods for Community/Partner Selection

Application Process	Invitation
Global Health Corps GlobeMed	Global Medic Force Doctors for Global Health Physicians for Peace
Needs Assessment	Opportunistic
Global Brigades Foundation for International Medical Relief of Children (FIMRC) Child Family Health International (CFHI)	DOCARE International Health Volunteers Overseas Manna Project International

Scholarly research discusses that one of the most important components of a healthy, sustainable international partnership is community buy-in.⁷² Unless there is active participation amongst those community members, programs tend to lose traction or have less impact because the people whom the program is serving have less investment in its success.⁷³ This strategy transcends the actual implementation of the program and starts at the beginning of the partnership. If communities are not able to provide Timmy with input nor have the autonomy to make decisions, Timmy may have less of an impact on the people it hopes to serve.

The best way for Timmy to have active participation, community buy-in, and more standardized partnerships is by using a mixed-methods approach to finding new partners. A mixed-methods approach incorporates using the strengths of previously stated strategies to implement an application process. This is more extensively discussed in the recommendations section.

⁷² Geilfus, Frans. 2008. *80 Tools for Participatory Development*. Inter-American Institute for Cooperation on Agriculture.

⁷³ Sarah White. “Depoliticizing Development: The Uses and Abuses of Participation.” *Development, NGOs and Civil Society*.

Characteristics of an Ideal Partner

Participation works both ways: Timmy needs to be able to work well with partners in order to achieve success. This strategy may mean being more selective about which partnerships Timmy establishes and which communities Timmy chooses to enter. Some organizations have a list of requirements for which potential partners are aware ahead of time, to increase understanding and ensure the best fit. From the comparative analysis, GlobeMed was the only organization with a clearly defined criteria for potential partners.⁷⁴ Below are the advertised qualities that GlobeMed seeks in partner organizations.

- NGOs in their region with a focus on community development, public health, education or health systems
- Have two major sources of outside funding
- Easily accessible over communications national organization and have easy access to internet or phone
- Have two full-time paid local staff Established
- Actively engage with their community to understand needs
- Can participate in impact measurement
- Excited to host students
- Want to engage in a network of national organization

If Timmy decided what key components were necessary in a partner, they could advertise that need during the application process so potential communities know what they must contribute in order to have a successful Timmy partnership.

Why Exit Communities

In any international development organization, especially one like Timmy that provides services to hundreds of community members, participation from all partners needs to be encouraged at every step of programming. This includes an exit plan communities are actively aware of and engaged in. Exit for the purposes of this report is defined as “the withdrawal of all externally provided program resources from an entire program area.”⁷⁵ For Timmy, a solid and comprehensive exit strategy is necessary in order to fulfill their goals of local community empowerment and facilitation of sustainable capacity-building for partner organizations and communities. Timmy has expressed concerns for sustainability, and exit is the first step in the journey toward achievement of that status. They have expressed concerns about creating relationships with partners that bring about dependency on Timmy’s resources and support, and want to develop program sustainability. The goal of this section is to leave Timmy with a proposed timeline for exit they can adapt to each current community and utilize in all future relationships, and to provide recommendations to use in deciding what considerations need to be made at each point in this timeline in order for it to reflect Timmy’s needs and concerns.

Phasing Over

One crucial first step in developing an exit strategy is deciding what type of transition you want to occur, based on your organization’s mission and priorities. The literature repeatedly cites one

⁷⁴ GlobeMed. “Prospective Partner Organizations.” <http://globemed.org/get-involved/prospective-partners/>

⁷⁵ Rogers, Beatrice Lorge and Macias, Kathy E. “Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs.” Food and Nutritional Technical Assistance: Technical Note No. 9, Nov. 2004.

source that defines methods of exit in three ways: phasing out, phasing down, and phasing over.⁷⁶ The first option, **phasing out**, involves a total withdrawal of project and resources without arranging for another organization to take over implementation. **Phasing down** refers to a gradual reduction of project activity and funding, that eventually leads to either phasing out or phasing over. **Phasing over** refers to a transfer of project activities and resources from the operating organization (Timmy) to partner organizations and communities. Phasing over is the method that fits best with Timmy based on their current structure and priorities, and on conversations between the Capstone team and Timmy staff.⁷⁷

Another decision Timmy will have to make in developing a concrete exit strategy is deciding precisely which mechanism they will use to indicate when community withdrawal will begin. There are three potential ways in which Timmy could identify this marker:⁷⁸

1. **Time Limit:** what is the time limit of a program based on funding cycles, organizational priorities, or artificial constraints set by the organization for other reasons?
2. **Achievement of Program Impacts:** what indicators of overall program impact can be used to determine exit criteria?
3. **Achievement of Benchmarks:** what benchmarks has the organization created that specifically indicate the organization has succeeded in its programming and should begin to withdraw?

While all three methods are possible for Timmy, the route most viable and helpful based on conversations about Timmy's need to develop an exit strategy is the use of benchmarks to determine achievement of program goals and the timing of an exit initiation. The Monitoring and Evaluation section of this report will assist in the development of program impacts, which can then be used to set specific benchmarks, or values, each impact indicator should reach in order to signal that it is time to begin exit.

According to a Food and Nutritional Technical Assistance (FANTA) Technical Note on phasing over, the method identified above as exiting while handing program functions over to a partner organization, success of such a move by an organization depends on a number of **important factors**, including:⁷⁹

- How strong is the community's sense of ownership/commitment to continue program activities?
- To what extent does the community value program activities? What is the level of demand for the "phased over" services?
- Do community members, groups and service providers have the knowledge and skills needed to implement the program activities?

⁷⁶ Levinger, B. and McLeod, J. 2002. "Hello, I Must Be Going: Ensuring Quality Services and Sustainable Benefits through Well-Designed Exit Strategies." Economic Development Center.

⁷⁷ Cottingham, Lauren. Meeting to discuss Timmy's program growth priorities. March 9, 2016.

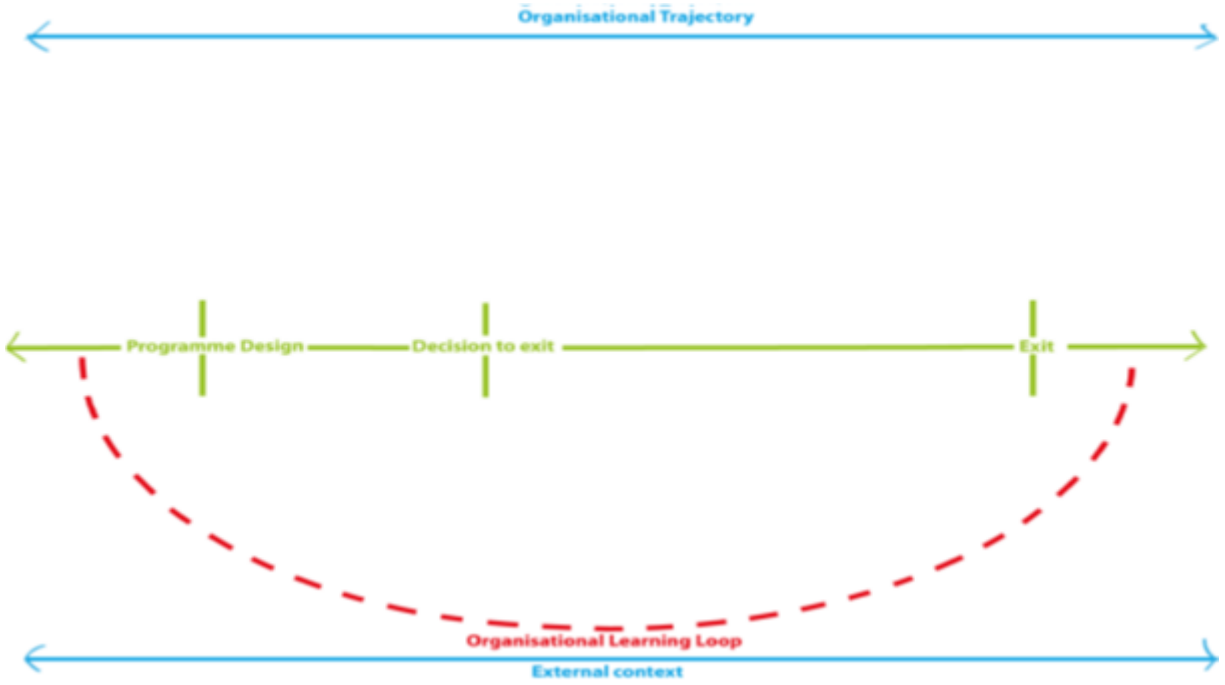
⁷⁸ Gardner, Allison et al. "What We Know About Exit Strategies: Practical Guidance For Developing Exit Strategies in the Field." C-SAFE Regional Learning Spaces Initiative. Sept. 2005.

⁷⁹ Rogers, Beatrice Lorge and Macias, Kathy E. "Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs." Food and Nutritional Technical Assistance: Technical Note No. 9, Nov. 2004.

- Do the local organizations implementing the phased over activities have sufficient institutional and human resource capacity?
- Are the organizations responsible for implementing phased over programs resilient to shocks and changes in the political and social environment?
- Is there a viable plan to generate the consumable supplies (such as the food or agricultural inputs) that are required to implement activities?

These questions will help Timmy set priorities for an exit strategy and determine what each step in the exit timeline will look like for the organization based on each individual community's answers.

Figure 3. Timeline skeleton for use in developing an exit timeframe



Developing a Timeline

In 2015 a paper was published based on a series of meetings with representatives from British Red Cross, EveryChild, Oxfam GB, Sightsavers, and WWF-UK entitled “Developing a timeline for exit strategies.”⁸⁰ This paper provides a generalized timeline for developing an exit strategy for relief programs, and discusses four main themes that must be considered in an organization’s development of its own timeline for exit. The timeline can be found in Figure 3. The four themes and how they directly relate to Timmy are as follows:

1. **Principles and Values:** Timmy’s organizational values will inform decisions about what must take place in order for exit to occur, and will guide decisions made about exit benchmarks and important markers on the exit timeline. Guiding Questions for this theme can be found in Figure 4.
2. **Capacity-Building and Relationship Management with Partners:** it is crucial for Timmy’s relationship with partner communities and organizations to not become one of dependency; it has been expressed by Timmy that programming is meant to strengthen capacity of service provision of partner organizations, and this is necessary especially in considering when to begin exit.
3. **Staff Care and Personnel:** discussion about the needs of staff at partner organization, and the needs of the partner organization as a whole, are important to consider in planning exit strategies; in addition, it is crucial for Timmy personnel in charge of managing the exit process and ensuring proper benchmarks are met and integrated into every part of the exit process, and received full support from Timmy staff – Guiding Questions for this theme can be found in Figure 5.
4. **Leadership:** buy-in and involvement from Timmy’s headquarter staff will be crucial to ensuring a smooth transition during exit; embedding the idea for exit in every step of the process is also crucial in sustainably transitioning out of a community, and will also require the efforts of Timmy leadership and HQ staff.

Figure 4. Guiding Questions for discussion on “Principles and Values” theme

Box 2: Guiding questions

- Are there formalised principles that underpin exit strategies? If not, are there explicit values or standards that underpin exit strategies?
- When were these principles/values developed?
- How were the principles developed? Who within the organisation/network was involved? What about partners and staff who might be affected?
- What happened to the principles after the exit process?

Box 7: Guiding questions

- How can momentum and staff motivation be maintained throughout the exit process?
- What steps can be taken to make the process less painful for staff and partners?
- What can be done to retain staff during major organisational transformation? What are the incentives to stay?
- What responsibility does the exiting agency or NGO have vis-à-vis staff of partners? What types of ongoing or interim support may be useful for partners relative to personnel and staff care?

Figure 5. Guiding Questions for discussion on “Staff Care and Personnel” theme

The resource that helped us define these four themes as they pertain to Timmy also provided “Tips for Practitioners” to help guide discussion on each of these theme. These tips are attached in Appendix 5.

⁸⁰ Lewis, Sarah. “Praxis Paper 31: Developing a timeline for exit strategies.” INTRAC, Jan. 2016

Gaps in Strategies

Timmy has no defined method for selecting new partners and communities, nor a defined method for conducting community needs assessments in order to determine which communities would be the best fit for Timmy's services. Additionally, Timmy does not evaluate its impact in partner communities, nor plan for eventual exit from current communities. To prevent dependency and the overextension of Timmy's resources, it is critical for Timmy to draft an entrance and exit strategy to better serve current and future communities.

Recommendations

2.1 Implement a mixed-methods approach to evaluate new partners.

A mixed-methods approach capitalizes on the benefits of using an invitation, an online application, and a needs assessment to enter the community. We suggest starting with an online application and incorporating the invitation and needs assessment into the process. The application ensures community buy-in and that local leaders want to be active in Timmy's program implementation. The application should include information about the community and the signatures of at least five local leaders representing differing local stakeholders (e.g., a business leader, leader of a family, head of the church) who are inviting Timmy into their community. After submission, Timmy will screen the application to identify if the community meets the threshold for hosting Timmy services. If the application passes screening of identified community indicators, Timmy will accept the application and start the needs assessment to determine how to best serve the community.

2.2 Develop list of community indicators needed when entering a community.

A list of community indicators will help Timmy identify which communities it has the capacity to enter. Some potential community indicators may include access to clean water, certain metrics about the individuals' health (e.g., the number of days on average individuals miss work due to health), or reliability of local government. Once Timmy identifies the community indicators it has the resources to best address, it can begin accepting more communities with similar needs.

2.3 Create a list of ideal qualities of a partner.

When initiating a new partnership, Timmy should emphasize that they will only continue to serve communities that uphold previously established standards. Throughout the application process, Timmy will be able to narrow the list of potential partners to include only organizations that are able to maintain minimum criteria for partnership.

2.4 Set priorities for exit consistent with program goals that clearly identify what is most important in Timmy's consideration of an exit timeline.

Some questions that may be useful for Timmy to answer in setting their priorities include: (1) what kind of post-exit relationship they want to have with partner organizations; (2) which resources, skills, and knowledge must be transferred to Community Health Workers prior to beginning exit; (3) if funding must continue for the program in order for it to continue once Timmy exits, should Timmy be a part of securing that funding; and (4) what should the status of the health services offered by partner organizations look like before Timmy decides to begin exit.

2.5 Determine what “capacity” must be developed in partner organizations.

To decide what “capacity-building” resembles for Timmy’s partner organizations, Timmy can identify the tools, knowledge, skills, and infrastructure that must be transferred to partners through Timmy’s services in order for a program to be considered successful at health service capacity-building. This will also be a part of deciding what will serve as the “marker” for indicating when the withdrawal process should begin. It would also be important for Timmy to evaluate the existing capacity of partners regarding Timmy’s priorities and develop a detailed plan through which such capacity can be built in a timely manner.

2.6 Identify which impact indicators will be used for benchmarks, and set benchmarks that will indicate to Timmy that once met, the exit process should be initiated.

These impact indicators may be developed with the help of this report’s Monitoring and Evaluation section, and can also be informed by any indicators that are developed in deciding which metrics should be used in the community selection process. Deciding on which impact measurements to use will also be informed by recommendation 2.5 (what threshold of capacity and which elements should be developed by Timmy programs to consider it a success).

2.7 Introduce the need for exit to partners as soon as a relationship is established, and as soon as possible for current partners.

The literature referenced in this section has made it clear that one of the first and most important elements of a successful exit strategy, and indeed a sustainable program, is the introduction of the need for exit early and throughout the organization’s relationship with in-country partners.

2.8 Involve partner organizations and communities in priority-setting.

Ensuring partner organizations and communities are aware of and take an active part in planning the course of Timmy’s programming will assist Timmy in developing an exit strategy so that: (1) community investment in programs is integrated into all programming activity; (2) partners are aware that dependency is not a sustainable method for reaching the goal of expanding access to quality healthcare; and (3) the appropriate tools and skills are transferred to them based on their actual input on what the communities served need most.

2.9 Decide on what a continuation of Timmy’s relationship with their partners looks like post-exit.

In order to re-engage with former partner communities later on for impact evaluation and potential further support as needed, it will be useful for Timmy to decide ahead of time, and again with the consent and active participation of partners, what kind of support, feedback, and/or interaction will take place.

Implementation

To more strategically enter communities, Timmy must first conduct a meeting with the staff, board, and other relevant stakeholders to prioritize which community indicators need to be present before Timmy enters a community. At this meeting, Timmy should also identify the qualities potential partners must possess to be considered for a Timmy partnership. After a consensus, Timmy can create an online application that asks for information about the community, information about the partner, and signatures of prominent leaders in the community that are inviting Timmy’s services. The online application can also advertise the

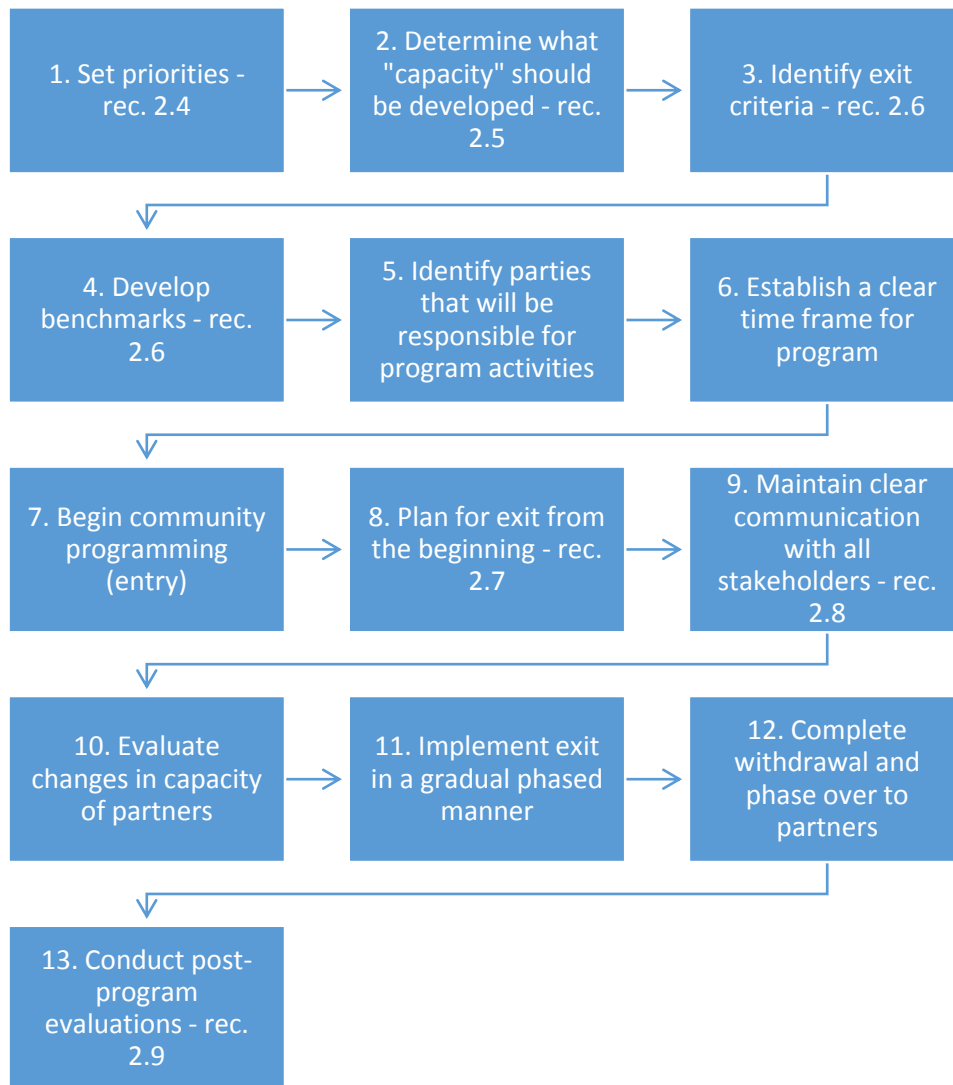
qualities Timmy seeks in a partner organization. Next steps regarding entrance strategies that are beyond the scope of this analysis include researching how to conduct needs assessments then incorporating needs assessments into the early stages of the partnership.

Recommendations 2.4 to 2.9 can be treated as a checklist for Timmy as they go through the process of developing a comprehensive exit strategy that makes sense for their organization, matches the needs of each partner community and organization, and ensures true sustainability. More specifically, the exit timeline below (Figure 6) provides Timmy with an idea about which processes should happen in which order for an exit strategy to be successfully implemented into its programming, referencing pertinent recommendations from above. Appendix 5's "Tips for Practitioners" in developing exit strategies will be a useful supplement to this proposed timeline, and may help guide the process for Timmy. The step "Establish a clear time frame" will be specific to each community's current status, capacity, needs, and other extenuating factors (like level of government involvement, political issues, drastic change in medical needs, natural disasters, etc.). It may be useful at this step to avoid setting specific dates for certain actions to take place and rather establish a sequence that will ensure events like partner capacity and impact evaluations and status update communication to partners regularly occur.⁸¹ However, there are several caveats that should be mentioned in regards to this timeline:

- This timeline is by no means exhaustive – there are many elements of exit that are not included in here, for the sake of clarity and because certain decisions or issues cannot be anticipated
- The inclusion of community entry at step 7 is flexible, and dependent upon the specific needs and status of each community and partner
- This timeline is not a full program timeline including considerations for entrance and partner selection; each step is included because it is related in some way to exiting

⁸¹ Rogers, Beatrice Lorge and Macias, Kathy E. "Program Graduation and Exit Strategies: A Focus on Title II Food Aid Development Programs." Food and Nutritional Technical Assistance: Technical Note No. 9, Nov. 2004.

Figure 6. Timeline for Exiting Communities



Service Provision: Community Health Workers

Overview

Community Health Workers (CHW), alternately referred to as Community Health Promoters (CHP), serve an essential role in international healthcare provision. The rise of the CHW movement in recent times has its roots in the Alma Ata Declaration of 1978, which highlighted the importance of universal access to primary health care. Despite their importance and increasing popularity for increasing access to healthcare, the promise of CHWs is not always realized. Establishing a comprehensive, well-supported program is essential for CHW success, since “CHWs are not a panacea for weak health systems and will require focused tasks, adequate remuneration, training, supervision and the active involvement of the communities in which they work”.⁸²

Timmy Global Health currently uses CHWs intermittently in its programs across Ecuador, Guatemala, and the Dominican Republic. Table 4 provides description of current or past CHW presence at each site.

Table 4: CHW Program Assessment⁸³

	Location	Program Description
Ecuador	Quito	CHWs are employed and paid by the partner organization, Fundación Tierra Nueva. CHW roles include support for medical service trips by selling tickets and following up with referrals. Other roles also include vaccination initiatives and community health discussions.
	Tena	Six CHWs are employed and paid by the partner organization, Patronato. Nineteen CHWs are funded by Timmy and live in communities where Timmy works. CHWs’ roles include medical trip preparation by selling tickets, spreading information about what specialists are coming, and following up with referrals. Other roles include home visits, workshops, and distributing medications.
	Santo Domingo	No program currently. Previous program existed through partner organization, Centro de Salud Hombro a Hombro, but was discontinued due to partner’s lack of funds to pay CHWs.
Dominican Republic	Monte Cristi & Mao	Program run and funded through partner organization, Banelino. CHW roles include selling tickets in preparation of medical trips and following up with referrals. Other roles include community health discussions.
	Las Canas	Program funded and managed by partner organization, 7elementos. CHWs are paid based on the trainings completed. Program is in early stages of development, but CHWs’ current roles include preparation for medical service trips by selling tickets, spreading information about what specialists are coming, and following up with referrals.
Guatemala	Quetzaltenango	No program currently. Partner organization, Pop Wuj, lacks capacity to support CHW program. Partner previously attempted CHW programs with a monthly payment structure but program failed. Other payment structures require more resources.

⁸² Lankester, T. (2009). *Setting Up Community Health Programmes: A Practical Manual for Use in Developing Countries*. Berkeley: Hesperian Foundation.

⁸³ Cottingham, L. & Horn, K (2016). Personal Interview

As Timmy considers scaling up its CHW programs, it faces questions of efficacy, long-term sustainability, and scope. Interviews with Timmy’s Director, program staff, and a review of two comprehensive analyses of Timmy’s CHW programs in the Amazon River basin of Ecuador underscored the need for clarification around these questions.

To assist Timmy in determining how best to expand its CHW programming, we conducted a review of existing programs and recommendations from international organizations and collated industry best practices. To create the list that follows, reports from the World Health Organization (WHO), the United States Agency for International Development (USAID), Partners in Health (PIH), the Global Health Workforce Alliance, and others were reviewed. Best practices here come from multiple sources and are general, if not unanimous, consensus regarding CHWs.

Developing a comprehensive CHW program involves thinking systematically about the structure within which CHWs operate, applying standards of practice while remaining adaptable to local contexts. Best practices in the following areas are detailed below: community assessment, program development, recruitment, training, compensation and incentives, and supervision.

Figure 7: CHW Planning Flow Chart



*Continue to Re-Assess Community and Program

Table 5: CHW Best Practices List

Pre-program Assessment	<ul style="list-style-type: none"> Determine Community need or want of CHW Program Assess health and social needs Plan to Re-Assess Identify existing comparable programs Discuss CHW program with local government officials
Program Development	<ul style="list-style-type: none"> Identify long-term objectives based on needs assessment Define CHW scope Identify and leverage existing resources Develop the comprehensive CHW structure Develop comprehensive budget, long-term finance plan
Recruitment	<ul style="list-style-type: none"> Develop a Participatory Selection Process Establish Standards of Recruitment Clearly Communicate CHW Opportunities Establish standardized process for interviewing and electing CHWs Officially Document, Hire, and Appoint CHW Budget for Recruitment
Training	<ul style="list-style-type: none"> Utilize a rigorous, adaptable curriculum Involve the local medical community Determine ideal training structure for each location
Compensation	<ul style="list-style-type: none"> Offer a combination of financial and non-financial incentives Decide compensation packages based on local context Plan for long-term program strategy and evaluation Compensation packages should be equitable and fair
Financial Compensation	<ul style="list-style-type: none"> Offer Regular Monthly Salaries Compensation is relative to surrounding labor market Ensure salaries payment and policies are clear and understood
Non-Financial Compensation	<ul style="list-style-type: none"> Provide necessary supplies Provide access to opportunities for advancement Establish forms of Community Recognition
Supervision	<ul style="list-style-type: none"> Plan and budget for adequate supervision Create explicit, standardized roles for supervisors

Best Practices by Program Area

I. Pre-Program Assessment

Identifying and recruiting the right type of community health worker is a critical step in developing a successful community health program. There are several contextual factors to consider, however, prior to standardizing the selection criteria and recruiting process. Program developers should undergo a thorough assessment of each location before implementing a pilot program.⁸⁴

1.1: Determine community need or want for CHW program

An assessment of the community's need or want for a CHW program is the first step of the assessment. For a CHW program to succeed the community must show motivation and interest in being part of planning, developing, and implementing a CHW program as well as receiving the services delivered.

1.2: Assess health and social needs

Understanding the specific health and social needs of the local community is fundamental to the process of planning, developing, and implementing a CHW program. A thorough assessment of health and social needs has implications on required training, types of CHW partners, and CHW tasks and roles. An assessment of the CHW's local working context will also shed light on key stakeholders that may have pre-determined selection protocols at the national or local level.

1.3: Plan to reassess

Carrying out an initial needs assessment in the community is a gold standard in program evaluation; however, program implementers should plan regular reassessments of the community and the program over time and adapt services to service type and service delivery accordingly.

1.4: Identify other comparable programs

An assessment also seeks to identify other comparable programs that currently exist at the local, regional, and national level. By identifying similar programs, CHW developers will be able to take advantage of pre-existing relationships and resources to minimize duplication of efforts. The assessment will also allow program implementers to identify CHW promoter and CHW program expectations based on other local program standards. Analyzing comparable programs in the area can also guide implementers on determining a CHW's role and place within the broader CHW network of relationships.

1.5: Discuss CHW Program with local government officials

It is important that CHW program implementers consider building a strong partnership with local government. Local government may offer an abundance of information regarding potential resources and local partners as well as legitimacy in the eyes of the local community. Including local government at every stage of the process is also fundamental to creating an integrated program that is sustainable in the long-term by the local community.

⁸⁴ Crigler, L., Hodgins, S, & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washington: USAID, Bureau for Global Health.

II. Program Development

2.1: Identify long-term objectives based on Community Needs Assessment

The first step in developing a CHW program is translating the community needs assessment into long-term objectives. Based on community needs, what will be the scope of the program in that community? This is the time to determine outputs and outcomes. Think about ways to measure outcomes and determine success. Doing so will allow Timmy to have evaluation mechanisms put in place when the program starts. It will also provide them the opportunity to think about the length of engagement of Timmy CHWs in each community.

2.2: Define CHW scope

There are two elements to defining the scope of the CHW: determining the CHW to patient ratio and defining the area of focus. Areas of focus can include disease-specific interventions, assistance with medication and referrals, medical follow-up, primary care, and public health education. According to a review by Partners in Health, because of funding limitations, “most small organizations begin by using CHWs for a disease-specific intervention.”⁸⁵

Determining how many patients CHWs can see in a given week requires consideration of the following: population density of the community, accessibility between households, available transportation, safety of patients’ neighborhoods after dark and CHWs other necessary income generating activities. CHW capacity will also depend on whether the organization employs the CHWs full-time.

2.3: Identify and leverage existing resources

For both minimizing costs and ensuring the financial sustainability of the program, it would be useful for Timmy to consider how to leverage existing resources, which may include: government, partner organizations, independent training centers, NGOs, businesses, and universities.

Across the literature, the importance of utilizing government resources wherever possible was highlighted. Recommendations from the literature urged CHW programs to use national training curriculums wherever possible, to partner with local clinics and medical professionals, and to “lower costs by obtaining free supplies to which the community may be entitled”.⁸⁶ Specifically, through obtaining any drugs that are available from the government for mass distribution, such as immunizations, supplements, or tuberculosis medication.

2.4: Develop the comprehensive CHW structure

Community Health Workers are just one element of the comprehensive CHW structure necessary for success. This structure includes CHW coordinators, CHW supervisors, local medical clinics, partner organizations, and the community itself.

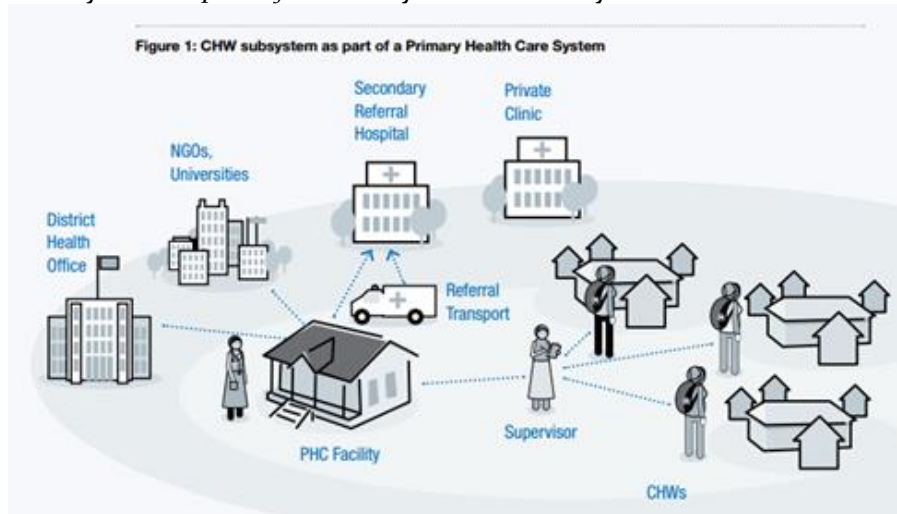
Identified factors that negatively impact CHW performance include: low interest by the government, inconsistent compensation, inadequate staff and supplies, and lack of community involvement.

⁸⁵ Partners in Health. (2012). *PIH Program Management Guide Unit 7: Improving Outcomes with Community Health Workers*. Boston: Partners in Health.

⁸⁶ Lankester, T. (2009). *Setting Up Community Health Programmes: A Practical Manual for Use in Developing Countries*. Berkeley: Hesperian Foundation.

Standards for training, compensation, supervision and impact evaluation are therefore further essential elements of the comprehensive CHW structure. According to Lassi et al., the plan of action should be finalized by a group of relevant stakeholders, include identification of resources needed, indicators, targets, and monitoring tools. In addition, where possible, it should be formally authorized by the Ministry of Health of the country in which Timmy is operating.

Figure 8: CHW Subsystem as part of a Primary Health Care System



2.5: Develop comprehensive budget and long-term finance plan

To plan adequately for success, a comprehensive budget and long-term financial plan should be developed that include the elements described above, with their costs to Timmy and partner organizations.

III. Recruitment

The following section presents a summary of best practices for recruiting CHWs, including best practices for developing a selection process, standards of selection, communicating CHW opportunities, interviewing and electing CHWs from candidates, hiring, and a discussion of how resources may influence CHW recruitment.⁸⁷ It is important to remember that challenges may arise during each step of the recruitment process. Thus, what we present here are CHW recruitment ideals that programs should strive for but are not limited, to since recruitment methods will vary depending on circumstances.

3.1: Develop a participatory selection process

The process of selecting individuals for CHW positions has an influence on the acceptability and sustainability of the CHW program within the local context. While recognized as an ideal yet rarely implemented, our review of literature on large- and small-scale CHW programs indicates that the local community should be involved in the process of selecting CHW candidates.⁸⁸

⁸⁷ Crigler, L., Hodgins, S., & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washington: USAID, Bureau for Global Health.

⁸⁸ Bhutta, Z. A., Lassi, Z. S., Pariyo, G., & Huicho, L. (2010). Global experience of community health workers for delivery of health related millennium development goals: a systematic review, country case studies, and recommendations for integration into national health systems. *Global Health Workforce Alliance*, 1, 249-261

Several CHW programs have successfully established a participatory selection process by setting up a community health committee for selecting candidates.⁸⁹

The community health committee is often composed of a variety of local stakeholders to ensure a “citizen voice” and allow for greater accountability for service delivery and improved program quality.⁹⁰ Establishing a committee that is representative of the community would allow Timmy to gather continuous input on the type of services needed and the quality of services provided. Further, having continuous input from the community would allow program implementers to adapt faster to changes or to incorporate innovative ideas for service delivery from the community. A participatory selection process also aims to ensure that the CHWs selected understands local issues and can deliver community health messages in a linguistically and culturally appropriate manner consistent with local norms. Case studies suggest that the participatory selection process can vary widely, but should generally strive to implement a standardized selection process including developing clearly defined selection criteria, methods of advertising CHW posts, interviewing processes of CHW candidates, official documentation processes, and approval and appointing processes.

3.2: Establish standards of recruitment

Establishing clear and transparent criteria for selection is crucial for establishing and maintaining program legitimacy and recruiting the right CHW(s) to serve the community. According to CHW case studies, program selection committees typically consider several demographic factors when recruiting CHWs.⁹¹

The most commonly cited recruitment standards include:

- Residency – CHWs should be members of the communities where they work
- Gender – CHWs whose primary roles are related to improving child mortality and maternal health are preferably female, married, and have children who are at least five years of age. One reason is that workers who fit this profile are less likely to migrate and have personal experience in dealing with issues related to pregnancy, motherhood, and caring of children when they are sick
- Literacy and Education - Standards for literacy and education requirements are dependent on the educational capacity of the local community. The CHW case studies often identified literacy or a primary school education level up to the 8th grade as standards for education attainment
- Age – CHW case studies suggest recruiting CHWs who are between the ages of 25 to 35, with the lowest age limit at 18 and the highest age limit at 50
- Marital Status – Case studies show a preference for recruiting CHWs who are married or have been married and have children of least 5 years of age
- Language skills - Ability to speak the language(s) of the households and communities the individual CHW serves

⁸⁹ Crigler, L., Hodgins, S, & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washington: USAID, Bureau for Global Health.

⁹⁰ Ibid.

⁹¹ Prahjhot, S. & Sullivan, S. *One Million Community Health Workers*. Retrieved from One Million Health Workers Campaign website:

http://www.millenniumvillages.org/uploads/ReportPaper/1mCHW_TechnicalTaskForceReport.pdf; Crigler et al., 2014.; Bhutta et al., 2010.

3.3: Clearly communicate CHW opportunities

All advertising of CHW opportunities must include a clear explanation of the proposed tasks and methods of remuneration. These tasks must be accepted by the CHW and the community to ensure the CHW performs these tasks well. The following are suggested methods for communicating CHW opportunities:⁹²

- Announcing positions at community meetings
- Conducting face-to-face or internal recruitment
- Collect idea for well-established and well-connected community-based organizations to help identify applicants – word of mouth approach
- Receiving referrals from current CHWs
- Posting fliers at shared community spaces, local recreational centers, municipalities, and health facilities
- Placing newspaper advertisements
- Announcing on the radio

3.4: Establish standardized process for interviewing and electing CHWs

Developing a participatory selection committee and identifying the stakeholders of the program will ultimately affect who interviews and elects the CHW. As mentioned earlier, the community is ideally involved in the selection process and/or approval of the CHW candidate. Best practices for interviewing CHWs focus on drawing out CHW candidates motivations to work in community health and the candidates' potential to succeed in the position. Case studies have recognized the CHW supervisor or clinical teams as the primary interviewer to select candidates based on merit with the community having to give final approval. USAID recommends that the interviewer should gauge the candidates based on the following characteristics: 1) interest for voluntary work and serving their own community; 2) genuine investment in the health of their community; 3) care and respect for all individuals; 4) problem-solving and leadership skills; and 5) and direct interests in working as a CHW. In addition, CHW case studies frequently cite having CHW candidates take a basic literacy test.⁹³

3.5: Official document, hire, and appoint CHW

Once stakeholders agree on their preferred candidates, CHWs should be hired and integrated into the community health program. The CHW should be enrolled in the appropriate orientation for training.⁹⁴ Case studies also cite publicly recognizing CHW's title and position with an official ceremony.

3.6: Budget for recruitment

According to several key stakeholders interviewed for the USAID manual, the number one cause of failure of CHW programs is that decision-makers do not factor in the high costs associated with the support functions required for CHW programs to function effectively. There is a

⁹² Crigler, L., Hodgins, S, & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washington: USAID, Bureau for Global Health.

⁹³ Bhutta et al., 2010; Crigler et al., 2014; Perry, H., Zulliger, R., Scott, K., Javadi, D., & Gergen, J. (2013). *Case Studies of Large- Scale Community Health Worker Programs: Examples from Bangladesh, Brazil, Ethiopia, India, Iran, Nepal, and Pakistan. Maternal and Child Health Integrated Program.*

⁹⁴ Crigler, L., Hodgins, S, & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washington: USAID, Bureau for Global Health.

mistaken idea that once CHWs are trained, it is a free program.⁹⁵ How community-based health programs are financed will affect how recruitment takes place and who participates in the process. Stakeholders involved with CHW recruitment should discuss the availability of monetary and in-kind resources. Resource investments should be generally standardized—one exception to this may be in a preliminary or pilot phase of program implementation, when modifications may be made prior to scale-up. According to USAID, ideally all stakeholders involved in CHW recruitment should make some resource contribution to the process, whether monetary or in-kind (e.g. village health committee contributes the use of their meeting space; a district health office could provide in-kind transport to CHW candidates using their own vehicle).⁹⁶

IV. Training

According to USAID and WHO, one of the most important roles of a CHW is to act as a bridge between health facilities and the community.⁹⁷ To do this well, CHWs need a well-rounded set of technical and interpersonal skills. Determining the appropriate training method will depend on whether the local conditions call for a CHW program that requires one “generalist” CHW or many specialized CHWs. The following are suggested factors to consider when developing a training program.

4.1: Curriculum development

A rigorous training curriculum should be standardized and adaptable to local contexts as well as aligned to national protocols. The exact curriculum is best worked out by the primary trainer and trainees together at the start of the training course.⁹⁸ Prior to implementing the curriculum, program implementers should field-test curriculums before adopting widely. The curriculum should also build in refresher courses (e.g. 15 days every year) to reinforce training knowledge and new skills.⁹⁹

4.2: Local Involvement of medical community

It is important to consider who is in charge of organizing and coordinating trainings as well as training master trainers. USAID suggests that a district health official should supervise the trainer and oversee the training of the CHW trainer.¹⁰⁰ The selected CHW trainer(s) is typically a local nurse, physician, or medical professional. Generally speaking, CHWs should be trained as near as possible to their own communities as it is more convenient for travel, trainers can learn about community context, and the community recognizes training being given to CHW.¹⁰¹

⁹⁵ Ibid.

⁹⁶ Ibid.

⁹⁷ Bhutta et al., 2010; Crigler et al., 2014; Perry, H., Zulliger, R., Scott, K., Javadi, D., & Gergen, J. (2013). Case Studies of Large- Scale Community Health Worker Programs: Examples from Bangladesh, Brazil, Ethiopia, India, Iran, Nepal, and Pakistan. *Maternal and Child Health Integrated Program*.

⁹⁸ Partners in Health. (2012). *PIH Program Management Guide Unit 7: Improving Outcomes with Community Health Workers*. Boston: Partners in Health.

⁹⁹ Bhutta, Z. A., Lassi, Z. S., Pariyo, G., & Huicho, L. (2010). Global experience of community health workers for delivery of health related millennium development goals: a systematic review, country case studies, and recommendations for integration into national health systems. *Global Health Workforce Alliance*, 1, 249-261

¹⁰⁰ Crigler, L., Hodgins, S., & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washington: USAID, Bureau for Global Health.

¹⁰¹ Perry, H., Zulliger, R., Scott, K., Javadi, D., & Gergen, J. (2013). Case Studies of Large- Scale Community Health Worker Programs: Examples from Bangladesh, Brazil, Ethiopia, India, Iran, Nepal, and Pakistan. *Maternal and Child Health Integrated Program*.

4.3: Program structure

A combination of classroom training and on the job training (e.g. 3 months classroom training with 1 year on-the-job training) is important for all CHWs. Case studies have described a wide range of training duration and types, however, two types are highlighted: 1) Block training which occurs each day for a period of 3 to 6 weeks, then once a week until the full course is implemented and, 2) Intermittent training which occurs one or two days per week until the course is complete.¹⁰² If selected CHWs are illiterate or have less education than levels suggested in the best practices, training should have ample interactive sessions including discussions, role-plays, and field activities. A consensus among the case studies is that training should offer opportunities for career mobility and professional development specific to the aspirations of the CHWs.¹⁰³

V. Compensation

Compensation is a key component to the success and longevity of CHW programs. Types of compensation are financial (includes salaries) and non-financial. They vary based on the program goals, local context, and available resources.

5.1: Offer a combination of financial and non-financial compensation

Create compensation packages that are both financial and non-financial. CHW programs operate on a spectrum between the two but most programs utilize both to encourage retention and compliance. Examples of financial compensation are salaries, stipends, and bonuses. Examples of non-financial compensation are t-shirts, food, bikes, and professional development opportunities.¹⁰⁴

5.2: Compensation packages should be decided based on the local context

The most effective compensation packages will vary across communities. Surrounding CHW programs should also be considered because CHW precedent will shape expectations of what type of compensation is expected. Other important components of the local context to account for are 1) culture; 2) religion; 3) economic/labor market; 4) political; and 5) social. This context should be understood to ensure forms of compensation do not conflict with “values of virtue and self-sacrifice”¹⁰⁵

5.3: Plan for long-term program strategy and evaluation

A key source for USAID’s CHW program evaluation states:

“The number two issue [leading to the failure of CHW programs] is related to the lack of long-term perspectives with regard to CHW careers [career trajectory] and long-term issues the CHW programs face.”¹⁰⁶

¹⁰² Lankester, T. (2009). *Setting Up Community Health Programmes: A Practical Manual for Use in Developing Countries*. Berkeley: Hesperian Foundation.

¹⁰³ Bhutta et al., 2010; Crigler et al., 2014; Perry, H., Zulliger, R., Scott, K., Javadi, D., & Gergen, J. (2013). Case Studies of Large- Scale Community Health Worker Programs: Examples from Bangladesh, Brazil, Ethiopia, India, Iran, Nepal, and Pakiistan. *Maternal and Child Health Integrated Program*.

¹⁰⁴ Crigler, L., Hodgins, S, & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washington: USAID, Bureau for Global Health.

¹⁰⁵ Crigler, L., Hodgins, S, & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washingtn: USAID, Bureau for Global Health.

¹⁰⁶ Ibid.

CHWs should be consulted on compensation packages, especially at early stages of program development. The input from the CHWs should determine what will be most significant to their retention. The consultation with CHWs does not ensure compensation will meet all their demands, but that they are appropriate in the context of the region.¹⁰⁷

The CHW program design must include regular assessments of the offered packages. Regions and people are continually developing so compensation deemed effective at the beginning of the program may no longer have the same weight at the end. In addition, workloads of CHWs change as new health challenges arise and personal lives evolve. These factors should be taken into account when reassessing the effectiveness of the program's current compensation.

5.4: Compensation packages should be equitable and fair

Compensation packages should be clearly defined, based on workload and expectations, distributed at regularly set intervals, and offered fairly amongst CHWs. Compensation needs to be clearly outlined when the program is developed, as previously mentioned, and be in accordance with the work expectations of the CHW. Those working fewer hours should receive less benefits than those working full time. Expectations of what CHWs will receive and when they will receive it will represent the professionalism and respect the program has for the CHW. Less reliable payments are likely to lead to less reliable CHWs.

Variations amongst incentive packages may occur because of differences in CHW experience or qualifications; use of performance based payments; or program financing structure. Regardless of the reason for variation in payment, the CHWs should be aware of the differences and provided justification for them.

VI. Financial Compensation

Salaries and other forms of financial compensation are a necessary part of CHW remuneration.

6.1: Offer regular monthly salaries

Research on CHW programs has found regular salaries as the most effective incentive payment method. Selling products or fees for receiving services will lead CHWs to focus more on curative options over preventative measures. Other forms financial compensation, such as payment based on tasks completed, can be offered with the regular salary to encourage specific practices.^{108,109}

6.2: Compensation is relative to surrounding labor market

Both USAID and Partners of America emphasize the importance of recognizing the wages of surrounding jobs to ensure competitive salaries are offered. Competitive salaries will incentive workers to remain in their role longer; however, Partners of America brings up an issue of NGOs offering salaries and benefits that pull workers away from other health roles where they are needed. This is especially problematic when NGOs and Ministry of Health staff work together. Thus, NGOs should be aware of pulling staff from health systems where they are needed based on the salaries offered.

¹⁰⁷ Ibid.

¹⁰⁸ Partners in Health. (2012). PIH Program Management Guide Unit 7: Improving Outcomes with Community Health Workers. Boston: Partners in Health.

¹⁰⁹ Crigler, L., Hodgins, S, & Perry, H. (2014). Developing and Strengthening Community Health Worker Programs at Scale. Washington: USAID, Bureau for Global Health.

6.3: Ensure salaries payment and policies are clear and understood

Salaries and payment policies need to be clearly outlined so CHWs understand how and when they will be compensated and what criteria is used to determine amount. Program leaders or supervisors should ensure CHWs clearly understand these policies.

VII. Non-Financial Compensation

Although financial compensation plays a key role in retaining CHWs, it is more effective when combined with non-financial compensation. Non-financial compensation options are vast so program developers should be creative in finding ways to incentivize their local CHWs. Common and successful forms of non-financial compensation will be described next and followed by a list of additional creative examples used by other NGOs in their specific community contexts.

7.1: Provide necessary supplies

CHWs have a basic set of supplies necessary for them to complete their tasks. What supplies are necessary will vary across regions because health challenges change based on location. Providing supplies also helps retain CHWs because it reduces barriers for them to complete their tasks. Example supplies include: rapid diagnostic kit, backpack and shirt, cell phone.¹¹⁰

7.2: Access to opportunities for advancement

USAID report states that access to trainings and opportunities for personal growth increase job satisfaction. CHWs are able to continually learn and grow in their field, which affects their personal satisfaction as well as ensures they maintain their reputation in the community.¹¹¹

7.3: Establishing forms of community recognition

Discussed in other sections are the roles the community should play in selection and supervision of CHWs. Another form of non-financial compensation includes regular opportunities for CHW recognition by the community. Community recognition will provide encouragement and accountability.¹¹²

Example of Non-Financial Compensation:

- Identification card
- Certificates or letter of recognition from Ministry of Health (if good reputation)
- Additional supplies such as hats, ponchos, boots
- Per diem lunch and transportation
- Regular refresher trainings

VIII. Supervision

Formally integrating supervisors into CHW programs is an essential, but often overlooked aspect of successful programs. According to a literature review by the World Health Organization, “It is

¹¹⁰ Prahjhot, S. & Sullivan, S. *One Million Community Health Workers*. Retrieved from One Million Health Workers Campaign website:

http://www.millenniumvillages.org/uploads/ReportPaper/1mCHW_TechnicalTaskForceReport.pdf

¹¹¹ Naimoli, J. F., Frymus, D. E., Quian, E. E., & Roseman, E. L. (2012). *Community and Formal Health System Support for Enhanced Community Health Worker Performance*

¹¹² Crigler, L., Hodgins, S, & Perry, H. (2014). *Developing and Strengthening Community Health Worker Programs at Scale*. Washington: USAID, Bureau for Global Health.

widely recognized in the literature that the success of CHW programmes hinges on regular and reliable support and supervision. It is equally acknowledged, however, that supervision is often among the weakest links in CHW programmes.”¹¹³ For this reason, planning and budgeting for supervisors should happen before CHW recruitment begins. The remainder of this section will discuss best practices for supervision in CHW programs.

8.1: Plan and budget for adequate supervision

Supervisors should be in regular contact with each of the CHWs they supervise. According to one source, “Supervisors should visit at least once a week the first year of the programme, unless communities are remote, scattered or there is political instability.”¹¹⁴ This need for frequent contact generates a significant portion of costs that, according to the World Health Organization, can “represent 40% of the cost of one CHW”.

To ensure a proper budget for adequate supervision, it is important to consider the supervisor’s roles (detailed below), as well as the appropriate ratio of CHW’s to supervisor. The ratio identified in the literature ranges from 20 – 50 CHWs per supervisor.

8.2: Create explicit, standardized roles for supervisors

The literature identifies many roles that can be served by CHW supervisors. First, “supervisors should be able to perform all tasks a CHW is expected to perform.”¹¹⁵ Beyond this base level of knowledge, effective supervisors need a combination of hard and soft skills. Hard skills include familiarity with reporting and recording, implementing formal classroom training and informal mentoring, and general managerial skills. Soft skills include encouragement and support and should not be neglected in favor of hard skills.

Supervisor tasks can include: review of patient records, routine and surprise visits to patient’s homes, regular meetings with supervisees to discuss concerns and share information, identification of topics for training, facilitation of trainings, dispersal of payments, and disciplinary action where needed.

Finally, it is important that supervisors maintain an interactive and trusting relationship with their CHWs. According to Bhutta et al, “Top-down mechanistic supervision emphasizes the social distance between supervisor and supervisee and leads to communication breakdowns and ultimately to program damage.”¹¹⁶

¹¹³ Lehmann, U., & Sanders, D. (2007). *Community Health Workers: What do we know about them?* Geneva: World Health Organization, Department of Human Resources for Health.

¹¹⁴ Lankester, T. (2009). *Setting Up Community Health Programmes: A Practical Manual for Use in Developing Countries*. Berkeley: Hesperian Foundation.

¹¹⁵ Partners in Health. (2012). *PIH Program Management Guide Unit 7: Improving Outcomes with Community Health Workers*. Boston: Partners in Health.

¹¹⁶ Bhutta, Z. A., Lassi, Z. S., Pariyo, G., & Huicho, L. (2010). *Global experience of community health workers for delivery of health related millennium development goals: a systematic review, country case studies, and recommendations for integration into national health systems*. *Global Health Workforce Alliance*, 1, 249-261

Gaps in CHW Programming Areas

Timmy currently implements two recognized community health programs in Ecuador (Tena and Quito) and one informal CHW program in the Dominican Republic. This section broadly discusses the overlapping gaps in program development, planning, and implementation of CHW programs in both countries. The best practices outlined in this document guide our identification of gaps and coincide with our recommendations. Generally, one way Timmy can improve its ability to identify future gaps is having greater comprehensive documentation of current CHW planning, development, and implementation processes in both English and Spanish.

Gap 1: Limited documentation on internal planning

One of Timmy's explicitly stated goals is to move away from developing CHW programming on an opportunistic basis. One way to begin this shift is to undergo a comprehensive internal planning process prior to implementing any component of a CHW program. An internal planning process can ensure that each component of a CHW program (i.e. training, supervision, local government involvement, etc.) reinforces each other and that the CHW model incorporates all stakeholders that can leverage resources. Currently, there exists limited documentation that such a planning process takes place prior to the implementation of the CHW programs in each location.

Gap 2: Limited community engagement

A review of Timmy's current Community Health Program documents reveals that local communities including local government could participate more at each stage of the planning process. A few areas of community involvement where the current CHW program is relatively strong is in the selection process, standards of recruitment, and training of a CHW. After comparing best practices with Timmy's current CHW program components, it appears that CHW roles and tasks within host communities could substantially expand to encourage greater service provision by local CHW's and in turn greater integration of services into the community. Broadly, greater community involvement can improve CHW accountability, program legitimacy, and matching between CHW services and community needs.

Gap 3: Lack of clearly stated scope of work, objectives, and evaluation metrics

Current documentation of Timmy's CHW programs lacks a clearly defined scope of work for CHWs and presents program objectives that lack specificity and clarity. While the CHW program broadly aims to provide greater access to healthcare via training local community members, the scope of work, objectives, and working relationship expectations among the different program components is unclear. Developing evaluation metrics appropriate to the various context of its CHW programs can greatly improve Timmy's future ability to create reachable and locally driven goals and objectives for each stakeholder in the in CHW program. Further, ongoing evaluations of CHW programs can reveal what community services are needed, areas for further CHW training, and opportunities for building partnerships with other entities that can fill the service gaps.

Gap 4: Underutilization of potential resources

The need for greater leveraging of resources directly relates to the need for greater community involvement at each stage of the CHW planning and implementation process as well as the need to undergo a comprehensive internal planning process. A careful planning process that engages all stakeholders can facilitate greater resource leveraging among stakeholders and can encourage

greater cooperation between public and private entities for the betterment of the local community.

Gap 5: Weak relationships with local government

Integrating local government into a CHW program is one of the highlighted best practices in the literature. While involving local government as key partners may have negative consequences under certain conditions (e.g. corruption or poor relationships), working with the local government can provide important benefits ranging from greater program legitimacy to physical program resources. Currently, the CHW program in Quito Ecuador is the only program that has a local government entity as a partner. However, the extent to which this partner is involved at each stage of the CHW planning process is unclear, due to limited documentation.

Gap 6: Lack of standardization

Only certain aspects of current CHW programming are standardized, such as CHW recruitment standards and partner qualifications. All CHW programming components need further standardization and documentation of these processes. A standardized CHW development and implementation guide should be adaptable to different locations to ensure CHW program implementers can apply best practices most effectively and use resources with maximum efficiency. Documents should be accessible in both English and Spanish to promote greater transparency and accessibility.

Recommendations

Timmy requested support for developing CHW programs across their sites in Latin America. Our literature review identified best practices of CHW programs (see *Best Practices* section above). After analysis of our best practices and Timmy's current CHW programming, we found six key areas where Timmy can improve (see *Gaps* section above). The following recommendations address fundamental elements of CHW programs needed by Timmy to operate sustainable and effective programming. Additional support for these recommendations can be found in the *Best Practices* section of the report.

3.1: Do comprehensive internal planning in all aspects of programming before hiring any CHW.

3.2: Involve the community at every stage of planning and implementation.

3.3: Clearly define scope, objectives, and evaluation metrics of the CHW roles.

3.4: Leverage existing resources offered through local and international NGOs.

3.5: Integrate local, regional, and national government involvement and resources into program.

3.6: Standardize the program, but remain flexible in adapting to local context.

Implementation

Timmy's next steps for CHW programming are to incorporate identified best practices. To assist in this, we provide starting points for the locations where Timmy operates based on local context and current programming.

Guatemala:

Guatemala currently has no CHW program, but Timmy staff expressed interest in developing one. However, Timmy's primary concern in this location is the limited capacity of its partner organization – Pop Wuj. We recommend that Timmy standardize its programming in other regions before starting a program in Guatemala. After Timmy standardizes its CHW programs in other regions, we recommend conducting a pilot program to test the CHW program in the Guatemala context. The pilot program should follow the stages of CHW program development outlined in *Figure 7*. A small-scale project will allow Timmy to make adjustments more easily than attempting to make changes to a full-scale program. The pilot program also offers the partner organization(s) an opportunity to reconsider its relationship with Timmy or for Timmy to find other partners for the CHW program.

Ecuador:

Of Timmy's three sites in Ecuador, two currently have CHW programs. In Tena, we found Timmy has already incorporated some of our identified best practices. Moving forward, we recommend focusing on clearly defining the scope, objectives, evaluation metrics for both Timmy staff and CHWs, and standardizing the program. In the report on CHW's in the Napo Province, Cripps outlined specific roles CHWs are fulfilling as well as other roles needed in the community. Since the assessment of community needs and workers is complete, Timmy can now focus on program development and standardization.¹¹⁷

For communities near Quito, it would be useful for Timmy to pursue similar assessments to those conducted in the Tena region to ensure that program development aligns with community needs. The Santo Domingo region currently lacks a CHW program. The partner organization, *Centro de Salud Hombro a Hombro*, previously attempted to implement a CHW program, but failed due to lack of funds. We suggest implementing a pilot CHW program in Santo Domingo, similar to our suggested strategy for Guatemala.

Dominican Republic:

Timmy's partner organizations, Banelino and 7elements, operate the CHW programs in the Dominican Republic with Timmy's support. Timmy should continue to support the partners' programs, especially in areas outlined in our recommendations. Since Timmy has strong partners that have the capacity to manage CHWs, we recommend providing necessary backing for the partners but allocating more resources to regions where Timmy currently lacks CHW programs.

¹¹⁷ Cripps, S. (2013). *An Assessment of Community Health Promoters in Ecuador's Napo*. University of Notre Dame.

Service Provision: Service Implementation Alternatives

Overview

A common problem facing international health service organizations is that the communities where they work become dependent on the organization's services, making it difficult for the organization to leave the community.¹¹⁸ Without a strategic plan for implementing Timmy's services with the goal of enabling its communities to provide for their own health provision so Timmy can eventually exit, Timmy is in danger of being one of these organizations and creating dependency between Timmy and the communities. Although Timmy recognizes the need to treat both symptoms and causes, without a strategic plan intentionally focused on community sustainability Timmy is at risk of being an organization that focuses primarily on symptoms without addressing the long-term health needs of a community.

Timmy's services to this point have largely focused on health service provision through medical service trips, patient record management, and patient referral systems.¹¹⁹ Timmy partners with a local organization in each community and provides financial and in-kind support to help with follow-up care.¹²⁰ Timmy is also engaged in health education through community health workers and Timmy's on the ground staff.¹²¹ Timmy has piloted some programs that specifically address long-term health improvement, such as the safe water initiative and the nutrition program.¹²²

The following sections discuss best practices for service provision that will help communities become self-sustaining, two alternative methods for Timmy's service provision that will help Timmy strategically position itself in its communities and gaps in Timmy's current services. This discussion is followed by recommendations based on these gaps, and a brief implementation plan for Timmy's next steps.

Proposed Model

There are a number of ways Timmy can adjust its method of service provision that will help Timmy achieve the goal of helping communities become self-sustainable while still staying within Timmy's current mission, goals, and values. The following sections discuss best practices for service provision that will help communities become self-sustaining and two alternative methods for Timmy's service provision that will help Timmy strategically position itself in its communities.

¹¹⁸ Green, T., Green, H., Scandlyn, J., Kestler, A. (2009, Feb. 26). Perceptions of short-term medical volunteer work: a qualitative study in Guatemala. *Globalization and Health*, 5(4); Martiniuk, A. LC., Manouchehrian, M., Negin, J. A., Zwi, A. B. (2012, May 29). Brain gains: a literature review of medical missions to low and middle-income countries. *BMC Health Services Research*, 12(134); Berry, N. S. (2014, May 6). Did we do good? NGOs, conflicts of interest and the evaluation of short-term medical missions in Sololá, Guatemala. *Social Science & Medicine*, 120, 344-351

¹¹⁹ Timmy Global Health (n.d.). Our Global Work

¹²⁰ Ibid.

¹²¹ Ibid.

¹²² Timmy Global Health (n.d.). Board Orientation: Programs 101

Best Practices

The literature on service provision by international organizations focused on health issues in low-income communities emphasizes the following best practices to help communities become capable of sustaining their own health services: creating strong partnerships with local service providers and governments, incorporating a focus on water and sanitation, assisting in education and capacity building for local health providers, performing a needs assessment so services can be tailored to the actual needs of the community, and using a holistic approach that addresses root causes as well as symptoms. The following sections discuss these best practices. Incorporating these practices into Timmy's services in new and current communities will give Timmy the opportunity to help these communities build local capacity and become self-sustainable.

1: *Partnerships with Local Service Providers*

Partnerships with local health service providers is an important aspect of service provision by international health services organizations. These partnerships include both partnerships with organizations directly focusing on health and organizations whose services are indirectly related to community health. Partnerships with local organizations that “understand and work within the infrastructure of a community” help determine what services should be provided and assure a continual medical presence in the community when the organization is not there.¹²³

These partnerships also help the organization be “adaptable to local situations”, which is important to sustainable programming.¹²⁴ Strong local partnerships also helps give credibility to both the international organization and the local partner, helps the organization ensure it is truly meeting the needs of the community, allows for follow-up care, and makes short-term service trips more effective.¹²⁵ In addition, working with local partners can help an organization set clear goals and metrics for their partnerships and for the communities, which helps the organization create an exit strategy for each community.

Providing health care alone is insufficient for helping a community become self-sustaining, as it addresses symptoms without fixing root causes.¹²⁶ Addressing underlying health needs requires increasing community capacity in a variety of areas directly and indirectly related to health,¹²⁷ as many of a community's health needs cannot be addressed without considering other development issues.¹²⁸ In many communities health is less of a priority to its citizens than things like food, shelter, education, and income, so it may not be possible to achieve broad community

¹²³ Suchdev, P., Ahrens, K., Click, E., Macklin, L., Evangelista, D., Graham, E. (2007, Jul-Aug). A Model for sustainable short-term international medical trips. *Ambulatory Pediatrics*, 7(4), 317-320.

¹²⁴ Morgan, L. M. (2001, Sep.). Community participation in health: perpetual allure, persistent challenge. *Health Policy and Planning*, 16(3), 221-230

¹²⁵ Green, T., Green, H., Scandlyn, J., Kestler, A. (2009, Feb. 26). Perceptions of short-term medical volunteer work: a qualitative study in Guatemala. *Globalization and Health*, 5(4)

¹²⁶ Martiniuk, A. LC., Manouchehran, M., Negin, J. A., Zwi, A. B. (2012, May 29). Brain gains: a literature review of medical missions to low and middle-income countries. *BMC Health Services Research*, 12(134)

¹²⁷ Gruen, R. L., Elliott, J. H., Nolan, M. L., Lawton, P. D., Parkhill, A., McLaren, C. J., Lavis, J. N. (2008, Nov. 1). Sustainability science: an integrated approach for health-programme planning. *The Lancet*, 372(9649), 1579-1589; Ott, B. B., Olson, R. M. (2011, May 20). Ethical issues of medical missions: the clinicians' view. *HEC Forum*, 23(2), 105-113

¹²⁸ Morgan, L. M. (2001, Sep.). Community participation in health: perpetual allure, persistent challenge. *Health Policy and Planning*, 16(3), 221-230

participation and support through health services alone.¹²⁹ Creating partnerships with local providers of services indirectly related to health, such as nutrition, education, shelter, and income, helps ensure an organization is addressing the community's needs and helping the community build capacity to become self-sustaining, instead of just treating symptoms.

2: Partnerships with Local Government

A strong partnership with local government can be very important for international health organizations as it may enhance the effectiveness of the organization in the community.¹³⁰ Partnerships help to ensure that the organization is working collaboratively with the government, which helps the organization set goals and priorities that fit within the government's overall goals and needs for health provision in the community.¹³¹ These partnerships can also provide access to local resources and can give the organization increased legitimacy in the community.¹³²

When partnering with governments there are some pitfalls to consider. In some cases, the government may be a barrier instead of a benefit and limit an organization's options for service provision to those approved by the government. It may also lessen an organization's legitimacy in the community if the government is seen as dishonest, corrupt, or exploitative. In addition, these partnerships may cause governments to decrease their own spending on healthcare, create dependence on outside aid, and create competition with the existing healthcare system.¹³³

3: Focus on Water and Sanitation

According to the World Health Organization, lack of reliable access to clean water, poor sanitation facilities, and improper hygiene account for about 6.3% (3.6 million) of all deaths and 9.1% of the disease burden worldwide each year.¹³⁴ Illness and death from water, sanitation, and hygiene issues is particularly common in poverty-stricken countries.¹³⁵ Some authors thus contend that a best practice for all healthcare organizations in low income communities is to address water and sanitation issues, as health professionals and organizations are in the best position to champion and coordinate improvement in these areas.¹³⁶ A focus on improving access to water

¹²⁹ Rifkin, S. B. (2009, Sep.). Lessons from community participation in health programmes: A review of the post Alma-Ata experience. *International Health*, 1(1), 31-36

¹³⁰ Ott, B. B., Olson, R. M. (2011, May 20). Ethical issues of medical missions: the clinicians' view. *HEC Forum*, 23(2), 105-113

¹³¹ Arifeen, S. E., Christou, A., Reichenbach, L., Osman, F. A., Azad, K., Islam, K. S., . . . Peters, D. H. (2013, Dec. 14). Community-based approaches and partnerships: innovations in health-service delivery in Bangladesh. *The Lancet*, 382(9909), 2012-2026; Martiniuk, A. LC., Manouchehrian, M., Negin, J. A., Zwi, A. B. (2012, May 29). Brain gains: a literature review of medical missions to low and middle-income countries. *BMC Health Services Research*, 12(134)

¹³² Arifeen, S. E., Christou, A., Reichenbach, L., Osman, F. A., Azad, K., Islam, K. S., . . . Peters, D. H. (2013, Dec. 14). Community-based approaches and partnerships: innovations in health-service delivery in Bangladesh. *The Lancet*, 382(9909), 2012-2026

¹³³ Green, T., Green, H., Scandlyn, J., Kestler, A. (2009, Feb. 26). Perceptions of short-term medical volunteer work: a qualitative study in Guatemala. *Globalization and Health*, 5(4)

¹³⁴ Prüss-Üstün, A., Bos R., Gore F., Bartram J. (2008). Safer water, better health: costs, benefits and sustainability of interventions to protect and promote health. *World Health Organization*, Geneva

¹³⁵ Bartram, J., Lewis, K., Lenton, R., Wright, A. (2005, Feb. 26). Focusing on improved water and sanitation for health. *The Lancet*, 365(9461), 810-812

¹³⁶ Bartram, J., Cairncross, S. (2010, Nov. 9). Hygiene, sanitation, and water: forgotten foundations of health. *PLoS Medicine*, 7(11), 1-9; Bartram, J., Lewis, K., Lenton, R., Wright, A. (2005, Feb. 26). Focusing on improved water and sanitation for health. *The Lancet*, 365(9461), 810-812; Martiniuk, A. LC., Manouchehrian, M.,

and sanitation provides an opportunity for an organization to show a commitment to meeting the long-term health needs of a community, rather than just addressing symptoms, as improved access to water and sanitation is a necessary factor for a community to be able to sustain its own healthcare provision.¹³⁷

4: Focus on Education for Local Health Providers

A key component of enabling a community to sustain its own health provision is building the capacity of local health providers through education.¹³⁸ Capacity building includes training for local students, doctors, and other healthcare providers and can be in the form of education provided directly by the organization, or funding to enable these individuals to seek out training on their own.¹³⁹ Education helps increase the capacity and knowledge of the local health providers, which helps them maintain the health of the community when the organization exits and decreases dependency on the organization's services.¹⁴⁰ A focus on education for local health providers also shows a commitment to building local capacity and helps set goals and indicators for local capacity attainment that will help the organization know when to exit.¹⁴¹

Service Implementation Strategies

One implication from the literature on best practices discussed above is the need to take a holistic approach that addresses root causes of a community's health needs, not just symptoms.¹⁴² There are two main ways Timmy could strategically position itself within a community that fit the need for this holistic approach. First, Timmy could be the health arm of an overall, holistic social development strategy coordinated by another organization. Second, Timmy could be the coordinating organization for a community health improvement/capacity building strategy.

In the first option, Timmy would position its services within an overall social development strategy coordinated by a local organization. In this alternative, Timmy's focus would be on how

Negin, J. A., Zwi, A. B. (2012, May 29). Brain gains: a literature review of medical missions to low and middle-income countries. *BMC Health Services Research*, 12(134)

¹³⁷ Bartram, J., Lewis, K., Lenton, R., Wright, A. (2005, Feb. 26). Focusing on improved water and sanitation for health. *The Lancet*, 365(9461), 810-812

¹³⁸ Green, T., Green, H., Scandlyn, J., Kestler, A. (2009, Feb. 26). Perceptions of short-term medical volunteer work: a qualitative study in Guatemala. *Globalization and Health*, 5(4); Suchdev, P., Ahrens, K., Click, E., Macklin, L., Evangelista, D., Graham, E. (2007, Jul-Aug). A Model for sustainable short-term international medical trips. *Ambulatory Pediatrics*, 7(4), 317-320; Ott, B. B., Olson, R. M. (2011, May 20). Ethical issues of medical missions: the clinicians' view. *HEC Forum*, 23(2), 105-113

¹³⁹ Green, T., Green, H., Scandlyn, J., Kestler, A. (2009, Feb. 26). Perceptions of short-term medical volunteer work: a qualitative study in Guatemala. *Globalization and Health*, 5(4)

¹⁴⁰ Suchdev, P., Ahrens, K., Click, E., Macklin, L., Evangelista, D., Graham, E. (2007, Jul-Aug). A Model for sustainable short-term international medical trips. *Ambulatory Pediatrics*, 7(4), 317-320; Ott, B. B., Olson, R. M. (2011, May 20). Ethical issues of medical missions: the clinicians' view. *HEC Forum*, 23(2), 105-113; Berry, N. S. (2014, May 6). Did we do good? NGOs, conflicts of interest and the evaluation of short-term medical missions in Sololá, Guatemala. *Social Science & Medicine*, 120, 344-351

¹⁴¹ Ott, B. B., Olson, R. M. (2011, May 20). Ethical issues of medical missions: the clinicians' view. *HEC Forum*, 23(2), 105-113

¹⁴² Bartram, J., Lewis, K., Lenton, R., Wright, A. (2005, Feb. 26). Focusing on improved water and sanitation for health. *The Lancet*, 365(9461), 810-812; Rifkin, S. B. (2009, Sep.). Lessons from community participation in health programmes: A review of the post Alma-Ata experience. *International Health*, 1(1), 31-36;

Martiniuk, A. LC., Manouchehrian, M., Negin, J. A., Zwi, A. B. (2012, May 29). Brain gains: a literature review of medical missions to low and middle-income countries. *BMC Health Services Research*, 12(134)

to best its services into the overall strategic vision of the coordinating organization. This alternative has several advantages. First, it requires fewer resources from Timmy, as the coordinating organization will be primarily responsible for developing partnerships with other service providers and with the local government. This will allow Timmy to devote its resources primarily to health provision, capacity building, and education for local providers. Second, this organization may have already performed a needs assessment and developed health goals for the community. Timmy would thus be able to develop goals and metrics based on those of the coordinating organization, as well as an exit plan based on these goals and metrics. Third, other partners within the coordinated framework will be working on issues that will complement Timmy's work and make it more effective. For example, there may be organizations working on nutrition, education, or income stability, all of which impact the health of a community.

Although there are benefits to this alternative, some disadvantages must be considered. Timmy may not have flexibility in the services that it provides as they may be limited to those approved by the coordinating organization. Additionally, there is potential for conflict if Timmy's idea of what is best for the health of a community does not match the coordinating organization's idea of what Timmy should be doing.

In the second option, Timmy would position itself as the coordinating organization for an overall strategy of health improvement and capacity building for the community. In this alternative, Timmy's focus would be on developing partnerships to holistically address a community's health needs and build community capacity so the community can eventually meet its own health needs. Although this strategy is not as broadly focused as the first alternative, it would require Timmy to expand its partnerships to include more organizations indirectly related to health service provision, such as those focused on nutrition.

There are several advantages to this alternative. First, it will allow Timmy greater flexibility in choosing communities and determining how to implement Timmy's services in the community. Second, additional partnerships with organizations focused on issues indirectly related to health would give Timmy the opportunity to engage volunteers who are interested in things like nutrition, housing, or water, as well as donors who are interested in funding work in these areas. Finally, it will build Timmy's credibility in the community as it shows a commitment to meeting the long-term needs of the community.

There are also some disadvantages to this alternative. First, it may require additional funding, resources, capacity, and staff to coordinate and manage new partnerships. However, current staff and resources may be sufficient if time and resources are reallocated towards managing partnerships and building local capacity and away from direct service provision. Second, if Timmy gets too involved in direct service provision in areas such as nutrition and water, this alternative may cause Timmy to lose sight of its original mission and stretch its resources too thin.

The choice of which method is best in a given community would be based on the needs assessment and evaluation framework discussed previously in this report, as well as the potential partnerships that are available in the community. Within either alternative Timmy's services

should still be tailored to the specific community, as a one-size fits all approach is typically not appropriate and an organization's services must adapt to the specific needs of a community.¹⁴³

Gaps

Based on this review, there are opportunities for Timmy to improve its services. Capacity building through strategic local partnerships, education, and addressing root causes of health needs is important to helping a community become self-sustaining, and Timmy's role in these areas has been fairly limited. Thus, Timmy is in a situation where it cannot leave its communities and be assured that the community will be able to sustain its health provision - partially because Timmy has not had a strategic plan for how its services will be positioned in a community to best meet the needs of that community. Addressing these gaps through the following recommendations will help Timmy get to the point where it is helping its communities become self-sustaining in terms of health provision, which will have a long-term, lasting impact on these communities.

Recommendations

4.1: Strategically position Timmy in the community as either the health arm of an overall, holistic social development strategy coordinated by another organization or as the coordinating organization for a holistic community health improvement/capacity building strategy.

Based on Timmy's strategic vision moving forward, Timmy could either choose just one of the alternatives and select new communities that will fit that strategy, or use both alternatives in different communities based on what best meets the needs of the community. Regardless of which option best fits Timmy's strategic vision, it is important that Timmy perform a thorough needs assessment to ensure that its services are addressing the needs of the community.

4.2: Increase the focus on capacity building in Timmy's services.

Direct health provision is important to address the health needs of a community, but if Timmy wants to address root causes of health issues and help communities become capable of sustaining their own health provision, then it is essential that Timmy also emphasize building local capacity. This means that Timmy's goals and metrics for its communities would also have a strong focus on local service capacity rather than just specific health outcomes.

4.3: Develop additional partnerships with local service providers.

Developing local partnerships is consistent with Timmy's goals and values of cultivating strong partnerships, delivering sustainable programs, and being thoughtful and culturally sensitive.¹⁴⁴ Although Timmy has already developed partnerships with local providers, there is opportunity for improvement in this area, particularly in those communities where Timmy may choose to

¹⁴³ Morgan, L. M. (2001, Sep.). Community participation in health: perpetual allure, persistent challenge. *Health Policy and Planning*, 16(3), 221-230; Ott, B. B., Olson, R. M. (2011, May 20). Ethical issues of medical missions: the clinicians' view. *HEC Forum*, 23(2), 105-113; Suchdev, P., Ahrens, K., Click, E., Macklin, L., Evangelista, D., Graham, E. (2007, Jul-Aug). A Model for sustainable short-term international medical trips. *Ambulatory Pediatrics*, 7(4), 317-320; Green, T., Green, H., Scandlyn, J., Kestler, A. (2009, Feb. 26). Perceptions of short-term medical volunteer work: a qualitative study in Guatemala. *Globalization and Health*, 5(4)

¹⁴⁴ Timmy Global Health (n.d.). A Path Forward: Strategic Plan Overview

position itself as the health coordinator in the future. These partnerships should include providers of services both directly and indirectly related to healthcare.

4.4: Consider Timmy's role in partnering with local governments

Developing partnerships with local governments is consistent with Timmy's goals of cultivating strong partnerships and Timmy's values of being accountable and culturally sensitive.¹⁴⁵ To date Timmy has not consistently and actively partnered with local governments, so there is opportunity for improvement in this area. In some situations Timmy may need to take an active role in working with the local government and in other situations Timmy's role may be fairly limited, based on how Timmy is positioned in the community.

4.5: Increase the focus on water and sanitation issues in Timmy's services

Focusing on improving access to water and sanitation is consistent with Timmy's goal of providing sustainable programs and the strategic pillar of expanding access to healthcare and health services.¹⁴⁶ Timmy already has some experience in this area and has piloted a safe water program in some of its communities. Thus, Timmy is in a good position to expand this program to other communities, especially through partnerships with local organizations.

4.6: Incorporate education for local service providers into Timmy's services.

Providing opportunities for education for local health providers is consistent with Timmy's goal of delivering sustainable programs and the strategic pillar of expanding access to health care and health services.¹⁴⁷ Although Timmy has worked with health education for the community through the community health workers, Timmy has not taken an active role in increasing the capacity of local health providers through education and training. Timmy could increase its role in this area through direct training or by providing funds to allow local service providers to attend educational conferences, learn new skills, or get additional professional training. Timmy could also consider partnerships with local universities or medical schools.

Implementation

The following sections briefly outline an implementation plan for each alternative strategy for positioning Timmy's services in a community discussed above.

Plan for Alternative 1: Health Arm

Timmy will need to consider the following steps and factors when strategically positioning itself as the health arm of an overall social development strategy in a community:

- Look for a strong local partner that is acting or can act as the coordinating organization for the overall social development strategy.
- Work with that partner to set expectations for Timmy's roles and goals to ensure that Timmy will fit well into the overall plan. It is important that Timmy still perform its own needs assessment and compare it to the coordinating partner's needs assessment.
- Based on the needs assessment and goals for Timmy's services, work with the coordinating partner to set clear targets for when Timmy will exit the community.

¹⁴⁵ Ibid.

¹⁴⁶ Timmy Global Health (n.d.). A Path Forward: Strategic Plan Overview

¹⁴⁷ Ibid.

- When Timmy has reached the targets for when Timmy will exit the community and the community has reached the point where it can sustain its own health service provision, and begin the process of exiting the community (using the exit strategies discussed previously in this document). This will involve working closely with the coordinating organization to ensure that the goals have been met and to transition Timmy's services to local providers.
- Timmy's role in engaging additional partners will be limited, as the main partner will be primarily responsible for relationships with other organizations. Timmy's main focus will be on health provision and health capacity building. Timmy may sometimes work with the partners focused on areas such as housing and nutrition, but this interaction will probably not be substantial and will be coordinated through the main coordinating organization.
- Timmy's role in engaging the local government will be limited as the coordinating partner organization will be primarily responsible for this relationship.
- Timmy will still be involved in water and sanitation, but will coordinate with other partner organizations who may also be working on these issues.
- Timmy will have a strong role in education and capacity building for local health service providers. This may in fact be one of Timmy's main roles in the community.
- Additional staff/volunteer capacity and funding needs would be primarily related to increasing Timmy's focus on improving access to clean water and sanitation and on providing educational opportunities for local service providers.

Plan for Alternative 2: Health Coordinator

Timmy will need to consider the following steps and factors when strategically positioning itself as the coordinator of an overall health improvement and capacity building strategy:

- Perform a thorough needs assessment to determine the primary health needs of a community. This will include both physical health needs and capacity needs for the community to be able to eventually provide its own health services.
- Consider working with the local government to determine the governments' perception of the health needs and goals for the community. When possible, try to ensure that Timmy's services fit within the government's goals and are complementing what the government may already be doing.
- Look for local organizations with which Timmy can partner to provide services both directly and indirectly related to health. This may include hospitals, local physicians or other health providers, and local pharmacists, as well as organizations focusing on things like housing, nutrition, water, sanitation, education, and income. As much as possible these should be partnerships with local organizations, although in some cases the partner may be an international organization that has a strong presence in the community.
- Work with those partner to set expectations for Timmy's roles and goals and the partners' roles and goals. These goals will be built around the ultimate goal of building local capacity so that Timmy can eventually exit the community.
- Based on the initial needs assessment and goals for Timmy's services, set clear targets for when Timmy will exit the community and communicate these to the partners.
- When Timmy has reached the targets for when Timmy will exit the community and the community has reached the point where it can sustain its own health service provision, begin the process of exiting the community. This will involve working closely with Timmy's partner organizations to transition Timmy's services to these local partners.

- Timmy will have a significant role in engaging partner organizations. Timmy's main focus will be less on direct health provision and more on health capacity building and coordinating partnerships. Timmy's main goal will be to work with these organizations to build their capacity so that eventually they will be better equipped to sustain the communities in the long-term without Timmy present.
- Timmy will be heavily involved in water and sanitation, which will be coordinated through a local partnership. Although with things like housing Timmy may primarily coordinate partnerships without getting directly involved in the actual work, with water and sanitation may want to be directly involved in providing access to water and sanitation and education on proper hygiene, as these are areas that are very closely related to the health of a community and Timmy has some experience in these areas.
- Timmy will have a major role in education and capacity building for local partners.
- Additional staff/volunteer capacity and funding needs would be primarily related to managing additional partnerships and Timmy's increased focus on improving access to clean water and sanitation and on providing education for local service providers.

Monitoring and Evaluation

Overview

Timmy recognizes the need for data-driven decision-making and the importance of measuring the impact of (1) student learning on the students that go on medical mission trips and their home communities, and (2) medical brigades on patients' health status and the overall community. Regarding student learning, Timmy uses self-reporting mechanisms to collect data about chapter members who participate in medical service trips. It administers two questionnaires to collect information on the impact of medical trips on students that participate in them. Timmy identifies the following impacts to be measured: (1) the extent to which student involvement with Timmy leads to changes in their knowledge of global health disparities, and (2) the degree of change in students' interest in playing an active role in decreasing global health disparities. Both questionnaires are simultaneously administered by Timmy staff following the medical service trip, where students are asked to put themselves in the mindset they were in before they went on the trip and then answer with their current after-trip mindset.

We have identified a gap in the flow of information between the headquarters and Timmy's student chapters. Currently, Timmy's oversight of the regular chapter work consists of a bi-annual conference call to address developments, concerns, and other opportunities for both Timmy and its chapters. While these communications are important, they are not conducive for continued chapter development throughout the year. Timmy expends more resources on medical service trip volunteer evaluation than on their overall chapter membership. The majority of the student members do not participate in a service trip and to best evaluate the impacts of service trip participation, Timmy must capture baseline impacts of being a member of a Timmy chapter.

Timmy does not have an established alumni network, and the Service Learning section outlines a potential model, which presents another need for data collection and monitoring. Timmy's 5 Year Strategic Plan lists "breadth of donor base" as a SWOT Analysis weakness. Engaging with alumni will help strengthen this weakness by increasing the pool of potential donors who can provide both financial and in-kind support. Also, according to Timmy's 2014 Student Engagement Survey Early Results, 82% of graduating students agree that they want to stay involved with Timmy Global Health as an organization after graduation due to their medical service trip experience.¹⁴⁸ However, Timmy's current indirect approach does not provide many opportunities for graduated student volunteers to remain involved in the organization.

Regarding the assessment of the impact of Timmy's medical trips on patients, Timmy's Monitoring and Evaluation report in 2013 developed measures of performance in terms of the effectiveness of referrals to get diagnosis and treatment, as well as the quality of medicine provision. The necessary information to build these indicators is collected in datasheets at the service trip level. Thus, the computation of the indicators requires three stages: collection of individual information, consolidation of trip information, computation of general indicators per location. This data manipulation increases the risk of unintentionally missing or distorting information. Moreover, Timmy conducts post-trip assessment meetings with its partners in order to identify areas of efficiency improvement.

¹⁴⁸ Timmy Global Health. (2014). Student Engagement Survey Early Results from May 14, 2014.

Timmy utilizes TimmyCare, a database used by students and medical professionals to log and store patient information to improve continuity of care and track health trends in the communities that they serve. In TimmyCare, students and medical professionals can register a patient for their consultation the day of the brigade, triage and record vitals for the day, input symptoms, diagnoses, and prescriptions. TimmyCare is also used as a record of diagnoses and prescriptions dispensed by previous medical service trips.

Timmy lacks the staff capacity to collect data and monitor programs for evaluation purposes. It is soliciting for a new position: Director of Programming and Evaluation. The main responsibilities listed for this position are, in conjunction and consultation with the Executive Director: develop staff, direct, plan, and coordinate work of Program Managers and International program staff members to include supervision and evaluation, training, and team building; and measure, implement, manage, supervise, and evaluate all program activities in accordance with established standards. We believe that these responsibilities do not effectively address the needs that Timmy has identified with respect to data analysis and evaluation of its impact.

Model

Types of Quantitative Program Assessment

Several techniques for assessing health programs can be found in the literature.¹⁴⁹ However, each type of analysis requires specific pieces of information and serves different purposes. For instance, cost-effectiveness analysis focuses on the estimation of costs incurred to achieve certain level of health outcomes while benefit-cost analyses assess whether the economic value of benefits derived from the program surpasses that of its costs. Performance measurement attempts to identify improvements in any relevant dimension of service provision such as quantity of outputs or outcomes, quality, customer satisfaction, among others.¹⁵⁰

Performance measures and management contribute to keeping track of the organization's level of service provision. However, they are not designed to identify a causal relationship between program activities and participants' outcomes. Instead, by establishing a comparison with an adequate control group and making appropriate methodological considerations, impact evaluations can elicit the actual effect of a program or intervention over its participants.¹⁵¹ Then, while performance indicators provide valuable information to the organization's internal management, external stakeholders such as foundations, intergovernmental organizations, and development advocates are increasingly urging for the greater and correct use of impact evaluations in the field of global health.

Process Evaluation

Conducting a process evaluation will enhance Timmy's current programs by understanding them more fully. The evaluations measure what is done by the programs, and who receives these

¹⁴⁹ Barnow, B.S. (2000). Exploring the relationship between performance management and program impact: A case study of the Job Training Partnership Act. *Journal of Policy Analysis and Management*, 19(1), 118-141

¹⁵⁰ Bingham, R.D., & Felbinger, C.L. (2002). *Evaluation in practice: A methodological approach*. New York: Seven Bridges Press. Chapters 2-3.

¹⁵¹ Wynn, B. O., Dutta, A., & Nelson, M. I. (2006). *Challenges in program evaluation of health interventions in developing countries*. Rand Corporation.

services. Research shows that process evaluations are conducted in the health field to evaluate questions in two areas: coverage and process.¹⁵² Generally, process evaluations contribute to understanding relationships between stakeholders, activities, and outcomes. Upon completing such an evaluation, Timmy would be able to improve program implementation by identifying strengths, weakness, and challenges related to program delivery. To do so, an Evaluability Assessment must be conducted prior to a process evaluation. An Evaluability Assessment examines the extent to which Timmy’s program can be evaluated in a reliable and plausible fashion.” This process will help to justify the program evaluation and provide useful information.¹⁵³

Impact Evaluation

In order to elicit the actual impact of a program or intervention, the evaluator must identify a variable that is directly related to the intended effect of the program. Then, this variable is measured before and after the program implementation, on both the treatment group (the program participants) and a comparison group consisting of people who do not receive the benefits from the program. Thus, the difference in the outcome variable’s change for the treatment and comparison group represents the program impact. In the following equation, ‘A’ represents the treatment group (the program participants), and ‘B’ represents the comparison group (people who did not participate in the program). Furthermore, ‘o’ represents the measurement before the program, and ‘i’ the measurement after the program is implemented. The program impact will be represented by the following equation:

$$\text{Program Impact} = (A_i - A_o) - (B_i - B_o)$$

Due to the use of two differences in the calculation of the impact (difference in time, and difference among groups), this methodology is commonly referred as Difference in Difference.¹⁵⁴ An ideal comparison group will be a perfect representation of the participants in all their characteristics. Thus, the closest that an evaluator can approach this ideal is drawing a random selection of participants between treatment and comparison group. However, the context of the specific intervention (medical treatments, social services, for instance) challenges this randomization on ethical grounds.¹⁵⁵ Alternative options include the provision of alternative treatments, or the comparison against general population indicators.

Best Practices

Break Away and Global Brigades

It has been established that service learning produces benefits to the students that participate in the activity and to their immediate communities in home countries. Studies with advanced statistical designs have shown that students who are involved in service learning have higher scores in midterm and final examinations, and that this activity has positive impacts on moral,

¹⁵² World Health Organization (2002). *Process Evaluations: Evaluation of Psychoactive Substance Use Disorder Treatment*.

¹⁵³ Kaufman-Levy, D., Poulin, M. (2003). *Evaluability Assessment: Examining the Readiness of a Program For Evaluation*. Juvenile Justice Evaluation Center

¹⁵⁴ Bingham, R.D., & Felbinger, C.L. (2002). *Evaluation in practice: A methodological approach*. New York: Seven Bridges Press. Chapters 2-3.

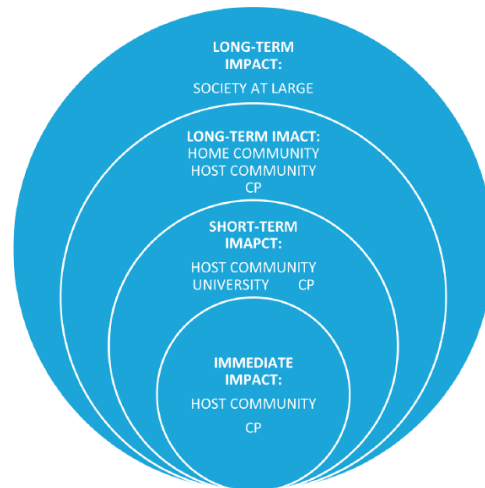
¹⁵⁵ Blustein, J. (2005). Toward a more public discussion of the ethics of federal social program evaluation. *Journal of Policy Analysis and Management*, 24(4), 824-846

social, and cognitive outcomes.¹⁵⁶ The range of these tangible and intangible results can be used by Timmy to shape its strategy for recruiting new volunteers, creating a cadre of advocates of global health, and establishing a base of future donors and advocates of its cause.

Questionnaires provide a channel of data collection, used to measure the change in the variables of interest between pre and post trip. In light of the impracticality of administering a more scientific evaluation study, the availability of the technology for data collection tools at hand, allow us to design a one-group pre-test, post-test study and analyze the degree of change that occurred in the variables of interest due to being on a medical service trip.¹⁵⁷

There is limited academic literature on impact evaluation on service learning from medical service trips. Break Away is one of few nonprofit organizations that has explored the idea of measuring impact of service learning. It supports active citizenship initiatives of students through connecting college campuses as well as training and assisting students in for alternative break trips.¹⁵⁸ Break Away defines impact as: student learning outcomes and awareness that students bring back to campus upon returning from their service trip. The organization developed a visual representation of how this learning and awareness is passed on as service learning impact by timing and area of impact. The immediate impact is on the host community in which students volunteer, the short-term impact extends to the students' university community, the long-term impact is on both the host and home communities, and finally a long-term impact is on the society at large.

Figure 9: Impact of Service Learning (Break Away)



159

¹⁵⁶ Bringle G. Robert and Julie A. Hatcher. Implementing Service Learning in Higher Education. *The Journal of Higher Education*, Vol. 67, No. 2 (Mar. - Apr., 1996), pp. 221-239

¹⁵⁷ Murnane, Richard J., and John B. Willett. "Designing Research to Address Causal Questions." *Methods Matter: Improving Causal Inference in Educational and Social Science Research*. Oxford: Oxford UP, 2011.

¹⁵⁸ Cornell et al. New York University, Robert F. Wagner Graduate School of Public Service, Capstone Project. Break Away. 2012-2013.

¹⁵⁹ Cornell et al. New York University, Robert F. Wagner Graduate School of Public Service, Capstone Project. Break Away. 2012-2013.

Break Away outlines the following best-practices for impact evaluation: (1) Combine quantitative and qualitative methods of measurement, (2) Use multiple channels for data collection: In-person interviews and focus groups, personal reflection through surveys and journals, and documentation of activities, reports and analysis, and (3) Involve all stakeholders in the process of impact evaluation.

Another example of an organization using best-practices on quantitative decision-making is Global Brigades¹⁶⁰, which utilizes a data informatics system called OpenMRS; their version of TimmyCare. While TimmyCare is an efficient and effective interface, the students and medical professionals underutilize it. TimmyCare is used differently by each medical service trip and some patient histories are more complete than others, which can lead to inconsistencies in treatment and continuity of care. TimmyCare is not updated in the interim if a patient visits or is treated by a local medical professional due to complications, unless a referral had been suggested by a medical professional from the brigade. There may not be updated information added to the patient profile in TimmyCare until the next medical service trip if the patient discloses any updates to the medical professional.

OpenMRS, like TimmyCare, compiles patient data electronically via student computers during clinic days. In addition, OpenMRS can identify short and long-term health trends in the community based on patient history compiled in the system. OpenMRS can identify the major diseases affecting a community and their staff can utilize the data to ensure the efficacy of the types of medical professionals or brigades employed in a given community to attempt to alleviate the causes or source of the diseases, if they are preventable. Global Brigades further clarifies the importance of OpenMRS as pivotal to the sustainability of their holistic model of development they are employing by attempting to identify the source of the health issues and design brigades more effective in mitigating those risks to health security in the communities. Global Brigades includes that they are able to send post-brigade health statistic briefs of the communities to their respective chapters post-trip, which enables them to track the specific impacts that chapter is having in their community over time.¹⁶¹ The subsequent brigades will be better equipped through data assessment of impacts on the communities that they work in and tune their services to better address the issues identified in the data analysis.

Evaluation of Medical Trip Programs and Health Promotion Programs

Literature on evaluation of medical trips is rare and limited.¹⁶² Among those limitations are the lack of standard tools for evaluation¹⁶³ and the perception, from volunteer organizations that evaluation does not contribute to their organizational missions.¹⁶⁴ Moreover, scholars have also identified significant challenges for the evaluation of health promotion programs such as the definition of the evaluation's object, the use of a rigorous evaluation design and the production of

¹⁶⁰ Global Brigades. (n.d). https://www.globalbrigades.org/media/DI_FAQ.pdf

¹⁶¹ Ibid.

¹⁶² Sykes, K. J. (2014). Short-term medical service trips: a systematic review of the evidence. *American journal of public health*, 104(7), e38-e48.

¹⁶³ Maki, J., Qualls, M., White, B., Kleefeld, S., & Crone, R. (2008). Health impact assessment and short-term medical missions: a methods study to evaluate quality of care. *BMC health services research*, 8(1), 1.

¹⁶⁴ Sykes, K. J. (2014). Short-term medical service trips: a systematic review of the evidence. *American journal of public health*, 104(7), e38-e48.

meaningful and relevant indices.¹⁶⁵ Maki et al (2008) presented one of the few assessment tools of medical trip programs that can be found in the literature.¹⁶⁶ In their study, the authors propose a survey-based qualitative assessment in terms of cost, efficiency, impact, preparedness, education, and sustainability. Although this method serves for comparative purposes as a performance or benchmarking management system, these indicators cannot function as impact measures by themselves.

The ideal program evaluation insists that a stakeholder analysis insists that a stakeholder analysis be conducted in order to collect information on the perceptions from each significant actor involved in the decision-making process of the organization.¹⁶⁷ Specifically, the goal is to collect their intentions for conducting an evaluation, most relevant measures to be evaluated, and potential use of the results. Moreover, a process evaluation serves to ensure that the program is properly described and delimited, and that the organization is ready to conduct an impact evaluation. From these results, it is possible to design an evaluation framework that takes into consideration the appropriate outcome measures and solves potential issues of internal validity.

Timmy's Monitoring and Evaluation report presents a series of indicators that fit into the category of performance measures. Thus, while they are able to provide guidance for management, they do not provide information about the actual impact of Timmy's interventions in the communities. Moreover, this performance system is not being maintained and updated, therefore reducing its usefulness as the maintaining cost might overcome the benefits.¹⁶⁸

Recommendations

5.1: Engage stakeholders in the evaluation design process and analysis

The first step towards this end is to identify the stakeholders' needs and perspectives about their relationship with Timmy. Thus, Appendix 8 presents the most relevant insights from a survey administered to a sample of representatives from Timmy partner organizations.

5.2: Allocate financial and human resources for data collection, computation and analysis of process and impact measures.

Resources for the process evaluation design can be combined with those for the impact evaluation design. As for allocation of human resources, the Director of Programming and Evaluation should focus solely on establishing a standardized data collection program across all chapters in the Timmy network and all medical trips. Specifically,

- a) The Director will establish a regular channel of communication with the chapter leaders who will assume responsibility in the process of data collection to be executed annually.

¹⁶⁵ Potvin, L., & McQueen, D. V. (2008). Practical dilemmas for health promotion evaluation. In *Health promotion evaluation practices in the Americas* (pp. 25-45). Springer New York.

¹⁶⁶ 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 services research*, 8(1), 1.

¹⁶⁷ US Department of Health and Human Services. Office of the Director, Office of Strategy and Innovation (2005). *Introduction to Program Evaluation for Public Health Programs: A Self-Study Guide*. Atlanta, GA: Centers for Disease Control and Prevention.

¹⁶⁸ Poister, T. H., Aristigueta, M. P., & Hall, J. L. (2014). *Managing and Measuring Performance in Public and Nonprofit Organizations: An Integrated Approach*. John Wiley & Sons.

- b) The Director will standardize the data collection methodologies to include the same set of questions to be asked to every chapter member (regardless of participation in the medical service trips). These questions must be designed based on the outcomes that Timmy needs to measure to draw meaningful conclusions for improving programming.
- c) The Director will work with the Executive Director to create more robust programming for the medical mission trips before they take place.
- d) The Director will analyze the data and report the findings to the Executive Director, Board of Directors and use them for annual reporting and planning
- e) The Director will communicate the recommendations from the findings to the Chapter leader who is responsible for passing it on to other members and work with Timmy to improve overall programming.

5.3: Collect information specifically destined to conduct a program evaluation and according to a pre-established data collection plan.

Improve Requirements for process measures: The variables that serve as appropriate measures of process have to meet the following requirements. Represent operations of Timmy staff and partners. These are steps conducted by staff and partners that enable the implementation of programs.

5.4: Develop the Organization's Technological Infrastructure for Monitoring and Evaluation

In order to develop program evaluation metrics and methods for determining program impact, Timmy needs to improve its infrastructure to accommodate the new processes. Specifically, Timmy should consider:

- a) Expanding the utilization of TimmyCare or adopt an open-source program like OpenMRS (Global Brigades) that can aggregate health statistics based on patient information in communities and deliver automated reports.
- b) Using appropriate computer software for survey administration and data analysis. Qualtrics is an economical option used by leading private and non-governmental organization alike, and suited well to Timmy's needs for survey administration, data recording and analysis of trends.

5.5: Monitor the Work of Student Chapters and Alumni Association

Timmy should regularly monitor the work of student chapters by collecting data on all chapters in a uniform fashion, in regular intervals, and recording the information on a database for future references. This process should involve chapter leaders. Moreover, Timmy should collect information from its former chapter members (alumni), on regular intervals, and analyze the information for improving alumni relations and support its efforts for attracting donations. The findings from this analysis should be shared with chapters and the alumni network, in addition to the internal management and board of directors, because it will identify opportunities for improvement on all fronts. A suggested questionnaire for data collection on alumni can be found in Appendix 3.

5.6: Evaluate the Impact of Medical Service Trips on Student Volunteers

Impact evaluation of the student volunteers who participate in a trip should follow a pre-test, post-test, comparison group quasi-experimental design. The first step is identifying tangible and intangible results that the organization expects its volunteers to get from participating in a service

trip. These results, or variables, should lead the process of developing questions for the surveys, which should be designed in a way that will enable quantifying the outcomes of interest. The same variables should be measured for students who go on a trip (treatment), and for those who do not (comparison). Differences in the outcomes for the two groups should be tested for statistical significance, so any change across the variables of interest can be attributed to exposure to the treatment variable (participation on a trip).

5.7: Suggested outcomes for medical trips evaluation

In order to serve as appropriate measures of impact have to meet the following requirements:

- Represent outcomes (effective changes intended in the participant individuals after the program intervention, e.g. health status) rather than outputs (activities executed by Timmy as part of its programs, e.g. number of referrals).
- Can be obtained for the treatment group (patients) and a determined comparison group (other members of the community, similar communities) both before and after the implementation of the program.

We specifically suggest the use of the following measures:

- Self-reported qualitative health status.
- Number of work days (adults) or school days (children) lost due to illness.
- Prevalence rate of common diseases such as parasitic disease.

5.8: Use the information at the municipal or the provincial level as a comparison group for medical trips evaluation:

The optimal comparison group, from a statistical point of view, would be a randomly assigned group of potential patients that are not treated.¹⁶⁹ However, this option does not meet the standards of respect and justice due to human subjects.¹⁷⁰ Moreover, there are significant difficulties for gathering specific information from members of the same community who are not enrolled as Timmy patients. Thus, we suggest the use of information at the municipal or provincial level as a second best option.

Implementation

The first step in an effective evaluation plan is to decide on the variables or indicators that Timmy is interested in analyzing. Then, the organization must develop data collection methodologies in order to quantify those indicators, and perform analysis to reach conclusions for making informed decisions.

Impact Evaluation Plan of Students who Participate on a Trip

Students who participate in a medical service trip are exposed to a new information and experiences that we hope will spark a change in the individual, which will then be transferred to the rest of the chapter members and their home communities. Impact evaluation is an attempt to quantify this change across a number of variables. We propose a pre-test post-test, comparison group, which is a quasi-experimental design that includes a comparison group - in Timmy's case would be the chapter students who do not participate on a trip, the use of which limits several

¹⁶⁹ Bingham, R.D., & Felbinger, C.L. (2002). *Evaluation in practice: A methodological approach*. New York: Seven Bridges Press.

¹⁷⁰ Blustein, J. (2005). Toward a more public discussion of the ethics of federal social program evaluation. *Journal of Policy Analysis and Management*, 24(4), 824-846

threats to validity. Both, students who go on a trip (A_1 =before; A_2 =after), and those who do not (B_1 =before; B_2 =after), answer the same questions pre-trip, and post-trip, and then the differences are compared as $[(A_2-A_1)-(B_2-B_1)]$. As mentioned in the description of the model, this difference-in-difference result is the measure of program impact. The difference-in-difference must be tested for statistical significance with a paired t-statistic hypothesis test. The null hypothesis is that the difference-in-difference is zero which means that the program does not have an impact. The alternate hypothesis is that the difference-in-difference is not zero, which means that the program has an actual impact, which could be positive or negative.

We have identified the following impacts to be assessed, and thus survey questions must be phrased in a way that quantifies the outcomes of interest. (Please see Appendix 7 for a proposed survey).

Student learning and home communities before and after the medical trip:

- Student understanding about service learning;
- Level of awareness of cultural diversity;
- The influence of participating in a Timmy trip on their professional/college major choice;
- Their level of civic engagement;
- Willingness for donating (time and money) to the Timmy causes in the future;
- Willingness for donating (time and money) to similar causes in the future;
- Development of leadership skills;
- Their perception on the impact of their work on the host community;
- The likelihood of them becoming involved in a potential Timmy alumni association.

Student impact on home communities:

- Degree of likelihood that students will become advocates of volunteerism, medical missions and similar causes;
- Willingness to pass on their knowledge and experience on volunteerism and medical missions to their peers in their home community. Did it materialize into an actual increase of their peers' civic engagement (more volunteers for Timmy, more volunteer organizations within the university).

Monitoring Plan for Student Chapters and Alumni Network

Timmy should regularly monitor the work of chapters in order to gain insights on the following: the development of chapters - evaluate the work that has been done throughout the year, identify potential weaknesses and challenges, monitor the number of chapter members and identify ways to recruit new students and build on fundraising efforts. This practice will strengthen the collective efforts of Timmy and the individual chapters in recruiting new members and pursuing donations for their cause.

Moreover, Timmy should annually collect detailed information on alumni in order to gain insights on the following: where graduated student volunteers are living, their occupation and career field, how often they engage in community service or volunteer work, and how to get hold of them in the future. This practice will allow Timmy to create a network of individuals who support the organization and increase the pool of potential donors. Maintaining contact with alumni also enables Timmy to report on alumni outcomes like chosen career and philanthropic involvement. (Please see Appendix 3 for a proposed alumni survey).

Data Collection

Timmy should continue to collect impact data through self-reporting measures, however Timmy should execute the collection of data for Group 1 into two intervals (1) prior to the trip (pre-trip questionnaire) that takes place before students go on a trip, and (2) a post-trip questionnaire upon returning from the trip. Collect data for Group 2 and 3 on regular intervals (i.e an annual basis).

Timmy should adopt the practice of administering questionnaires online instead of hard copies - this eases the procedures of recording information for analytical purposes. We recommend that Timmy obtain the license for **Qualtrics** - a superb software for data collection and analysis which will facilitate the job of the program evaluator.

We recommend that part of the responsibility of data collection should be passed on to the Chapter leaders, who will be empowered by the increased responsibility and engagement with the management, and will complement the efforts of the Timmy Program Evaluator position. Chapter leaders should oversee that all members complete the surveys, and stress the importance of improving the functions of the organization through this practice. They should be in regular contact with the Program Evaluator and held responsible for the compliance rate of the surveys.

Internal and external validity, and limitations of the design

Pre-trip, post-trip comparison group design, is one of the simplest evaluation techniques, consequently there are internal and external validity threats. The main threat to validity is the fact that all Timmy chapter members have voluntarily joined a chapter meaning that any change in the outcomes of interest may be the result of characteristics that these students share that led them to join an organization such as Timmy in the first place¹⁷¹. Therefore, the findings will have weak statistical power, will not prove any causality, and will be only applicable to the students in Timmy chapters. This technique is commonly used for comparing groups of participants and then evaluating the change that resulted from a treatment or intervention which in this case would be the participation on a medical mission trip. The chapter members who do not attend a medical mission trip provide a window of opportunity for improving the validity of the study because these individuals make up for a good counterfactual that can be used as a comparison group in a more advanced control group pre-test post-test design. Results are analyzed and simple statistical techniques are used for evaluating whether the change in the variables of interest has statistical significance. We believe that this method will produce satisfactory analytics for the purposes of internal use by Timmy.

Reporting

Regular communications and reporting are vital to continued development and improved programming for Timmy Global Health in their chapters and on their medical service trips. As outlined above, Timmy has solicited a new position, Director of Programming and Evaluation. This position should have regular communication with Timmy chapter leaders to ensure that curricular and programming needs are identified and mitigated, annual focus groups are held improve chapter development, and utilize alumni base for continued growth and development as an organization.

¹⁷¹ Bingham, R.D., & Felbinger, C.L. (2002). *Evaluation in practice: A methodological approach*. New York: Seven Bridges Press. Chapter 2, p. 24

Conclusion

Timmy Global Health has well-positioned itself to be competitive in the global health provision field. Because there are many organizations providing similar types of services for students and communities, Timmy asked the students at the IU School of Public and Environmental Affairs to analyze its operations and identify ways to distinguish itself from competitors. This becomes increasingly pressing as more organizations enter the global health market and as constituents' demands for accountability become more prevalent to the organization's success.

As an organization focused on building global health leaders, Timmy already prioritizes student empowerment. To better distinguish itself from competitors, we have suggested a more robust service-learning curriculum that focuses on pre-service preparation, interacting with partners on the ground, and time to reflect on the students' experiences. Also, teaching values rooted in social justice will transform the students from participants to activists, which better prepares them for global health leadership.

Timmy already differentiates itself from similar global health service providers by promoting continuity of care and consistently returning to the same regions. To further itself in the field, Timmy has the opportunity to not only serve communities, but also empower them. By utilizing participatory development to enter communities, creating a more standardized model to service community-specific needs, building upon the capacity of local partners, and focusing on the exit strategy through the entire process, Timmy will increase its level of impact and create more self-sustaining model.

Over the last decade, donors and supporters have been pressuring nonprofits to use evaluation to drive decision-making. Most nonprofits in the global health field do not use data to inform decisions. Timmy is positioning itself ahead of the curve by incorporating evaluation techniques into its operations. Timmy can ensure its stability well into the coming decades by incorporating sustainability into its operations. By focusing on responsible empowerment of students and communities, considering costs an investment in the people Timmy serves, and using data to drive decision-making, Timmy can propel itself into leadership of the global health field for the foreseeable future and beyond.

Appendix 1. Glossary of Service Learning Terms

High Impact Practices (HIPs)

Definition: techniques for teaching and learning that have proven to be beneficial for student engagement and successful learning among students from many backgrounds.¹⁷² HIPs include learning communities, collaborative assignments and research, diversity/global learning, capstone courses, and service learning.¹⁷³

Application to Timmy: Timmy engages in high impact practices through offering global learning opportunities during service trips and learning communities via the chapter structure. Students that are involved in co-curricular organizations such as Timmy benefit from enhanced learning based on the opportunity to develop important leadership and

Service learning

Definition: Generally, service learning is considered to be a program that links academic studies, community service, and reflection¹⁷⁴. As Timmy's programs are not always course based (depending on the college and availability of courses), a definition adopted by the Corporation for National and Community Service for their volunteers is more appropriate. The

According to the National and Community Service Act of 1990,

Service learning is a method:

- under which students learn and develop through active participation in thoughtfully organized service experiences that meet actual community needs;
- that provides structured time for students to think, talk, or write about what the student did and saw during an actual service activity;
- that provides students with opportunities to use newly acquired skills and knowledge in real life situations in their own communities, and;
- that helps foster the development of a sense of caring for others, citizenships, and civic responsibility.¹⁷⁵

The National and Community Service definition of service learning incorporates four key qualities:

- Service activity that meets a community-identified need
- Reflection
- Transferable skills
- Fosters commitment to humanitarianism

¹⁷² "High Impact Practices." *Lead Campus Toolkit: Resources and Models for Innovation*. Association of American Colleges & Universities, n.d. Web. Retrieved from <http://leap.aacu.org/toolkit/high-impact-practices>

¹⁷³ Kuh, G. D., & Schneider, C. G. (2008). *High-impact educational practices: what they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities, 2008.

¹⁷⁴ Celio, C., Durlak, J., & Dymnicki, A. (2011). A Meta-analysis of the Impact of Service-Learning on Students. *Journal Of Experiential Education*, 34(2), 164-181.

¹⁷⁵ Corporation for National and Community Service. (1990). The National and Community Service Act of 1990. Retrieved from http://www.nationalservice.gov/pdf/cncs_statute.pdf

It is important to note that each of these components carries equal amount of weight. They are all key to creating a service learning experience and if one component is lacking, the activity ceases to be a full or idealized service learning model that emphasizes the equal balance between service and learning.¹⁷⁶ For instance, if students engage in a service or advocacy activity but fail to reflect on the activity, they are volunteering and not participating in the idealized model of service learning. The students in this example have not been provided an outlet to synthesize their experience and further their understanding. While service learning takes many forms and definitions, there is broad consensus that service learning integrates these qualities.¹⁷⁷

Application to Timmy:

This definition of service learning, one that incorporates **service, reflection, transferable skills, and fosters a commitment to humanitarianism**, matches Timmy’s mission and goals for your student leaders.

Course-based vs. Community-based Service Learning:

Definition:

In addition to the qualities that must be present in a full model of service learning, there are distinctions between course-based and community-based service learning. Course-based service learning is a credit-bearing service learning experience that allows students to gain hands-on experience in a particular academic subject, see Figure 1.

Figure 1. Course-based vs. Community-based Service Learning

Course-based Service Learning	Community-based Service Learning
<ul style="list-style-type: none"> • Meets actual community needs 	<ul style="list-style-type: none"> • Meets actual community needs
<ul style="list-style-type: none"> • Coordinated with the school and community 	<ul style="list-style-type: none"> • Coordinated with the school and community
<ul style="list-style-type: none"> • Integrated into each student’s academic curriculum 	<ul style="list-style-type: none"> • Support the learning objectives of the organization
<ul style="list-style-type: none"> • Provides structured time student to think, talk, and write about what he/she did and saw during the actual service activity 	<ul style="list-style-type: none"> • Provides structured time for student to think, talk, and write about what he/she did and saw during the actual service activity
<ul style="list-style-type: none"> • Provide student with opportunities to use newly acquired skills and knowledge in real life situation in their own communities 	<ul style="list-style-type: none"> • Provide student with opportunities to use newly acquired skills and knowledge in real life situation in their own communities

¹⁷⁶ Eyler, J., & Giles, D. (1999). *Where’s the learning in service-learning?* San Francisco: Jossey-Bass, c1999.

¹⁷⁷ Bringle, R. G., & Clayton, P. H. (2012). Civic education through service learning: What, how, and why? In L. McIlraith, A. Lyons, & R. Munck (Eds.), *Higher education and civic engagement: Comparative perspectives* (p. 101-124). New York, NY: Palgrave Macmillan.

<ul style="list-style-type: none"> • Are a practical application of what is taught in the class 	<ul style="list-style-type: none"> • Expand the student’s learning environment to include the broader community
<ul style="list-style-type: none"> • Helps to foster the development of a sense of caring for others 	<ul style="list-style-type: none"> • Helps to foster the development of a sense of caring for others¹⁷⁸

Application to Timmy:

Based on these definitions of service learning, Timmy is framing the educational aspect of a student’s experience as community-based service learning. Using tools of community-based service learning, Timmy can prescribe these particular practices and approaches for student leaders to adopt in their chapters. Further, Timmy can make recommendations (or requirements) for students on trips to engage in in order to gain the full benefits of community-based service learning. For example, it is considered best practice to engage in reflection daily on service trips. This allows students to process their experiences and think critically about how their work influences the host community.

¹⁷⁸ Standards of quality for school-based and community-based service learning. (1995). Alliance for Service-Learning in Education Reform. Retrieved from <http://tncampuscompact.org/files/qsbc.pdf>

Appendix 2. Literature Review of Best Practices for Service Learning

Overview of Theory & Benefits of Service Learning

Educational research lauds service learning for its transformational value.¹⁷⁹ The central claim of service learning is that “service, combined with learning, adds value to each and transforms both.”¹⁸⁰ The combination of service and learning is powerful and the potential benefits are farther-reaching than when service and learning are done separately. Because of the experiential nature of service learning, students’ understanding is enhanced and with enhanced understanding, comes more effective action.¹⁸¹ Service learning is also innately connected to emotions and intellect, fostering student development by capturing students’ interests and passions.¹⁸² When done in tandem, service and learning can foster personal growth and add value to students’ regular academic learning.

Service learning programs have proven to benefit students and the host communities where students serve. Research supports claims that students engaged in service learning have more positive beliefs and values toward service and community, and more broadly, service learning positively impacts personal, attitudinal, moral, social, and cognitive outcomes.¹⁸³ Additional research finds that service learning produces students that are “more tolerant, altruistic, and culturally aware; who have stronger leadership and communication skills; and who (albeit marginally) earn higher grade point averages and have stronger critical thinking skills than their non-service learning counterparts.”¹⁸⁴ Other research has found that continued involvement in service encourages responsible citizenry. Delve, Mintze, and Stewart (1990) suggest that as students advance in their service experiences, they tend to be able to recognize not just the needs of the immediate community, but also the needs of the overarching society.¹⁸⁵ The transition from a focus on charity to social justice is often prescribed as a necessary component of effective service learning.

¹⁷⁹ Mitchell, T. D. (2008). Traditional vs. Critical Service-Learning: Engaging the Literature to Differentiate Two Models. *Michigan Journal Of Community Service Learning*, 14(2), 50-65.

¹⁸⁰ Honnet, E. P., & Poulsen, S. (1989). *Principles of Good Practice in Combining Service and Learning*. Wingspread Special Report. Racine, WI: Johnson Foundation, p. 1.

¹⁸¹ Eyler, J., & Giles, D. (1999). *Where's the learning in service-learning?* San Francisco: Jossey-Bass, c1999.

¹⁸² Ibid.

¹⁸³ Bringle, R. G., & Hatcher, J. A. (1996). Implementing Service Learning in Higher Education. *The Journal of Higher Education*, (2). 221.

¹⁸⁴ Mitchell, T. D. (2008). Traditional vs. Critical Service-Learning: Engaging the Literature to Differentiate Two Models. *Michigan Journal Of Community Service Learning*, 14(2), 50-65.

¹⁸⁵ Delve, C., Mintz, S., & Stewart, G. (1990). *Community Service as Values Education*. New Directions for Student Services, no. 50. San Francisco: Jossey-Bass.

While research has primarily examined the impact of service learning on students' development, there is research to support the claim that service learning simultaneously benefits the host community. Communities that participate in service learning generally report that they are satisfied with service learning volunteers and that they benefit from the additional resources provided by the students.¹⁸⁶ Establishing a program that emphasizes mutual benefits for the community and the students will be key in Timmy's case, as the organization is committed to building the capacity of both.

A large source of criticism surrounding service learning has been related to the lack of evidence or attention to community impact. Some experts argue that service learning does not truly serve communities and that it reinforces negative stereotypes and perceptions of poor communities.¹⁸⁷ These arguments stem from the limitations often associated with the service that is done through service learning programs. For instance, students that participate in service learning programs are generally short-term volunteers and might seek out (or in some cases create) a project that serves their own needs or institutional requirements. This approach disregards the community's voice in the process and reinforces the idea that communities are deficient and require outside resources to solve their problems, while perpetuating systems of inequality.¹⁸⁸

In order to prevent this harmful approach, a service learning model should not support activities that provide superficial fixes, and instead support sustainable and effective community-driven service work.¹⁸⁹ Further, effective service learning empowers community members, builds capacity in community organizations, and strives to deconstruct systems of power.^{190,191}

Based on the benefits associated with service learning, it is easy to understand why Timmy wants to implement service learning for its student volunteers. Volunteers that engage in service

¹⁸⁶ Eyer, J.S., D.E. Giles, Jr., C.M. Stenson, & C.J. Gray. (2001) At a Glance: What We Know About the Effects of Service-Learning on College Students, Faculty, Institutions, and Communities 1993-2000. Funded by the Corporation for National and Community Service, Learn and Serve, National Service-Learning Clearinghouse. Retrieved from <https://www.mnsu.edu/cet/academicsevicelearning/Service-Learning.pdf>

¹⁸⁷ Stoecker, R., Tryon, E. A., & Hilgendorf, A. (2009). *The Unheard Voices: Community Organizations and Service Learning*. Philadelphia: Temple University Press, 2009.

¹⁸⁸ Eby, J. (1998). Why service-learning is bad. Retrieved from <https://www.villanova.edu/content/dam/villanova/artsci/servicelearning/WhyServiceLearningIsBad.pdf>

¹⁸⁹ Piacitelli, J., Barwick, M., Doerr, E., Porter, M., & Sumka, S. (2013). Alternative break programs: from isolated enthusiasm to best practices. *Journal of Higher Education Outreach and Engagement*, 17(2), p. 87-109.

¹⁹⁰ Stoecker, R., Tryon, E. A., & Hilgendorf, A. (2009). *The Unheard Voices: Community Organizations and Service Learning*. Philadelphia: Temple University Press, 2009.

¹⁹¹ Mitchell, T. D. (2008). Traditional vs. Critical Service-Learning: Engaging the Literature to Differentiate Two Models. *Michigan Journal Of Community Service Learning*, 14(2), 50-65.

learning, rather than just service, are challenged to think critically about service activities and social injustices. Volunteers are challenged in new ways, allowing for growth and understanding. This can lead to a deeper commitment by the volunteer to the organization and its cause. In a meta-analysis of 62 studies involving 11,837 students, Celio, Durlak, and Dymnicki (2011) found that students that participate in service learning programs demonstrate significant gains in in five outcome areas: attitudes toward self, attitudes toward school and learning, civic engagement, social skills, and academic performance.¹⁹² This evidence supports the view that Timmy’s student can similarly be transformed through a service learning experiences into more aware, active, and engaged citizens.

Chart of High-Impact Educational Activities¹⁹³

Table 1
Relationships between Selected High-Impact Activities, Deep Learning, and Self-Reported Gains

	Deep Learning	Gains: General	Gains: Personal	Gains: Practical
<i>First-Year</i>				
Learning Communities	+++	++	++	++
Service Learning	+++	++	+++	+++
<i>Senior</i>				
Study Abroad	++	+	+	++
Student-Faculty Research	+++	++	++	++
Internships	++	++	++	++
Service Learning	+++	++	+++	+++
Senior Culminating Experience	+++	++	++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

Table 2
Relationships between Selected High-Impact Activities and Clusters of Effective Educational Practices

	Level of Academic Challenge	Active and Collaborative Learning	Student-Faculty Interaction	Supportive Campus Environment
<i>First-Year</i>				
Learning Communities	+++	+++	+++	++
Service Learning	+++	+++	+++	+++
<i>Senior</i>				
Study Abroad	++	++	++	++
Student-Faculty Research	+++	+++	+++	++
Internships	++	+++	+++	++
Service Learning	+++	+++	+++	+++
Senior Culminating Experience	++	+++	+++	++

+ p<0.001, ++ p<0.001 & Unstd B > 0.10, +++ p<0.001 & Unstd B > 0.30

¹⁹² Celio, C., Durlak, J., & Dymnicki, A. (2011). A Meta-analysis of the Impact of Service-Learning on Students. *Journal Of Experiential Education*, 34(2), 164-181.

¹⁹³ Kuh, G., O'Donnell, K., & Reed, S. (2013). *Ensuring Quality & Taking High-Impact Practices to Scale*. Washington, DC: Association of American Colleges and Universities.

Appendix 3. Alumni Survey

1. Name (blank space for response).

2. Timmy Chapter (provide a drop-down list of chapters).

3. How many years were you involved with Timmy Global Health?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8+

4. Were you a member of your Timmy Chapter's Executive Board? Yes No

5. Did you go on a medical service trip with Timmy Global Health? Yes No

6. If yes, how many medical service trips did you go on with Timmy?

- 1
- 2
- 3
- 4
- 5
- 6
- 7
- 8+

7. What year did you complete your undergraduate degree? (provide a drop-down list of years)

8. What was the field of study of your undergraduate major(s)? (Check all that apply)

- Biological Sciences (e.g., Biology, Biochemistry, Environmental Science, Neuroscience/Biopsychology)
- Business and Management (e.g., Accounting, Business Administration, Finance, Marketing)
- Communications (e.g., Journalism, Mass Communication, Speech, Speech Pathology)
- Education (e.g., Elementary Education, Secondary Education, Special Education)
- Engineering (e.g., Chemical Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering)
- Fine and Performing Arts (e.g., Architecture, Art, Dance, Music, Theatre)
- Health Sciences (e.g., Exercise Science, Nursing, Pharmacy, Public Health)
- Humanities (e.g., Classics, English, Modern Languages & Literature, Philosophy)
- Physical Sciences, Mathematics, and Computer Science (e.g., Astronomy, Chemistry, Earth Sciences, Physics)
- Social Sciences (e.g., Anthropology, Economics, Political Science, Psychology, Sociology)
- Other: _____

9. Please indicate which of the following describes your current PRIMARY activity:

- Employed (part-time or full-time)
- Graduate or professional school (part-time or full-time)
- Military service
- Volunteer or national service (Peace Corps, AmeriCorps, etc.)
- Not employed, but seeking employment, admission to graduate school, or other opportunity
- Not employed, and not seeking employment or admission to graduate school (homemaker, traveling, volunteer, retired, etc.)

10. Please indicate your plans for each of the following degrees or certificates:

	Do not plan to pursue	Degree received	Currently enrolled or working toward	Degree you hope to attain in the future
Second Bachelor's Degree				
Master's Degree in Arts and Sciences (e.g., MA, MS, MFA)				
Master of Business Administration (MBA)				
Other Master's Degree (e.g., MSW, MSE, MSN, MAT, MPA)				
Law Degree (JD or LLB)				
Medical Degree (e.g., MD, DO, DDS, DVM, PharmD)				
PhD				
Other Doctoral Degree (e.g., EdD, PsyD, DB)				
Other Certificate: _____				
Other Degree: _____				

11. Please indicate the city, state, and country where you currently live (blank space for response).

12. Please provide the name of your firm or organization, and your job title.

Employer / Name of Company (blank space for response).

Full job title (blank space for response).

13. In what sector are you employed? Mark the best answer.

- Self-employed in own business or professional non-group practice
- For-profit corporation/company/group-practice
- Government or other public institution or agency, including military
- Non-profit organization, institution or NGO (e.g., arts/human services/international organizations)

14. Please select the industry that best describes your employer.

- Agriculture
- Biotech/Pharmaceutical
- Business Services
- Communications/Marketing/PR

- Computer Science/Technology
- Education: Higher education (public or private)
- Education: Elementary or secondary education, adult education (public or private)
- Engineering & Environment
- Financial Services
- Fine/Performing Arts
- Hospitality
- Tourism
- Travel
- Information
- Technology
- Law/Legal Services
- Manufacturing
- Media/Journalism/Publishing
- Medicine
- Military/Defense
- Politics
- Public Policy
- Advocacy
- Retail
- Science
- Social Services
- Other. Please specify. _____

15. Whether or not you are currently employed, what is your principal occupation?

- Administrator
- Administrative support, clerical worker, secretary
- Architect or planner
- Clergy or other religious ministry worker
- Consultant
- Economist
- Educator: Faculty (tenured or tenure-track)
- Educator: Teacher or Instructor
- Engineer
- Financial analyst
- Fundraiser
- Human resources or labor relations professional
- Journalist
- Lawyer or judge
- Other legal professional
- Performing artist, entertainer, or professional athlete
- Writer or editor
- Visual artist or designer
- Other creative professional
- Physician or surgeon
- Psychiatrist
- Psychologist (clinical), therapist or other mental health professional
- Other health services professionals
- Programmer, computer scientist, or systems analyst
- Sales, marketing, advertising or public relations manager
- Salesperson, broker, or agent
- Scientist: Life scientist

- Scientist: Physical scientist
- Social scientist or psychologist (excluding counselor and clinician)
- Statistician, mathematician, actuary, or related analyst
- Other occupation, please specify _____

16. About how often do you engage in community service or volunteer work for organizations?

- Weekly
- Monthly
- Several times a year
- Once or twice a year
- Less than once a year

17. How connected do you feel to Timmy Global Health?

- Very strong connection
- Some connection
- Very little connection
- No connection

18. Overall, how satisfied were you with your Timmy Global Health experience?

- Very satisfied
- Satisfied
- Neither satisfied nor dissatisfied
- Dissatisfied
- Very dissatisfied

19. How likely are you to remain involved with Timmy Global Health?

- Not likely
- Likely
- Very Likely
- Unsure

20. How likely are you to join the Timmy Global Health alumni network?

- Not likely
- Likely
- Very Likely
- Unsure

Appendix 4. Competitor Entrance Strategy Details

Application Process

Benefits: Communities are invested in success of program and are therefore more likely to be involved in operations; Timmy can easily compare communities when choosing between multiple to enter; Timmy can easily identify key indicators needed for communities to enter

Shortcomings: May take a few year before receiving multiple applications; may lose out on communities that would be a better fit if they do not apply

Invitation

Benefits: Communities are invested in success of program and are therefore more likely to be involved in operations; multiple community members invested in program if the entire community invited Timmy

Shortcomings: Harder to compare communities when choosing between multiple to enter; unsure of current community indicators; communities may be experiencing drastically different levels of need, so harder to standardize operations; may take longer for community members to reach a consensus if Timmy should be there, which slows operations

Needs Assessment

Benefits: Communities that are identified as good matches by Timmy are selected, so already going to best fit into standardization; Timmy can better serve communities by knowing their individual needs

Shortcomings: Costly to do a needs assessment with both staff and finances, takes longer to implement programming

Opportunistic

Benefits: Easiest strategy, can be more flexible with use of resources

Shortcomings: Less strategic, so may be inefficiently exerting resources and therefore creating less impact

Appendix 5. Exit Strategies “Tips for Practitioners”

TIPS FOR PRACTITIONERS: PRINCIPLES AND VALUES

The timeline and discussions show that principles and values are very organisation-specific. However, if you were to use a similar exercise to think through the exit process, important factors to consider at key moments include:

Before entering new partnerships or designing new programmes: decide on entry criteria.

At the start of the relationship: agree whether formal partnership and exit principles are appropriate at this stage, if they don't already exist.

At the programme design stage: build exit thinking into the design of the project or programme; apply partnership principles if appropriate.

Between programme design and the decision point to exit: think about whether you will use criteria to guide decisions on when to exit, and if so, how you will ensure they are applied consistently, for example through monitoring indicators.

At the decision point to exit: if they don't already exist, decide whether you need exit principles, especially if you already hold yourself to account to other criteria, values and standards.

If they would add value, consider whether revising existing principles within the organisation is enough, or whether you will develop new ones. If the latter is the case, think about who you are developing them for, and whose input you need. Look at existing guidance, manuals and ideas on exit to see whether elements of these could be incorporated into the principles.

Don't forget to pay attention to how partnership principles will be maintained from this stage onwards.

During implementation: use exit indicators and principles to monitor the process, review progress and keep the exit on track. If you follow formal exit principles, keep revisiting these to ensure they are still relevant. Honour implicit principles, such as those embedded in exit guidance.

Post-exit: take the time to reflect on the exit and learn from it; revise principles based on this; or think about developing principles to build into future programming if they would be deemed relevant at that stage.

TIPS FOR PRACTITIONERS: CAPACITY BUILDING AND RELATIONSHIP MANAGEMENT WITH PARTNERS

Our analysis of the timeline exercise and discussions highlights the need to assess how partnerships are defined, entered into, reviewed and managed. Some areas to think about at key stages include:

At the start of the relationship: if you will be using tools to understand partners' strengths and weaknesses, build exit thinking into these and the plans that result from them. Be clear about the rationale for engagement - this will help when developing the rationale for exit.

At the programme design stage: build specific objectives on capacity and organisational development into programme design if appropriate.

Between programme design and the decision point to exit: undertake formal partnership review mechanisms if appropriate.

At the decision point to exit: review what capacity building is already in place and assess how partners are currently being supported, for example by undertaking an organisational capacity assessment. If necessary, consider doing more to increase chances of sustainability after withdrawal and decide how much you can invest in this.

Don't forget to consider whether the partner could absorb these inputs without being overloaded and be clear on where you will draw the line during exit.

During implementation: decide whether it is necessary to alter the type of capacity building support. If so, consider how you will ensure other areas are not sidelined. Monitor the process, and if it emerges that the partner isn't ready for exit, decide whether or not to extend the exit timeframe. Weigh up the pros and cons. Consider how you will maintain post-exit relationships, and the nature of these.

Post-exit: reflect on the capacity building provided, and how partnership management went. Build learning from this into strategic planning cycles and support to other partners.

TIPS FOR PRACTITIONERS: STAFF CARE AND PERSONNEL

Investment in staff care is an integral part of responsible exits. An analysis of the timeline exercise and debates highlights certain actions that could be taken to make the exit process less painful:

At the start of the relationship: have a good understanding of the legislation of the country you are working in.

At the programme design stage: develop or refresh guidance on duty of care and make sure staff and partners know where this can be accessed.

Between programme design and the decision point to exit: decide whether you will undertake informal consultations with staff before the decision to exit; think about whether this would create unnecessary amounts of uncertainty or whether a sharper process would be better.

At the decision point to exit: decide who will be responsible for overseeing exits, and the type of support they will require to do so. If roles are at risk, review the policies and procedures for redundancies in place, both at headquarter and national or country office level. Ensure mechanisms are in place for handling complaints, and establish a proactive communications policy. Discuss with partners the support they require. Make sure management of all affected organisations develop and agree clear plans and strategies so that staff get the same information and support where necessary.

During implementation: provide appropriate support for staff responsible for carrying out, and affected by, the exit. Recognise that staff retention and motivation may become an issue and require additional resources. Ensure you are aware of the national legislation on redundancy and redeployment in the country.

Post-exit: consider how learning from the exit will be retained, particularly if staff have moved into new positions. Undertake follow-up conversations with staff, such as through post-exit calls, or conduct an evaluation if appropriate.

TIPS FOR PRACTITIONERS: LEADERSHIP

The timeline and discussions show that leaders need to champion exit, contribute their thinking and support, and ensure that necessary resources are allocated to the process. Some key moments where certain decisions and actions could be taken by leadership include:

At the start of the relationship: ensure there is a clear rationale for engagement that is well communicated by leadership and documented.

At the programme design stage: explain decisions made and ensure there is a record of these that staff and partners can access.

Between programme design and the decision point to exit: define criteria and priorities for exit – will decisions be driven by the organisational strategy (i.e. how well projects and programmes fit within focus regions or thematic areas) or are they sustainability driven (i.e. when there is no longer a need for the organisation's support)?

At the decision point to exit: provide a clear, consistent rationale on the decision to exit and how it will take place; give consideration to who internal communications should come from and when.

During implementation: determine the level of investment required to implement the exit smoothly. Find an appropriate way to support the implementing team at the right times. Update those affected on progress before the moment of exit.

Post-exit: celebrate achievements with staff and partners instead of commiserating. Allocate time and resources for embedding learning and making sure it is carried forward into the next programming cycle and organisational strategy. Consider commissioning or conducting an evaluation.

Appendix 6. Aggregated Chapter Member Survey Responses

I identify as a leader.

I'd agree.

I would strongly agree.

I would think so. I think in a lot of things I've been a part of I've taken on leadership roles.

In some cases, I'm definitely not a follower, but I would play a support role. I definitely lead myself in terms of making decisions for myself and pretty much what I want to do in certain situations.

I would say I agree with that. I think I identify as a leader, but I also like taking direction. I respect other people's opinions. I can see how I fit in both depending on the situation.

I feel like there are times that I feel like I'm not a leader. I think I have become more of a leader lately and it depends on what it is that I'm doing and what I'm comfortable doing determines how much I take the lead.

I'd say I agree to that.

(Agree)

Yes, I think that I have leadership capabilities, but I haven't had many leadership positions. It's something I aspire in my collegiate and professional agree as well.

(Strongly Agree)

Somewhat, I would think. Just because of my personality; I don't think I'm super outgoing. I'm more of an introvert. If there's a decision to be made then I will help make that decision.

I would agree.

I believe that volunteering helps me learn through hands-on experience.

Yeah, strongly agree.

Yeah, definitely I believe that. There's nothing like the hands-on experience. In academics, you can learn about other communities, but you don't get that experience. By volunteering you can get that experience.

(Agree)

Yeah, volunteering can teach you either technical skills or tactile type skills, but also about who you are, what your future goals are, and ideas about your future in general.

(Strongly Agree)

I would strongly agree with that – especially after this week.

I think the hands-on experience is a great way to get your hands dirty and get involved and learn what you're trying to study.

There are plenty of reasons to be interested in the field or be a major, but unless you're really in it, you don't truly know how it works.

Definitely. My whole school career has been based on community service and giving back. Service learning is truly important. It is very important to be in touch with what's going on in your community. The socioeconomic conditions and factors in the environment really do impact health care in how things are distributed and can affect a lot of things. It's a focus in our major and the organizations that I partner with that we give ourselves to service because we are being provided education – very important.

Absolutely. I think especially with a lot of the majors here, they're not in the medical field and so this is a nice intro to kind of see what it's like. Not necessarily in hospital setting, but in a makeshift hospital setting – so there's some leeway for them.

I think so. You can only read so much. We are visual people.

Definitely, agree.

I feel like I will make a lasting impact on the host community.

In the community here, I know that 7 elements is, but personally not so much. I think Timmy and 7 elements as whole are making a lasting effect. But I'm only on one trip so it's not really a lasting effect for me.

I think so, but there are so many other determinants of health. I think we are necessary and get them started.

I think so and I think it's different as the week goes on. I think earlier the lasting impact isn't necessarily as going or really helping them; it's more maintaining what has already been accomplished. Whereas today and tomorrow are more the initial setup to where it could be sustained to be like the earlier communities.

I think we are making an impact, but in order for it to be continuous it has to be ongoing and not one and done. I think we are part of a last changing. I feel as each brigade comes through and people get healthier then that will transcend through and make a change.

I think with the earlier communities we were making a bit more of a lasting impact because I felt like those communities were still struggling, but maybe were not able to afford their medication and the money they save with Timmy brigades they can use it for something else. Whereas in the bateys I don't see how sustainable that could be – not to say that it shouldn't be done, I believe it should – but I don't know how lasting of an impact it is. The lasting impact is different is in the bateys than the earlier communities.

I think it's hard with this program because we are here for a week and don't get to see any of the follow-up. We do a lot when we're here. We're really busy helping patients with all this stuff and giving them medicine to better their health. But after I leave I won't hear anything. I can't really see I'm having a lasting impact, but I believe I am having an impact.

I think we are in the beginnings of a change, but aren't making the type of impact people have in mind. I think we get a lot of instantaneous feedback when we interact with the patients and locals, but that doesn't mean that we are making an impact in the long run. If for some reason the brigades weren't able to come back [the communities] wouldn't be able to move forward.

(Strongly Agree)

I think that especially with Timmy's commitment coming every 2-3 months, that aspect has a long-term impact, but I think it's limited in scope because health is only one aspect of the lives of the people we are trying to help. The other problems they are facing need to be addressed as well, and yes we are having a lasting impact, but that isn't the whole story or scope of things that need to be addressed.

(Neutral)

I think I'm making an impact, but I don't know how much of an impact. We're here such a short amount of time. Maybe if we were here longer I would feel more that we were making an impact.

I'm not sure if we're actually making it lasting because it may be a more short-term kind of impact.

I believe that the skillset I will build during this medical service trip will be transferable and useful in my future.

Definitely.

Definitely. Being a scribe you learn about the patient's symptoms, the doctor's diagnosis process and treatment plan. In the future I hope to go to medical school and become a doctor and seeing how it works helps.

I think realizing what different factors go into a person's health; whether it's the 7 elements of human security or the conversations I've had on the trip with the people about how different entities work together to get things done. The interpersonal skills I'm gaining will definitely help with leadership and in just having a conversation with someone and connect with people.

Not skillset in terms of the medical aspect – in scribing, or doing triage or pharmacy work – skillset in people from other cultures, speaking other languages. There are people who have different skills and careers. Those types of skills would be helpful in the future.

I think there are a lot of medically related things that we do and I want to go into health care. I think what students are allowed to participate in gives us a hint of what we would do in a healthcare setting. Just a basic level of exposure to what is needed of a health professional from basic diagnostic procedure to medication – and we build on that later on.

I think one of the things this trip has taught me is how to interact with patients who I might not be able to communicate efficiently with because as we've seen language is a barrier, but it doesn't have to be as big of a barrier as we make it. This trip has taught me that there are other ways to communicate your thoughts, ideas, and direction without having to necessarily use words and I think that's really valuable.

I think this trip is really helpful for interpersonal communication. We are working with a lot of medical professional and it's really good to talk with them and learn to communicate with them. It's also helpful learning to talk with patients. A lot of us can't speak the language here, but being able to find a way to communicate with them is applicable to my future career.

We're all learning so much – the triage stuff and the presentations we get at night about how the organizations are formed and what the goals are. So from all sides you're getting learning and a better understanding.

Especially with the career I'm going into. It makes everything come together for me. It's one thing to read it in a book, but it's another thing to actually see it working and what the effects are.

This is a different type of learning. This isn't necessarily about medical skills, but more about how to be in a global capacity than a medical.

I think interpersonal communication and patience when you can't change a situation.

I agree, definitely. You're serving the community helping people, developing soft and hard skills.

I would recommend Timmy Medical Service Trips to my peers.

I would.

Especially for anyone pre-health professional.

Yeah, I would. I would especially recommend this program to people who haven't been in medical. This is different from trips I've done before. On trips before they give you needles, meds, and you just go and do it – it's more relaxed. You get more of that hands-on experience (medically). I think this is geared to those pre-med, pre-pharmacy and that kind of setting.

This is a pretty life-changing thing. It'll broaden your perspective and I think will make you a better health care provider. And also more culturally competent, which is a very big issue within health care. You have to be able to understand people's environments and their culture to really be able provide them the type of care that meets their needs, not only what you think should meet their needs.

As someone who is pursuing a career in medicine I do believe that medicine, health, wellness overall, is the first building block for everything – even though we do argue, which element of security has priority. Everybody has their health and I think it relates to anyone and everyone.

I think there is a lot to gain from going on a trip like this. This trip has been really organized and relaxed. I feel like if you haven't done anything like this before it is good to get your feet wet. I don't think this is quite as hands on and if this isn't your first trip it may seem different.

(Strongly Agree)

Timmy Global Health as an organization is relatively more structured than other organizations I have been a part of. Global Brigades is not as structured or organized as Timmy – we have more access to resources and have a more efficient system. I think comparatively it is a lot stronger. Additionally, I went on a brigade with my father when I was child and the other brigades I've been on Timmy has the best structure and best ability to assess patients' condition to treat them accordingly.

I think it's a great, thought provoking and eye-opening seeing how everyone here lives. And getting an idea for incorporating this into future careers. I think it's always good to get out of the American culture and see how people live and learn from other cultures as well.

(Strongly Agree)

Definitely. Especially if they're pre-med, pre-health they would enjoy it more with it being a medical brigade.

Yeah.

How likely are you to become an advocate of volunteerism, global health, and similar causes?

I definitely would be supporting for sure. If it comes I'd be advocating for Timmy or other organizations I'm involved in.

Very likely.

It's definitely one of my passions to help other people. Like the language barrier speaking Spanish I've been able to help them cross that barrier.

It's important for people to go into these trips with the right intentions and expectations. Voluntourism is pretty popular and I think some people do it for the wrong intentions and need to be self-aware and reflect on why they're doing it. I think once you're in it it's productive and makes a difference.

I think volunteerism is important in both gaining new perspectives and knowledge in your life, but also to contribute to others. I'm not sure if global health will be the focus of my volunteerism in the future, but I do think that it's an important topic to address.

I think a lot of health care system requires that people are involved in voluntourism. The health care system is very difficult and very prone to providers not caring about the people that they treat, but the benefits they receive themselves. More people are advocating for the betterment of the patients rather than seeing the benefits they receive from practicing. Voluntourism is becoming the new norm of health care and it goes hand-in-hand with service learning because when you are volunteering you're learning through your service and about service. You are able to take advantage of the opportunity not for material gain, but for gaining knowledge. Volunteering in my opinion is service learning.

Pretty likely.

I think it's really important to global health to advertise the state these kinds of places because in America we don't really see these other conditions – we hear about them and these places, but it's one thing to go and actually experience them.

The volunteerism one is interesting because I have never thought about advocating for volunteerism. Prior to college I had only done here and there volunteering. In college I have gotten more involved with organizations volunteering and it has changed my perspective immensely. I think I have gotten more out of volunteering in college than most of my classes. I think that's something that I need to focus on and get more people involved in. I am passionate about global initiatives. And regardless of my career I think that is something that I would definitely get involved.

Very likely.

I think a lot of people here are here for global health. We are interested in health care and we know what it's like in the States, but we know how bad it is elsewhere. We want to recruit people to help get the rest of the world up; and we don't know what a good baseline is, but everyone helping can help make that impact better.

Very likely.

How likely are you to donate (money) to Timmy Global Health in the future?

Maybe in the future.

It'd probably be through a letter writing campaign because it says what you get for the amount you contribute.

I'd like to know more about where the money is going. If they just approached me for donations then I wouldn't be as likely to donate than if they were asking for this because they've seen this particular issue. But I wouldn't just want to write a blind check.

I'm more likely to donate my time, not that I'm against donating money. I just don't think there's money substantial enough to account for the work I would put in on my own where I can actually see the difference. But I'm just like that. You know if you're hungry, I will take you to get something to eat. I'm not just going to give you a dollar. It's not because I don't trust you, but because I physically want to see that you are satisfied and that you are getting what you need. I'm likely to do both, but extra stars on actually putting in work and putting in time.

A little farther in the future, but pretty likely if the organization is still close to the values it has now.

We pay to get to the trip and I think that's a good investment of our money. Just giving money I don't think that I'd be super involved with that because I don't know where it's going. I would need to know purpose behind that before I would contribute.

Depends. It would be nice to be able to donate because the cause is important and requires support, but at the same time I'm broke.

I've set aside a nominal amount to donate towards Timmy every year when there's an event to contribute. I will definitely donate and continue to donate. Timmy has left a lasting impact on my life and when I become a professional, I would do anything I could to help.

Donations are crucial to fulfilling mission goal and obviously without those contributions it would be difficult to make an impact here or elsewhere.

It's important for me to donate because I feel like they're getting to a place where their model is sustainable. Whether it's their partnerships with the communities or how they are supporting their student chapters, but I think they are making a model that will last and make a huge difference in these communities.

Just being a part of it you can see much of an impact it's making. Donating not only just your time and money you can help that cause.

Pretty unlikely.

How likely are you to donate (time) to Timmy Global Health in the future?

Very likely.

Just being a part of it you can see much of an impact it's making. Donating not only just your time and money you can help that cause.

After working with medical professionals seeing they're still active and that drive is active in their career. It is really motivating to see that the desire stays with them through their career.

If I were to donate between money or time, I would prefer time because you're getting that personal aspect to those you are helping. And you gain so much more giving time than just money.

I've been increasing my involvement with Timmy Global Health and I think I would continue doing that because I like how the organization operates.

Pretty likely.

I'm already involved with Timmy and try to go to meetings when I can.

A little farther in the future, but pretty likely if the organization is still close to the values it has now.

I'm more likely to donate my time, not that I'm against donating money. I just don't think there's money substantial enough to account for the work I would put in on my own where I can actually see the difference. But I'm just like that. You know if you're hungry, I will take you to get something to eat. I'm not just going to give you a dollar. It's not because I don't trust you, but because I physically want to see that you are satisfied and that you are getting what you need. I'm likely to do both, but extra stars on actually putting in work and putting in time.

I did like the program and I think when I come back with an actual RN license it'll be different. I'm excited for Peru and I'm excited for more of the new ones than the normal site ones to be able to move with local doctors to other areas.

It's easier as a student I'd say, but once I'm a health professional or doctor it would be a good outlet.

I would love to go again, but I don't have the money for it. I'll be going on another trip with another organization.

How likely are you to donate (money) to a similar cause in the future?

Possibly in the future.

Not having been on a trip with another organization makes me less likely to donate because I am familiar with Timmy and their cause.

I have been on other ones and they're phenomenal. You can't go wrong with any organization trying to improve global health.

I'm more likely to donate my time, not that I'm against donating money. I just don't think there's money substantial enough to account for the work I would put in on my own where I can actually see the difference. But I'm just like that. You know if you're hungry, I will take you to get something to eat. I'm not just going to give you a dollar. It's not because I don't trust you, but because I physically want to see that you are satisfied and that you are getting what you need. I'm likely to do both, but extra stars on actually putting in work and putting in time.

I think it is something no matter where I am it is something important to do. And I think as more globalization takes place it is not something you can turn a blind eye to anymore – you know it's

there; you see it; you hear about it all the time in the news. I really believe as humans we are all interconnected and need to give people the opportunity to fix the issues.

I would want to see where it's going and what it is being used for; unless there was another trip like this.

Pretty likely.

I would donate to another cause, if I had the opportunity to assess their cause and their ability to benefit in the areas they work in.

If I were to donate money I'm not sure that I would personally focus on global health. I've found that I think that there are some other issues, since I've been here, that I'd be more likely to donate.

It's going to be important for me to know about causes before I donate money or time to them. I don't want to get to the point to where I'm just throwing money at causes without knowing where it's going. I would need to sit down and meet with whoever is in charge or experience what they're doing and believe in their mission.

I feel like I would have to know a bit more about the other organizations. Some other organizations are scams and you can never know. So, I would just have to learn more.

Pretty unlikely.

How likely are you to donate (time) to a similar cause in the future?

I don't know enough about other organizations to say that I would do any less or more than I have done with Timmy.

I feel like I would have to know a bit more about the other organizations. Some other organizations are scams and you can never know. So, I would just have to learn more.

It's going to be important for me to know about causes before I donate money or time to them. I don't want to get to the point to where I'm just throwing money at causes without knowing where it's going. I would need to sit down and meet with whoever is in charge or experience what they're doing and believe in their mission.

I was pretty interested in incorporating [volunteering in global health] into my career, but since I've signed up for the trip and come here that has changed. That really changed prior to the trip and more-so through the week.

I think time is more important and would be more willing.

Pretty likely.

I would definitely try to go on another trip because I think it would be a great experience and super educational.

I think it is something no matter where I am it is something important to do. And I think as more globalization takes place it is not something you can turn a blind eye to anymore – you know it's there; you see it; you hear about it all the time in the news. I really believe as humans we are all interconnected and need to give people the opportunity to fix the issues.

I'm more likely to donate my time, not that I'm against donating money. I just don't think there's money substantial enough to account for the work I would put in on my own where I can actually see the difference. But I'm just like that. You know if you're hungry, I will take you to get something to eat. I'm not just going to give you a dollar. It's not because I don't trust you, but because I physically want to see that you are satisfied and that you are getting what you need. I'm likely to do both, but extra stars on actually putting in work and putting in time.

I have been on other ones and they're phenomenal. You can't go wrong with any organization trying to improve global health.

Not having been on a trip with another organization makes me less likely to donate because I am familiar with Timmy and their cause.

I'm going on a trip to Swaziland in the summer.

How likely are you to share your knowledge and experience of volunteerism and global health with your peers?

I'll go back and tell all my friends and family. Tell Timmy about it.

All of my friends are pre-health professionals and like to go on similar trips and share experiences.

I think a lot of people are scared to go on these trips or are unsure. They don't know the people they're going with or it's unstable, but the more you talk about these trips it changes the stigma and hopefully improves in recruiting volunteers to increase impacts.

10 plus.

Even though I feel really strongly, it's difficult to convey unless [others have] experienced it. With trips like these you go home and have pictures of the kids, you have the stories of things you did

and crazy things you saw, but unless you're here with everyone and see how people react when they get their medications or their blood pressure is lower because of this medication they've been taking – it's hard to get that message across.

I think that it's really good to share what I've experienced here and push [others] to get involved. That's how I got involved because some people on this trip pushed me to sign up and try to do it. That was the main reason I decided to and if I could share that with someone else to break the barrier of the comfort level to do this I would.

Pretty likely.

I would advocate for Timmy Global Health trips for everyone.

I've definitely learned a lot through Amelia and the different presentations; the social, political, and economic issues that are surrounding the reasons why we even have to be here to help these people. I find it genuinely interesting, especially going about the 7 elements of human security and how they are all intertwined. I think that's really interesting and if that comes up in conversation with people I share this experience with, then [I would] definitely [share].

After this trip, pretty likely.

It's definitely different from local Indiana going out internationally. Some people are closed-minded and wouldn't want to go out internationally, but definitely to my open-minded friends.

Very likely.

How likely are you to start a new global health initiative on campus or in the community?

Not very likely.

There are already so many organizations out there that it's hard to start a new one. You can add to the existing ones.

Pretty likely – especially after this trip and meeting many motivated people. I think many people our age who have gotten a bad rap for being lazy and it's not like the old days, but being around this many motivated people has further motivated me to continue doing this and recommend this to my peers because it's a great career and character building experience.

I think my interests in non-profit work have shifted from global health

I think there are enough organizations to fulfill that need. I don't think I would start a new one, but could work with an existing one and improve upon it.

Not very likely. Not because I don't think they aren't important or don't appreciate the value of what I'm learning here, but I don't have the time to commit to doing that.

I am a student and don't have a bunch of time on my hands and I am very involved on campus right now and I don't think it's realistic, but I guess I am kind of involved already, but I didn't find it. In the future when I've settled down I could think about doing something like that.

I would say that's something far out in the future. Trying to get my own education done I don't think I have the knowledge base to do something like that. It could be something for the future.

I need resources, but it's something I could pitch to United Scholars and that would be easy. They encourage us to go abroad and send us all over the place.

I've been really involved in an outreach program and have cooperated with other schools to provide health care in Indianapolis and we started that. In the future I won't be that person, but I could get someone excited to do that.

Not very likely – there's a lot that goes into it. Timmy has the foundation already.

Starting something is really hard compared to supporting something like Timmy – easier to say, Timmy's great!

How likely are you to become involved in a potential Timmy alumni association?

Pretty likely.

I'd say likely.

I have never been a part of Timmy. I just applied because I love global health. We honestly don't know about Timmy in my program. Besides coming on the trip I have no basis to be a part of Timmy because there are no fliers or outreach anywhere in our school.

Pretty likely.

If it's similar to the organization itself, it sounds like something I could be interested in.

I think it would depend on what they were doing and the kind of events.

I haven't really been involved in Timmy to be able to commit to something like that. I have only been involved in the trip so it is difficult to feel invested enough to be a part of that.

I have already talked to the heads of Timmy about what I could do as a med student and starting a new Timmy chapter and expanding their base.

I think it would be really cool to connect with other people who took these trips and see what they have to say and about their experiences and what they've learned. It would be interesting to see how they incorporated these life lessons into their careers.

Very likely.

Very likely. After seeing how it works.

I don't know. I'm not sure how that would be structured to say.

How involved is this partner in the local community?

I would say pretty involved. I feel like we are pretty associated with 7 elements here and I would say it is.

I see them and even with the community advocates they have one in every community. They do more than the medical brigades and leave them; they also do the follow-ups before the next brigades.

Amyelia, Scott, and Alex who talked about the stove today – they're trying to get involved in every facet of their lives. They are everywhere and people know that and trying to make a positive impact and be as involved in their lives as they can.

I'm not sure about their involvement in the other 6 areas of human security that they've listed.

7e is host to multiple organizations and I think Timmy has a huge presence in 7e like 40-50%, while the others comprise the remaining. In some sense Timmy and 7e are one in providing health care and should be operating as one in that endeavor, but Timmy isn't always here. They are definitely two separate organizations, but the time Timmy is present they operate as one in providing health care and 7e hosts Timmy the majority of the time.

7e really tries to connect the patients with the community doctors and in order to be able to build that trust they have to be very involved in the community.

I think they do a lot for the community. I think they are putting forth their best effort and give it all they have and you can't ask more than that. I know they have their separate space and I don't think it's for their comfort level, but for the comfort level of the volunteers that may not be comfortable going out and staying in the communities.

This is hard only seeing the medical side, but we've seen the other side. I would say from the local side they are trying to hit it from all sides and are pretty involved. The water filters and stoves that they made seem like they can go a long way as well.

I feel like they're very involved because people know the brigades are coming through and they know it impacts their health and their life. People are taking the time to register and show up. They showed up and showed out.

I think they do a lot for the community, but I also think they are in their own bubble. I've done previous trips and we were living with the community priests and in the heart of their community. This is just different. It's not bad and the people know them and it's just a little different than being in the heart of where everyone is and is involved. In Haiti we were in their Catholic church we were working in the area we were in was their main hub.

They have follow-up, community health agents, and live here so very involved.

They're very involved. I wouldn't have known prior to going on this trip that they are so involved in the communities.

What is Timmy's relationship with the local partner?

We support them and help them out with the clinics. They're the base and support system and we come in and fill in the gaps on the medical brigades and support them any way we can.

It's very involved, up-to-date, and efficient. They share a lot of the same goals in their missions.

I think Timmy's relationship here is having that local contact for when 7 elements can identify places that need more medical brigades and what areas really need the work. We can do what we can from the states and come in for two weeks to provide medical care and go home, but you need someone on the ground that knows the area and knows the people, and local doctors who know what need the most help so that we can provide the best help.

I don't think it's reciprocal in the sense that the whole foundation of the 7 elements of what creates health and wellness is intertwined. Health is more than take this medication or this pill. You're really leading into...

I've been really impressed with Timmy's relationship with 7e. I think you can tell the way they speak about each other that they really respect each other's initiatives. As non-profits I think they work really well together. We have seen only a small part this week, but I don't see many conflicts and everything seems very smooth.

I wouldn't say it is an even partnership. I would say Timmy is a benefactor because they give people to come help out and medicines. I don't feel like they run the place; I think 7e is the frontrunner when it comes to the logistics, but I'm not sure how often people from Timmy come to check in on how things are going. It's tough to give a straightforward answer.

I think Timmy provides the support. I think what they do is more along the lines of these are the people can assist with the brigade; they don't necessarily lead the initiative, but they help it move forward by providing volunteers, which is an important component of what they do. When you talk about equitable partners and when you think of people perceiving the lead – I don't think they are the lead, I think 7 elements are the lead here – but they are ingrained in the culture and I think that's very important. You have to understand the culture before going about these brigades because there are definitely wrong ways to do brigades. I think they have figured out a way that consistently works and keeps the patients healthy and also happy, which is important. If they don't feel safe or secure with the people who come for these brigades then they won't come seek any help.

7e acts as a conduit for Timmy. Allowing Timmy to make healthcare better here.

I think Timmy plays a role in the health aspect of 7 elements of human security. I think they are part of the larger picture of all seven, and they are very intertwined. But, this one of the seven is very vital to the mission of 7 elements to be able to expand security into the other areas.

Timmy's impact is to address the health security of 7e. They are essentially providing a work force for 7e to provide health services and future health leaders to take on these projects that include health. I think that a portion of our funds for this trip goes to help the other projects that 7e does and that makes it even more worthwhile.

I feel like 7 elements works more with the community than Timmy Global Health does. I haven't seen, not necessarily Timmy executives, but I've seen more 7 elements personnel involved with the brigades in the communities.

Partners are like give and take, but I'm not sure if Timmy is giving or taking more from 7 elements. I feel like 7 elements is leading us into these brigades more than we are leading them.

Appendix 7. Dominican Republic Chapter Survey

Timmy Case Study Survey

Timmy Chapter: _____

Please indicate your year in school: Freshman Sophomore Junior Senior Graduate/Med School

Please indicate your area of study/major: _____

Are you a member of your Timmy Chapter's Executive Board? Yes No

Is this your first trip with Timmy Global Health? Yes No

Please answer the following questions to the best of your ability. Use the space provided for your response; limit each response to 1-2 sentences:

1. How did you learn about Timmy Global Health?
2. Why did you join this Timmy Global Health trip? Are there distinguishing traits that made Timmy more attractive than similar organizations?
3. Were you involved with your Timmy Global Health chapter before you applied for this trip?
_____ (Yes/No) If yes, how many hours (estimated) have you spent volunteering with your Timmy Global Health chapter so far this year (2015-16)? _____
4. What are you hoping to gain from this trip?

For the following questions, please circle the one answer that you feel most applies to your knowledge and understanding:

5. I believe that volunteering helps me learn through hands-on experience.

Strongly Agree Agree Neutral Disagree Strongly Disagree

6. I feel like I will make a lasting impact on the host community.

Strongly Agree Agree Neutral Disagree Strongly Disagree

7. I believe that the skillset I will build during this medical service trip will be transferable and useful in my future.

Strongly Agree Agree Neutral Disagree Strongly Disagree

8. I would recommend Timmy Medical Service Trips to my peers.

Strongly Agree Agree Neutral Disagree Strongly Disagree

9. I identify as a leader.

Strongly Agree Agree Neutral Disagree Strongly Disagree

For the following questions, please circle the one answer that you feel most applies to your knowledge and understanding based on a scale of 1-10; where 10 is very likely and 1 is not at all likely:

10. How likely are you to become an advocate of volunteerism, global health, and similar causes?

10 9 8 7 6 5 4 3 2 1

11. How likely are you to donate to Timmy Global Health in the future?

10 9 8 7 6 5 4 3 2 1

12. How likely are you to donate to a similar cause in the future?

10 9 8 7 6 5 4 3 2 1

13. How likely are you to pass on your knowledge and experience on volunteerism and global health to your peers?

10 9 8 7 6 5 4 3 2 1

14. How likely are you to take a new initiative for the good of the community?

10 9 8 7 6 5 4 3 2 1

15. How likely are you to become involved in a potential Timmy alumni association?

10 9 8 7 6 5 4 3 2 1

16. Do you know the name of Timmy's local partner in Las Canas, Dominican Republic?

Yes No

If yes, on a scale of 1-10 where 10 is very involved and 1 is not involved, how involved is this partner in the local community?

10 9 8 7 6 5 4 3 2 1

Appendix 8. Stakeholder Analysis

MAIN FINDINGS	
Area / Aspect	Description
Relationship with Timmy	
Perception of Timmy	In general, partners regard Timmy as an organization that is receptive to their questions. However, the effectiveness of Timmy’s answer depends heavily on the specific field coordinator working with the partner organization.
Assessment of overall relationship with Timmy	The partner organizations are satisfied with what they have accomplished by themselves and with the support provided by Timmy. This does not neglect that there are areas of improvement for the relationship.
Future projects with Timmy	Those organizations whose plans include program expansion would be willing to consider future projects with Timmy.
Role of Timmy coordinators	There is no consensus about the role that Timmy coordinators must/can play in the partnership. While in every case the coordinators provide a valued logistic support, the extent to which they interact directly with the communities vary. Moreover, the partners differ in their assessment of whether the coordinators should be expected to engage with the community or not.
Improvement Opportunities	
Language issues	In several communities whose native language is other than Spanish, the medical trips need the assistance of two translators (English-Spanish, and Spanish to third language) which demands more time and resources, and reduces the efficiency and effectiveness of the trip.
Interaction between Latin American counterparts	The partners consider that there is an opportunity to strengthen their capacities and the global health network centered on Timmy by interacting with their Latin American counterparts. Among the proposals are returning to the annual summits in Indianapolis to which partners’ representatives were invited, or promoting visiting trips between the partner organizations. They identify a gain in benchmarking and best practices’ learning.
Need to know Timmy’s full range of programs	The partners express that they are not aware of the different programs that Timmy implements or supports in other locations. Hence, they miss the opportunity to identify potential matches between unattended community needs and available programs.
Long-term interventions	Partners either 1) highlighted the importance of long-term interventions that they conduct by themselves or with Timmy’s support, or 2) expressed their wish that Timmy promotes longer volunteering missions. They see these options as beneficial for continuity of care, treatment of

	chronic diseases, and long-term impact on the communities.
Evaluation	
Involvement in evaluation process	There have been several initiatives to conduct evaluations from Timmy, the partners, and local research institutions. Regardless of the origin of the initiative, they consider important to have access to the results and to be allowed to participate in the analysis of these.
Reasons for evaluating	Partners see evaluation as necessary to identify changes in community needs, effectiveness of current programs, and potentials for program updating. Moreover, some of them mention the opportunity to identify if the communities are heading towards autonomy and empowerment so that Timmy and the partner can eventually exit.
What to evaluate?	Among the measures suggested by the partners are prevalence of parasitic diseases, medicine intake, and some measure that represents long-term changes in the overall community's quality of life.
Management of evaluation results	Partners see evaluation as an opportunity to validate current practices and ponder potential innovations in areas that show bad performance or low impact.