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LV Prasad Eye Institute

Improving access and quality of eye healthcare delivery

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Project Overview

Primary Host Contacts

[names removed]

Project Scope

LVPEI is an eye health facility in Hyderabad that offers comprehensive patient care, clinical research, sight enhancement, rehabilitation services, rural eye health programs, education, and product development. Care is provided at free of cost to those who are unable to pay. The problem LVPEI is facing involves large patient volumes and capacity constraints to meet the variable demand. There is currently no system that captures dynamic changes in patient demand. Opportunity exists to use effective data collection methods to expose bottlenecks and inefficiencies in the system based on patient flow, wait times and patient walk-in data.

In the course of this project we intend to research best practices in capturing vital patient flow and resource allocation data in local hospitals, analyze current data collection practices used in LVPEI, gain deeper insights in the critical challenges and offer a set of recommendations focused around developing a system that dynamically captures patient flow and resource allocation data and enables LVPEI leaders improve access and quality of healthcare delivery.

**The project scope does not include analysis of LVPEI's hospitals outside of Hyderabad.*

Key Assumptions

- MIT Sloan team will have access to all available data relevant to patient flow, resources and capacity utilizations
- MIT Sloan team will have access to all key internal stakeholders for brief interviews while on-site
- MIT Sloan team will have an opportunity to observe operations while on-site

Value to LVPEI

MIT Sloan team hopes to deliver a set of valuable insights that will help LVPEI design a system that captures key performance indicators, characterize relationships among them and helps them make better informed decision around allocating resource and improving processes, access and quality of care delivered.

Main Work Products

Phase 1: Pre-Trip (February 4th – March 15th)

The pre-trip phase of the project will be focused on developing a holistic understanding of the organization (business, operational, and delivery model), market landscape, and comparative analysis to organizations operating in the similar domain as LVPEI. This understanding will guide the team in tackling the problem statement provided in the proposal document and develop initial hypotheses on possible solutions and approaches.

Key Activities:

- 1 **Understanding LVPEI:** develop an understanding of the organization starting from the care delivery mechanism, business model, and operational model.
 - a **Identify and engage key stakeholders:** to develop an understanding of the organization the team will need to identify and engage the key stakeholders at LVPEI early. Engagement will involve interviews with identified stakeholders to understand the problem and develop the relationship prior to landing on the ground on March 16th.
 - b **Understanding the problem statement:** the problem statement provided in the project proposal will need to be understood and enhanced to identify the true need or pain points for LVPEI. Stakeholder interviews, data, and reports will provide an initial view to the team on the problem faced by LVPEI.
- 2 **Market analysis:** as part of developing a holistic picture of the market, the team will need to understand the current situation on the ground that impact the operations of LVPEI on a daily basis. These may include socioeconomic, political, and economic factors.
- 3 **Comparative analysis with regional and model organizations:** the critical portion of the pre-trip work will be to develop an understanding of the organizations operating in similar domain as LVPEI regionally in the India market and locally in the Boston metro area. The goal will be to identify what are the key best practices that work for these organizations that can be applied to LVPEI in the Indian market context.
 - a **Site visit to Mass Eye & Ear Hospital:** one potential organization that the team is looking into is Mass Eye & Ear Hospital in Boston.
- 4 **Initial hypotheses development:** based on pre-trip research conducted the team will prepare a set of hypotheses and preliminary ideas to tackle the project issues highlighted by LVPEI.

Deliverables:

The deliverable for Phase 1 will be a report and an overview presentation that summarizes key findings from the pre-trip activities listed above along with the plan for on-site work at LVPEI. This report will be delivered to LVPEI prior to the team's departure from Boston.

The overview presentation will be presented to the LVPEI sponsors and leadership on the first day onsite to provide a summarized view of the pre-trip work as well as the plan of action on the ground.

Phase 2: On-Site (March 16th to March 30th)

Key Activities:

1. **In-depth stakeholder development and market research:** The on-site portion of the work will be the most critical to understand the patient flow and the current data collection method that is used to record patient flow at LVPEI. The team will try to capture the processing time and waiting time between check-in and checkout to assess LVPEI's current efficiency and patients' experience. Based on past documentation of patient flow and our on-site survey, the team will attempt to diagnose the critical issues and bottlenecks related to the variation in patient flow and provide LVPEI with recommendations that not only improves management of patient flow, but also enhances patient experience. The team hopes to achieve this through series of activities including:
 - Patient survey and recording process/waiting time between check-in and checkout:
 - a Paying patients
 - b Nonpaying patients
 - c Walk-in patients
 - d Returning patients
 - e Walk-in patients
 - f Appointment-based patients
 - g Surgical patients
 - h Post-surgical patients
 - i First class patients
 - j Business class patients
 - k Economy class patients
 - Clinical staff interviews:
 - l Doctors
 - m Nurses
 - n Administration (IT, Accountants, etc)
2. **Recommendation Development:** The team will attempt to deliver a draft recommendations to the Operation and IT departments based on the insights from the conducted research while still on-site.

Deliverables:

The deliverables in Phase 2 of the project will be to provide a summary of analysis and insights from the market research. The team will also draft recommendations on data collection method to provide an immediate plan for LVPEI's Operation department.

Phase 3: Post-Trip (April 1st to May 2nd)

Key Activities:

1. **Refinement:** After returning to MIT Sloan, the team will work to refine the recommendations for LVPEI. Refinements will be made using inputs from the following sources:
 - a. Data and feedback collected in Phase 2;
 - b. Research on best practices and related benchmarks;
 - c. Comparison to other GHL teams' experiences and observations.

2. **Reflection:** Returning to Cambridge will also allow the team to reflect on our experience in Hyderabad, and arrange a debriefing session with our mentor. These may lead to new insights to be incorporated into our final recommendations.

Deliverables:

The deliverables in Phase 3 of the project will revolve around the final recommendations to help LVPEI optimize its eyecare delivery service. These will be presented in 3 ways:

- 1 An executive summary;
- 2 An open letter to the host;
- 3 A poster comprised of the executive summary & organizational structure.

Logistics & Travel

The team will be engaged with LVPEI from January 2013 through April 2013. We will be working remotely for Phase 1 and Phase 3 with regular communication with LVPEI through Skype and e-mail. Phase 2 will be conducted on site at the LVPEI Hyderabad Eye Institute in Hyderabad, India.

Phase 2 will last approximately two weeks, from March 16th to March 31st. LVPEI will provide accommodations for all the team members, and MIT will bear responsibility for round-trip economy class airfare from Boston to Hyderabad.

Submitted by:

Agreed to:

Ali Kamil
Dmitriy Lyan
Nicole Yap
MIT Student

LV Prasad Eye Institute

Work Plan Specifics

Tasks

1. **Rotation:** The team member will rotate for regular deliverables, such as WedUps, meeting notes, etc.
2. **Voluntary:** We hope to use a voluntary system whereby each team member will volunteer for tasks and deliverables of their interest.

Data

1. **Class Website “Section Material”:** The team will upload any articles, cases and other readings that are relevant specifically for our project. The team will upload any completed deliverables.
2. **Google Doc:** The team will create Google Doc to co-work and update our progress on the deliverables
3. **Dropbox:** The team will create a Dropbox folder to share logistical information and work-in-progress deliverables internally amongst the team.

Progress

1. **Action Item List:** The team will create an action item list to list all the tasks and designate a team member to each task so that one person will be accountable for completing the task. We will also use the action item list to monitor the progress of the task.
2. **Gantt chart:** The team will use Gantt chart to plan the activity of the project and the current schedule status.

Communication

1. **WedUps:** WedUps will be used as a primary source of regular weekly update on our progress, issues, and immediate plans.
2. **Mentor Meeting:** We hope to meet with our project mentor biweekly to verbally update on our progress, issues, and immediate plans.
3. **Team Meeting:** The team will meet twice a week after class to address any issues, milestones and decision point.
4. **Skype Conference:** We hope to speak with our host contacts three times before our visit on-site. The Skype conference will be used to update our host on our progress and questions to the host.

Task Breakdown by Week

Category	Activity	Phase 1				Phase 2		Phase 3				
		February		March				April				
		18	25	4	11	18	25	1	8	15	22	29
1) Understanding LVPEI	Identify & engage key stakeholders											
	Understand problem statement											
2) Market Analysis	Research for country profile											
	Research for eyecare industry											
	Understand LVPEI operations											
3) Comparative Analysis	Site visit to Mass Eye & Ear Hospital											
	Benchmark comparison											
	Develop initial hypothesis											
4) Field Research	Patient surveys											
	Clinical workflow observation											
	Clinician interviews											
	Refine hypothesis											
5) Recommendation Development	Draft initial recommendations											
	Additional data collection											
	Refine recommendations											
	Compare to other team findings											
6) Reflection & Refinement	Post-trip debrief with mentor											
	Individual reflection											
	Finalize recommendations											
7) Wrapup	Communicate with host											
	Prepare video											
	Prepare blog post											

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