2016

Needs Assessment and Down Selection in Guatemala

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http://hdl.handle.net/2027.42/122849
ABSTRACT
A team of sixteen students traveled to Guatemala in March 2015 to conduct needs assessment while volunteering in mobile clinics. Observations were collected and synthesized into over 60 problem and need statements. These statements were down-selected to ten. Then, three statements were chosen through several rounds of literature review and selection rubrics. The three statements are currently being pursued to complete a final down-selection to one problem and need statement.

RESULTS
• Develop a diagnostic tool that allows doctors to accurately identify the respiratory condition that the patient possesses.
• Develop a method to facilitate breathing in patients with severe upper respiratory infections.
• Develop a method to remove pollutants and toxins from air inside the home.

IMPACT
Throughout this process, the team has gained a better understanding of front-end design processes, namely in-country needs assessment, literature review, and down-selection. By tackling challenges during the project, the team has developed an understanding of the challenges with and importance of rigorous front-end design. The team has also experimented with and refined its organizational structures. Most importantly, the team has learned the importance and benefit of working with strong community partners and has begun to foster a growing partnership with the cohort at Universidad de Sans Carlos de Guatemala.

FUTURE WORK
Working with the USAC cohort, the team plans to continue to conduct literature review and benchmarking to down-select to one problem and need statement. The team projects to have a design complete by May 2017.

ACKNOWLEDGEMENTS
A huge thanks to Emma Kellenberg Callewaert, Michelle Bakker, Amy Blatt, Tim Cha, Eric Cosky, Trish Dine, Ashley Gray, Saumya Gupta, Yoani Herrera, Christine Nisula, Sanjana Murali, Paula Rodriguez, Roja Swarnam, Pratik Vaidya, Erik Thomas, Nic Ditzler, Amanda Ejups, Jennifer Lee, Kiran Prasad, Ryan Thomas, Katie Uvick, Kayla Wlock, Jose Monzon, Andrea Gabriella Reyes Hernandez, Christian Alvarez, Dr. Erwin Calgua, Dr. Susana Arrechea Alvarado, Prof. Aileen Huang-Saad, and Prof. Kathleen Sienko.

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OBJECTIVES
• Down-select to one problem and needs statement
• Establish community partners to support project

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