



ReSurge
INTERNATIONAL



Operating Plan

Erin Connors, Jessica Huang, Clementine Jacoby and Carrie Ting

Design for Extreme Affordability, 2015
Stanford University

Table of Contents

I. EXECUTIVE SUMMARY	2
II. PROBLEM & NEED	4
III. SOLUTION DESCRIPTION.....	5
IV. MARKET STRATEGIES	9
V. COMPETITIVE ANALYSIS	12
VI. OPERATIONS & MANAGEMENT PLAN.....	14
VII. LEARNING PLAN	17
VIII. FINANCIALS.....	19
Appendices	20

I. EXECUTIVE SUMMARY

Problem

Currently, over 2,000 people a year die from burns in Nepal. But this is a solvable problem, as skin, like other organs, can be donated after death. Donor skin grafts act as super bandages for burns, preventing infection and reducing pain as the victim heals. Last year, the ReSurge Nepal team established Nepal's first Skin Bank at Kirtipur Hospital in Kathmandu. Today, the facility is fully operational, but getting skin in the bank so that it can save lives remains a tremendous challenge. Organ donation is uncommon in Nepal. Furthermore, donor registration isn't enough, as donations require family consent. To give their consent, **grieving families need a non-disruptive and rewarding donation process they can trust.**

Solution

Establishing trust requires fostering consent long before a donor's death. A public awareness campaign can aid in priming but can't replace the personal conversations that provide information and address family members' concerns. Our challenge is to develop a person-to-person model for initiating these conversations that can scale.

Rotary and Lions Clubs are popular hubs for philanthropic activity in Nepal. Currently, presentations delivered to clubs by the skin bank team generate lots of enthusiasm. In March 2015, the Lions Club District president expressed interest in making Skin Donation a District-level priority. But today, these presentations are one-off events with little follow-up, so enthusiasm fades. We believe that, once properly equipped, this existing club infrastructure can be mobilized as a "network of champions" for skin donation, charged with disseminating trust through conversations about skin donation.

The "**Champion in the Box**" is a ready-made resource that combines all of the tools a Club needs to take on the project of building trust in the skin donation process. It provides an action plan that reduces the task of building family trust into actionable steps and all the tools needed to maintain momentum along the way.

Market Strategies

We plan to reach trusted community champions through Rotary and Lions Clubs. Our solution is designed to scale the Nepal Team's outreach efforts by empowering clubs to energize and educate their own members.

The two key stakeholders in our solution are Rotary and Lions Leadership and ReSurge (both in Nepal and the U.S.). This summer, we will continue conversations with Kathmandu-based Rotary Clubs that Jessica and Clementine started in March. With a tangible solution in hand, we're optimistic that this initiative can be made a district-level priority in Kathmandu. We will then identify champions within clubs to launch the

Champion in a Box prototype. ReSurge is on board with our proposed solution. We plan to demonstrate proof of concept through the pilot and to provide a supporting business and operating model by mid-September when we transition full ownership of the project.

Competitive Analysis

The Champion in a Box solution is more effective than mass communications because it leverages a network of trusted community members. Our solution is also scalable, enabling faster recruitment and training of champions than ReSurge Nepal's current outreach methods.

Operations & Management Plan

Long term, the “Champion in a Box” will be turned over to ReSurge. However, the Stanford Team hopes to complete additional steps before that transition. The prevailing situation in Nepal following last month’s devastating earthquakes has stymied in-country testing. We therefore envision a continuation plan with three phases. Phase 1 will focus on Product Refinement and Trial—we hope to use Social E Lab funding to prepare for a successful handover by integrating the “Champion in a Box” into ReSurge’s Ecosystem. In Phase 2, we will test the full-scale prototype with a single club and evaluate buy-in, member enthusiasm, and family response. Phase 3 comprises the full roll-out of the “Champion in a Box.”

Learning Plan

Careful monitoring of the kit materials and customer channels will be key to achieving the desired outcomes. Phase 1, described above, will involve extensive user testing aimed at answering questions around our prototype (e.g. Can the “Box” materials be produced in Kathmandu?) and our Business Model (Can we recruit an individual with the requisite skills to lead Phase 3 rollout in Kathmandu?). During Phase 2, user feedback will be measured against a number of success metrics developed during the quarter (e.g. % of registered donors who have conversation with at least one family member). In Phase 3, responsibility for monitoring and evaluating these metrics will transition to ReSurge.

Financials

Phase 1 costs include video production, printing box materials, in-person awareness events, and Stanford Team support. Given the precedent (in India) for Rotary Clubs to financially support skin banks, we are optimistic that we will be able to secure funding from Rotary Clubs to run the Phase 1 pilots. Phase 2 costs will include printing and a salary for an FTE to run club campaigns, champion trainings, and data collection.

Impact

There are over 35 Rotary clubs in Kathmandu, with an estimated 30 members each. The skin bank has capacity for 70 skin grafts. Given these numbers, we are optimistic we can fully stock the bank with our Champion in a Box initiative.

II. PROBLEM & NEED

Severe burn injuries remain a tremendous health crisis in Nepal. Currently, burns primarily caused by open fires used for heating, lighting and cooking, affect more than 55,000 people annually. Over 2,000 of these burn patients die unnecessarily each year. While hospitals in the US are able to treat burn patients with injuries covering up to 90% of their bodies, in Nepal a patient suffering from a burn that covers more than 40% of his or her body is currently not able to be saved. A primary reason behind this disparity is access to a supply of skin grafts in a region where artificial skin alternatives are not affordable. Donated skin acts as a “super bandage” for burn injuries, protecting the victim’s body from infection and exposure to provide more time to heal, thereby increasing the rate of survival.

The ReSurge International (ReSurge) Surgical Outreach Program in Nepal recognized the importance of having skin grafts for acute burn patients and worked with a Design for Extreme Affordability team last year to establish the country’s first ever Skin Bank at Kirtipur Hospital in Kathmandu. The Skin Bank, which officially launched operations in October 2014, has the capacity to store up to 70 skin grafts, which could allow ReSurge to save an additional four burn patients a month. However, getting skin in the bank so that ReSurge can actually start saving these lives remains a tremendous challenge. The Skin Bank did receive its first donation in May 2015. While this is a promising development, the donation arose from a unique situation where a high profile donor contributed his body to medical purposes in a suicide letter. The concept of organ and tissue donation is still quite foreign in Nepal. Unlike many countries in the developed world, Nepal lacks a National Donor Registry and few hospitals perform transplants. The exceptions are cornea and blood donation, which have a much longer history.

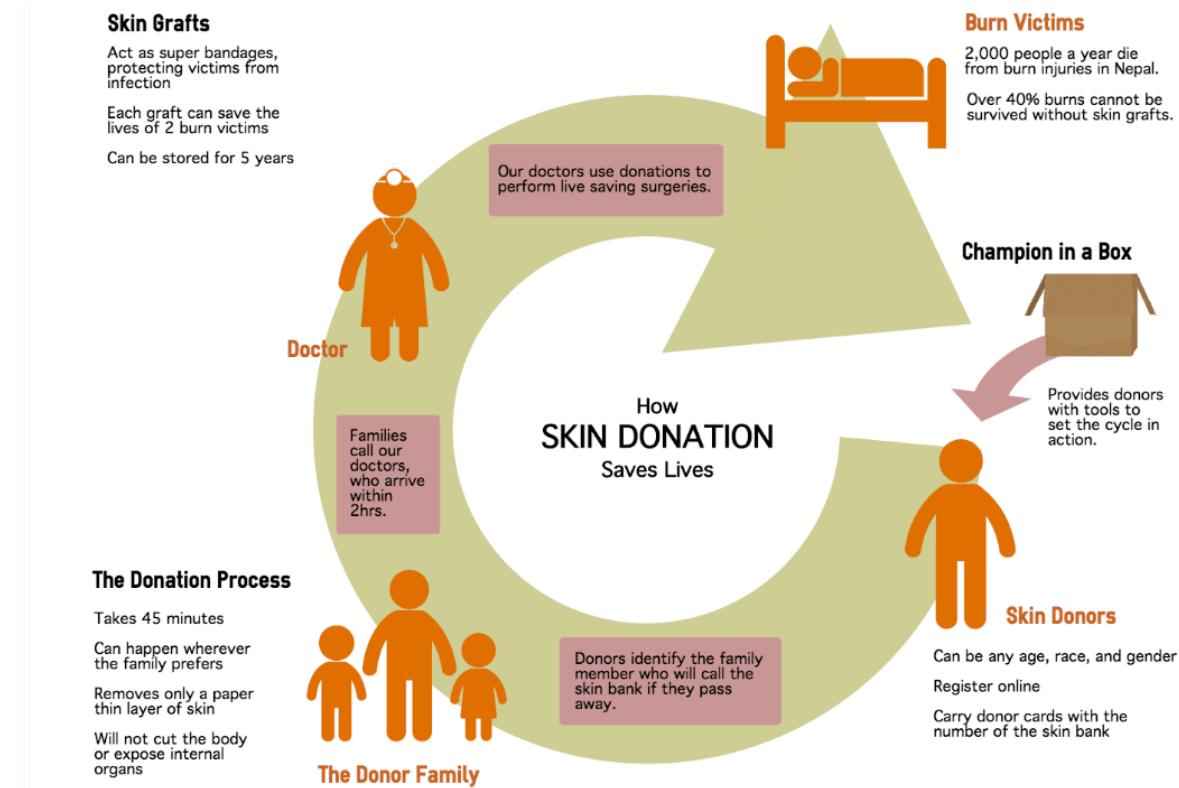
While registering is an important step to increase the donor pool, posthumous follow-through hinges on consent from family members. There is a culture of collective decision-making in Nepal and the family can override the donor’s decision if there is not unanimous consent. This consent is shaped by a combination of cultural, religious, and political factors in Nepal, but perhaps most significantly, by the perceived credibility of the process.

Funeral rites in Nepal are elaborate, steeped in tradition and often carried out in the public eye. Incorporating a donation process that might disturb these practices in any way is enough cause for concern to refuse consent. Furthermore, the general public is often not familiar with Nepal’s burn problem and how critical a role skin donation can play in saving lives. While Nepalese are generally altruistic people and believers in the “karmic benefit” derived from helping someone else, the region has flourishing illegal trade in organs and so doubt about the benefit of skin donation is another hurdle to gaining consent. In other words, in order to give consent, **grieving families need a non-disruptive and rewarding donation process they can trust.**

III. SOLUTION DESCRIPTION

Trust – Our Core Solution Concept

Establishing trust means laying the groundwork for family consent significantly further upstream than the time of the death. If the conversation about consent is initiated in an acute setting of bereavement without this priming, it can lead to the family feeling taken advantage of. The Nepal Eye Bank experienced this when they moved their tissue procurement operations onto the grounds of the Pashupati Temple and began approaching families at the time of cremation. A public awareness campaign is an excellent tool for priming, but doesn't negate the need for a more sensitive personal conversation that both provides information and addresses family members' individual concerns. Our challenge was to develop a person-to-person model for initiating these conversations that can successfully scale.



The Network of Champions

Today, ReSurge's awareness-raising efforts are primarily focused on delivering presentations at individual Rotary and Lions Clubs. These clubs are popular hubs for social activity in Nepal and—with a combined membership of approximately 1,200 in Kathmandu alone—are very influential. Furthermore, they are service-oriented

organizations. Clubs sponsor community service projects and members are expected to volunteer their time and talent to further the projects' goals. The ReSurge presentations, delivered by Dr. Shankar and his team, generate a lot of enthusiasm about skin donation from these clubs. In fact, during the Stanford Team's visit in March 2015, the Lions Club District president expressed an interest in taking Skin Donation on as a District-level priority for the year. However, under the current model, these presentations are one-off events with little follow-up and the enthusiasm fades. If properly motivated and equipped, this existing market could be mobilized as a "network of champions" for skin donation, charged with initiating these person-to-person conversations in their communities and consequently, building family trust in the process.

The Champion in a Box

The Champion in a Box provides the means to do this. It is a ready-made resource containing all of the tools a Club needs to take on the project of building trust in the skin donation process.



It comes with a start-up guide, describing how to use its components:

Skin Donation Action Plan ROTARY INTERNATIONAL DISTRICT 3292		Use the Champion in a Box Guide or contact ReSurge Surgical Outreach Team to assist you in developing your Action Plan			
Club Name: _____	Project Leader: _____				
Zone Number: _____	Date of Orientation: _____				
ACTION GOALS	BOX TOOLS	TIMING FOR ACTION	COMPLETED	# OF MEMBERS	
1. Introduce During an upcoming club meeting, begin to inform members about the need for skin donors. Encourage them to invite their family members to the Awareness Video and answering any outstanding questions members might have.	1. Awareness Video	1 / 3 2 / 3 3 / 3	_____	_____	
2. Induce Following the presentation, invite members to immediately register as donors at the meeting (via www.nepalskinbank.com)	2. Donor Registration Cards	1 / 1 2 / 2 3 / 3	_____	_____	
3. Inform Inform newly registered members about the importance of family consent and skin donors, the need to speak with their families about that decision. Address any outstanding concerns they might have.	3. TACs	1 / 1 2 / 2 3 / 3	_____	_____	
4. Involve Encourage registered members consent to do what they can help this conversation with family. Keep in close contact with these members to ensure that the conversation takes place and to provide additional support.	4. Conversation Card	1 / 1 2 / 2 3 / 3	_____	_____	
5. Inspire Encourage registered members to call the Skin Bank on their behalf.	5. The Box	1 / 1 2 / 2 3 / 3	_____	_____	

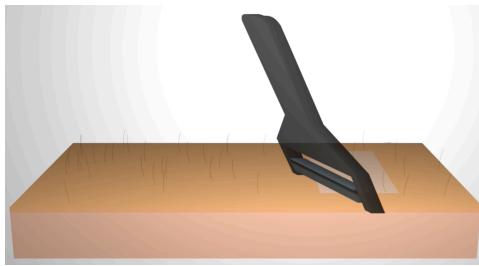
The Action Plan: modeled after Rotary's own Membership Development Action Plan, this tool gives Clubs a clear, specific set of actionable steps to take on sponsoring this project over the course of a year along with a corresponding timeline. It is designed (a) to reflect all of the behaviors the Stanford Team identified as necessary for the project to have its intended impact; but also (b) to break down the task of building family trust into actionable steps that motivate new donors and retain the interest and commitment of registered donors.

Each of the following resources corresponds to steps in the Action Plan:

The Awareness Video (Step 1) corresponds with the first step in the Action Plan and will be shown to members at an awareness event hosted by the club. Its contents focus on the two critical messages associated with building trust in the donation process: (1) it IS rewarding; and (2) it IS NOT disruptive of traditional funeral rites.

The video communicates the first message (**rewarding**) by putting a name and face to the problem of burns in Nepal, and by communicating the benefits of skin donation through the story of an actual survivor.





The video communicates the second message (**non-disruptive**) by using animation to illustrate the grafting process and what the body will look like afterward, and by answering common questions that arose in the Stanford Team's user testing.

The video as a whole is intended to motivate members to not only register (Step 2) but talk to their families, friends, and others about their decision (Step 3) and to equip them with the information they need to do so with confidence and passion.

The Donor Registration Card

(Step 2) will be provided to members that make the decision to register. It contains important information such as the phone number of the Skin Bank but also serves as important symbol of the donor's intent for their conversation with family.



How Skin Saves Lives (Frequently Asked Question)

1. How can donated skin help save a life?

More than 2,000 people a year die from serious burn injuries in Nepal. These burn injuries are caused primarily by open cooking fires. Currently, if more than 40% of a patient's skin area is burned, it is not possible to save them. Skin donation can change this. Donated skin acts like a super bandage, protecting the victim's body from infection and giving it time to heal. It also reduces pain, reduces the cost of treatment, and increases the survival rate of patients.

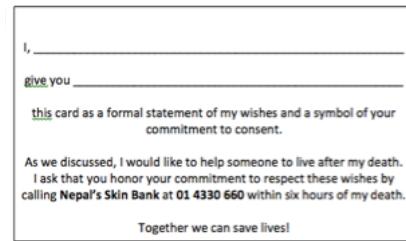
2. When and where can skin be donated?

Skin can be donated within 6 hours of death. After being called, our doctors will arrive within 2 hours to conduct the donation. This can be done in a hospital, in the home of the deceased, or at another site that the family prefers. Our doctors can accommodate most locations.

The FAQs (Step 3) are meant to supplement the Awareness Video by providing donors with a resource they can have on hand to use in their conversations about skin donation with their family. The document reflects the top 10 questions about the skin donation process that have come up in the Stanford Team's testing to-date.

The Conversation Card (Step 4)

will be provided to donors to give to the family member who will call the skin bank in the event of their death. The card contains the number of the Skin Bank. It symbolizes the family member's commitment to call and is meant to trigger that commitment when the donor passes away.



Iterate and Multiply (Step 5) In this final step, registered donors who complete Steps 1-4 can become champions themselves by getting a Champion in a Box of their own and using the materials to guide friends, family, and others in their network through the steps that they've just mastered.

Future Directions: Building Community and Competition

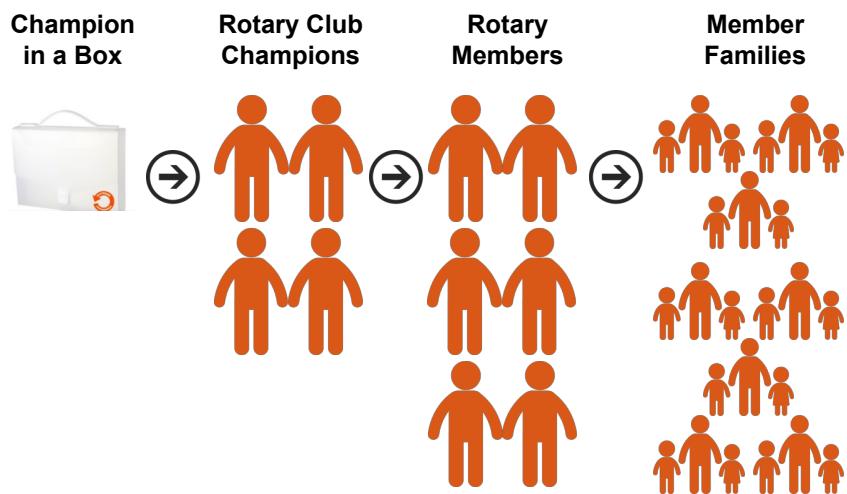
We of course hope that many long and healthy years pass between the time when a donor registers and when they donate. In order to retain donor engagement during those years, we envision building a community around skin donation to engage, involve, and recognize our network of champions. These efforts may include a SMS messaging campaign that updates donors on the status of the Skin Bank and lives recently saved, online social media communities for spreading news and providing outreach opportunities, and annual in-person celebrations. Some of this has already begun. When our team was on the ground in March, we launched a Nepal Skin Bank Facebook community, which has reached 152 likes with almost no maintenance. We also built an online registration form, investigated SMS campaign pricing with a Nepalese telecom company, and held an in-person awareness event attended by about eighty doctors, patients, journalists, and community members.

Furthermore, because the Champion in a Box toolkit breaks down the skin donation journey into concrete and measurable steps, there is opportunity to introduce some friendly competition into its implementation. This could include incentivizing intra-club competition with metrics like “number of registered donors” and “number of donors who have identified the family member who will call the skin bank in the event of their death” and recognize clubs that were able to inspire the most new champions to action. The implementation of this plan would be contingent on a fraternal atmosphere among the Kathmandu Rotary Clubs.

IV. MARKET STRATEGIES

We plan to reach trusted champions within the community through Rotary Clubs¹. Dr. Shankar and his team have given over twenty, in-person presentations to clubs and organizations in the Kathmandu metropolitan area. To help scale their efforts, we are proposing that Dr. Shankar and his team instead make a strategic investment in interfacing with club leaders.

Leaders will learn how to train champions by Shankar and his team, enabling them to take on the task of raising awareness and generating excitement among their club members. Leaders will then distribute the box materials to their members, empowering them to obtain consent from and spread awareness through their families.



Our approach to engaging Rotary Clubs will have four stages:

- First, we want to make skin donation awareness a district-level priority. We understand from Rotary Club leaders that this has been critical for past campaigns to gain traction within Rotary.
- Second, we will select individual clubs within those districts to run the pilot. We are now in active conversations with the Yala Club in the Patan District and the Midtown Club in the Kathmandu District, both of which we believe will be great candidates for the pilot.

¹ Throughout this section, most of our references to “Rotary Clubs” are also applicable to Lions Clubs and Rotaract Clubs. Because we plan to launch the pilot with Rotary Clubs, we’ve focused on them in much of this document. How and when we expand to other organizations will depend on the cordialness of the relationships between these clubs in Kathmandu in addition to other factors.

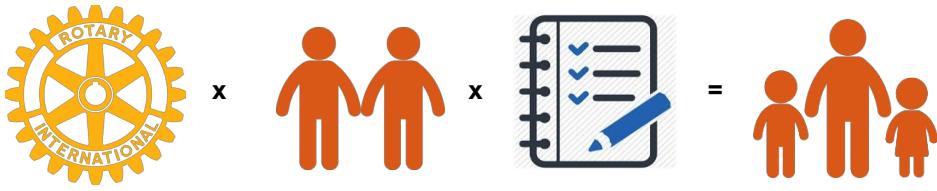
- Third, we will identify club-level champions who will be able to run the solution prototype and have ownership of the campaign. We will hold an orientation with the identified champions at which the Stanford Team and the ReSurge Nepal Team will be present. The club-level champions will receive the “Champion in a Box” toolkit and develop action plans for their clubs.
- Finally, we will roll out the prototype to additional clubs and potentially promote friendly competition between them.

We have chosen to pilot this solution with Rotary Clubs because we believe they are aligned in four critical ways.

- Rotary Clubs are an **existing structure** that does not need to be built from scratch.
- They are a **networked organization** that serves as a trusted body within the community.
- Rotary Clubs have an **aligned mission** with service-oriented members who will be pre-disposed to our message.
- Rotary Clubs have indicated **early motivation** and support for the idea.

We are excited about the potential impact of this approach. There are an estimated number of 35 clubs in Kathmandu, with an average of 30 active members each. If we estimate that 50% of all members will complete the training and gain family consent for skin donation, then we could potentially reach 550 families through this program in Kathmandu alone. We need to test in the field in order to determine what percentage of families who have been primed and have committed to calling will indeed call in the event of a donor’s death.

The skin bank currently has capacity for 70 grafts. This means that we could fully stock the bank if one out of every eight families who commit to doing so call after a donor’s death. We think that this is a reasonable expectation, and are optimistic that we can reach an awareness tipping point in the near future after which a structured campaign will no longer be necessary. Before then and after the pilot, we also hope to expand our strategy to other clubs and organizations to keep the bank fully stocked.



35 Chapters

Total # of Rotary Clubs in Kathmandu

30 Members

Average # of members per Rotary Club

50% Obtain Consent

Estimated # of Rotary Club members who will gain family consent

550

Families

Potential number of families reached by program

Nepal Skin Bank can hold

70 skin grafts

We are also hopeful that this solution will benefit from a multiplier effect. The last step in the action plan asks Rotary Club Members who have completed all of the preceding steps to become a champion themselves by receiving a box of their own, holding an event in their neighborhood, community, or church, and starting the cycle afresh.

We are confident that this approach is feasible because of the contacts we have established over the past few months. Our local Rotary Club contacts have referred us to Dilendra Raj Shrestha, who is the district governor of Nepal Rotary (encompassing over 70 clubs), and we have the contact information for the past presidents of the Patan and Kathmandu districts.

Our proposals have been met with enthusiasm from Rotary and Lions Clubs leaders who we spoke with while in Nepal in March. While there, we also presented to a Rotary Club in Kathmandu and initiated discussions with district-level Lions Club Leadership, who were ready and willing to take on the campaign. Now that we have developed the concept further, we are excited to return to Nepal to follow-up on those initial discussions and engage Rotary Clubs at a more tactical level. It's worth noting that while our approach focuses on Rotary Clubs, we also see the potential for working with Lions Clubs and will need to manage that relationship carefully.

ReSurge is currently on board with our proposed solution. We plan to demonstrate proof of concept through the initial pilot and provide them with a supporting business and operating model that will give them the confidence to take on the project full-time.

V. COMPETITIVE ANALYSIS

This is an area where there is a lot of white space when it comes to potential solutions. Existing efforts have been primarily geared towards raising broad awareness about organ and tissue donations. Beyond traditional mass communications, the Champion in



a Box solution can target likely potential donors and follow-up from registration to donation by leveraging a network of trusted community members. For example, the Tilganga Eye Bank has invested in mass communication techniques, such as radio announcements, television spotlights, print advertisements, signage, products and gifts with branding, and street rallies.

While the priming has helped put eye donations in the public eye, a few years passed before the first donation was made. Additionally, it is not clear how these efforts have directly contributed to increasing donations or which methods might be more effective than others. In contrast, the Eye Bank's employment of family grief counselors has been strategically enabled personalized conversations about the donation process.

Approximately 10% of families who are approached by the grief counselors now give their consent. The Skin Bank is exploring a partnership with Tilganga Eye Bank, to piggyback on their mass communication efforts and have grief counselors also inquire about skin donation when talking to families primed for eye donation. The Skin Bank team has been featured on the Eye Bank's radio, as a start, and the grief counselors may also be equipped with a version of "Champions in the Box" materials. A unique aspect of the Skin Bank network of champions is how there is support and encouragement for person-to-person conversations to happen well before the time of death, which is a more difficult time to be broaching the subject of organ and tissue donation.

Service-oriented clubs like Rotary remain one of the most promising avenues for building a network of trusted community members to have personalized conversations with donors and families. These clubs are widespread across Kathmandu Valley, with far more members than the 5 Eye Bank counselors. Members are highly organized, well-connected, resourceful, and well-respected within their communities for the service work that they have been doing. Rotary Clubs have been effective at leveraging their network to increase blood donations in Nepal, and there are opportunities to collaborate with these existing efforts to spread awareness about skin donation.



BLODAN

Our method is more scalable than the current method of in-person training. ReSurge's surgeons have been personally going around to give presentations to raise awareness. Events can take a long time to organize and run, and result in as few as a handful of donor registrations among hundreds of attendees. There is typically a large amount of

initial enthusiasm, but few avenues for follow-up. Anyone wanting to learn more about skin donation to be able to help spread the word to their own contacts currently needs to go through the information with the Skin Bank leadership, which can several hours up to entire days. The “Champions in a Box” model has identified what critical information is needed to empower people to have conversations about skin donation with family and friends, distilling a training process used to take many hours of a surgeon’s time down to a couple minutes of video and a few pages of information. Initial testing has shown that this model’s effectiveness at providing the necessary information, with analogous users being able to have 30-90 minute conversations with family members about skin donation and gaining consent. The plan is to test these materials and methods more in Nepal during summer fieldwork.

In addition to the potential partnerships with the Eye Bank and Blood Bank, there are also opportunities to partner with other donation efforts in Nepal to create a national



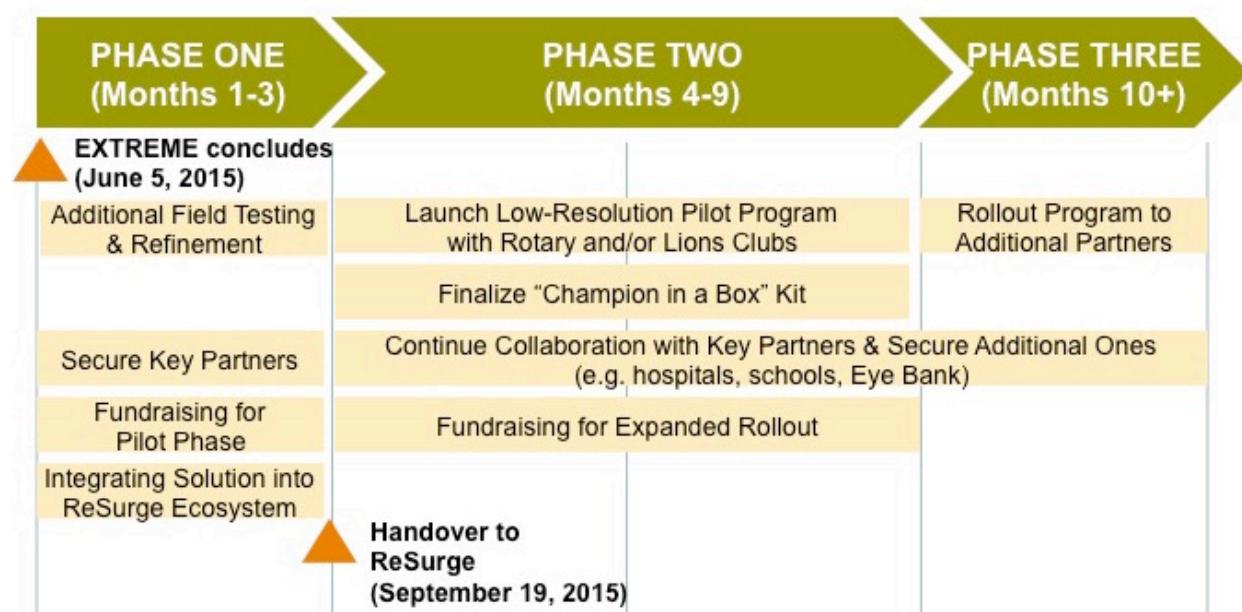
coalition for organ and tissue donation. Research into similar coalitions in the United States has shown that people may find it easier to think about and give consent for donating organs and tissues, including skin, when they are packaged together. Rather than compete, these organizations can work together to raise awareness about how medical donations can save lives. The government has set aside a couple rooms for donation collection before cremation at one of the important Hindu and Buddhist funeral sites.

The “Champions in a Box” model enables faster recruitment and training of champions than ReSurge Nepal’s current outreach methods, and leverages a network of trusted community members for more effective persuasion than traditional mass communication. We aim to partner, rather than compete, with other organ and tissue donation efforts in Nepal. Our hope is that the different actors at play can piggyback off of each other’s efforts, from priming the general public to having person-to-person conversations.

VI. OPERATIONS & MANAGEMENT PLAN

This plan describes how our team plans for the project to continue starting in early June. Long term, the team plans to turn the “Champion in a Box” kit over to our partner, ReSurge International. However, there are additional steps that we feel our group is best suited to complete before making the transition to ReSurge.

While our team is making significant progress on developing kit materials through Design for the Extreme Affordability, the prevailing situation in Nepal following last month’s devastating earthquakes has made in-country testing impossible during the course. This has particularly impacted the team’s ability to stress test key assumptions we are making about Customer Channels and Key Partnerships. We therefore envision a continuation plan divided into three (3) phases:



Phase I (June-September 2015): Testing & Refinement

This stage is aimed at advancing the project and setting it up for success after a handover, anticipated at the end of Phase I. We believe that the following are the key deliverables for Summer 2015:

1. **Prototype Field Testing and Refinement:** Members of the team will travel to Kathmandu to complete additional field testing of the preliminary “Champion in a Box” materials with Rotary Club presidents, members, and their families. Yala Club in Patan and the Club of Kathmandu Mid Town have been identified as target clubs for this testing. Key assumptions in the Business Model, particularly those associated with Key Partnerships and Customer Channels will also be stress tested

with District Governors and Club presidents. The Stanford Team will then work with ReSurge Nepal to refine “Box” materials and the Business Model according to the feedback received for the full pilot in Phase II.

2. **Securing Strategic Implementing Partnerships:** We will secure several key implementing partnerships, including Rotary International District 3292 and/or Lions International District 325 that are critical for allowing the “Champion in a Box” solution to successfully scale.
3. **Fundraising for Full Pilot Phase:** The team will also work to secure funds for a six-month pilot roll-out of the refined “Champion in a Box” kit (see below). Rotary International District 3292 has been identified as a potential source of funding for this phase as there is precedent in their sister District in India directly supporting the Skin Bank at their National Burns Centre. With the increased attention on Nepal given the recent devastating earthquakes, we anticipate that there may be new potential sources of funding from the aid agencies currently leading relief efforts.
4. **Integrating “Champion in a Box” into ReSurge’s Ecosystem:** This will include the recruitment and training of an additional ReSurge/phect-Nepal staff member responsible for managing the full pilot phase of the project.

Management Plan:

Stanford Team members (lead):

- Erin Connors: full-time
- Carrie Ting: part-time from Palo Alto
- Clementine Jacoby: part-time from Mexico
- Jessica Huang: part-time from Uganda

ReSurge Nepal staff (assist):

- Dr. Shankar Rai: Fundraising/Integration
- Dr. Bishal Karki: Content/Partnerships
- Hemanta Dhoj Joshi: Testing/Translation

Phase II (October 2015-March 2016): Full Pilot Roll-Out

This phase would involve the initial proof of concept for the refined “Champion in a Box” kit, to be conducted with Rotary International District 3292 and/or Lions International District 325. The main goal of this pilot is to test various components of the full-scale prototype we have developed, including evaluating club buy-in, member motivation and confidence, and family response. The Stanford Team may remain involved in an advisory capacity during this phase, but hopes to have fully transferred ownership of the project to ReSurge International staff in Nepal.

Phase III: (April 2016-): Roll-Out to Additional Partners

This phase comprises the initial roll-out of the “Champion in a Box” roll-out to other potential partners (e.g. schools, hospitals, local NGOs, expat organizations). Eventually, we hope that skin donation will become more of a social norm, and that the program will transition toward focusing on a more general public audience. We envision that the tools in the box will can be used but perhaps in a different form. For example, rather than having the animation as an awareness-generating tool for a Rotarian, it will be playing in the background at hospitals.

VII. LEARNING PLAN

In order to assure the long-term success of “Champion in a Box,” careful monitoring and readjustment of the kit materials and customer channels will be key to achieving the desired outcomes.

Phase I: Product Refinement and First Trial

During additional user testing and prototyping this summer, the following questions are important to answer:

- **Prototype**
 - Does “Champion in a Box” kit adequately address the key questions that Rotary members have about the skin donation process and its associated reward? Does it make members feel sufficiently passionate and confident about skin donation to (a) register as a donor; and (b) have conversations about skin donation with their families?
 - Does taking part in a conversation with their registered family member make families feel sufficiently confident in the donation process to agree to give consent when the time comes? What else would they need?
 - Does the Action Plan sufficiently “shrink the change” and “script the critical moves” to enable full implementation by clubs, members, families?
 - Can the “Box” materials be produced in Kathmandu? What is the final associated cost?
- **Business Model**
 - Are the Rotary and/or Lions clubs in Kathmandu willing to take this on as a district-level project given the current situation in Nepal? Will the membership of those clubs allow the “Champion in a Box” to sufficiently scale? Are the clubs’ commitment to service, along with a bit of (implied) competition, sufficient incentives for them to successfully take on building community trust in skin donation as a project for the year? Can we identify individuals “champions” within each participating Club to lead the implementation of their Action Plan?
 - Will the workload of the existing ReSurge Surgical Outreach team in Nepal necessitate that we hire an additional staff member to manage the roll-out of “Champion in a Box?” Can we recruit an individual with the requisite skills in Kathmandu?
 - Where is financial support coming from for the pilot phase?

Feedback from Club leadership, members, families and ReSurge staff will be gathered primarily through surveys administered during testing (See **Appendix X** for surveys). During Phase I, the Stanford Team will be responsible for compiling the surveys and suggesting associated changes to the project.

Phase II/III: Full Pilot Roll-Out/Roll-Out to Additional Partners

During Phase II, user feedback will be constantly monitored, as in Phase I. Specific success metrics to be measured include:

- % of trained “champions” that increase their passion and confidence (on a 1-10 scale at least above a 7) about taking on the cause of skin donation in their respective clubs as a result of the “Box.”
- % of participating Rotary Clubs that fully implement the developed “Action Plan.”
- % of members exposed to the “Box” who register as skin donors.
- % of donors who feel motivated and prepared (on a scale from 1-10, at least above a 7) to have conversations about skin donation with their families.
- % of registered donors who have conversation with at least one family member.
- % of families that take part in these conversations who feel more confident about the skin donation process (on a scale from 1-10, at least a 7).
- % of registered donors who also identify the family member who will call the Skin Bank when the time comes.
- % of designated family members who actually end up calling the Skin Bank.^{**2}

During Phases II/III, ReSurge will be responsible for monitoring and evaluating these metrics in cooperation with individual Rotary Clubs. In addition to surveys, feedback will also be obtained through Rotary Club and Skin Bank registry records. It is expected that Rotary members well self-report on the metrics relating to the conversations with their families.

² ** denotes a long-term impact metric, the measurement of which will only be possible when a registered donor actually passes away.

VIII. FINANCIALS

The startup costs associated with Phase 1 will include producing the awareness video, printing the Champion-in-the-Box materials, and hosting in-person events (to spread awareness and kickstart donor commitment). The Stanford Team is seeking support through the Social Entrepreneurial Lab and the Phase 1 key deliverables are outlined in the Operations and Management Plan.

Operational costs in Phase 2 will include ongoing printing and campaign costs to scale our model to other Rotary Clubs (i.e. printing Champion-in-the-Box materials and setting up orientation events).

The main budgetary item in Phase 2 is the salary for a ReSurge FTE who can run the campaigns with Rotary clubs, train champions, and coordinate data collection. This salary for this role is designed to be a short-term, upfront investment in assuring that the pilots are successful. We have also confirmed that this FTE could also take on the responsibilities proposed by the lifeRAFT team. ReSurge International would also like to explore whether this FTE could be combined with a FTE that could focus on storytelling, communications, and advocacy, and we are excited about that possibility.

In Phase 1, funding sources will include Stanford through the Social Entrepreneurship Lab as well as strategic partnerships that we identified when in Nepal. Furthermore, at the Extreme Expo, a donor from a local Rotary Club expressed interest in funding this effort and is presenting our solution concept to his club this week. In addition, the current relief efforts focused on the Nepal earthquake may reveal new funding sources (e.g., aid agencies focused relief efforts, the Nepalese government).

Rotary International has been identified as a likely funding source for Phases 2 and 3. There is precedent for Rotary Clubs financially supporting skin banks (as in done in India, and as was done to build The Nepal Skin Bank facility), so we are optimistic that we will be able to secure funding from Rotary Clubs to run the club-level campaigns.

If ReSurge is supportive of combining our proposed FTE with the FTE focused on storytelling, communications, and advocacy, then there is also the possibility that this position could be paid for by ReSurge International.

(USD)	Phase 1	Phase 2
Start-up Investment:		
Animation	\$5,000	
Printing Costs	\$100	
In-Person Events	\$70	
Stanford Team Support	\$4,300	-
Ongoing Operations:		
Ongoing Printing Costs		\$1,000
Ongoing Campaigns		\$200
ReSurge FTE		\$5,000
Estimated Funding	\$9,470	\$6,200
Potential Funding Sources	Stanford Strategic Partnerships Rotary Clubs	Rotary Clubs ReSurge

Appendices

Appendix 1a: Box Materials – Quickstart Guide



Quickstart Guide

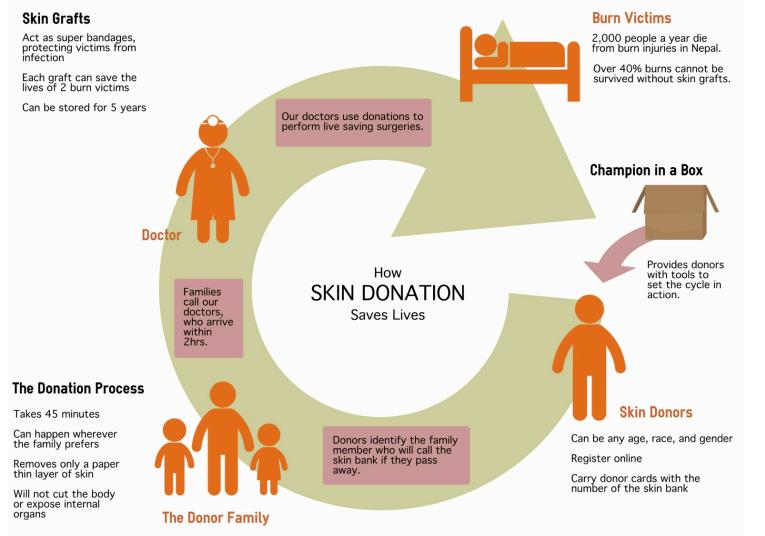
Dear Participating Rotary Club,

We're thrilled that you're interested in taking on skin donation as a project this year. This **Champion in a Box** kit provides everything your club needs to make this project a success.

Currently, 2,000 people a year die from severe burns in Nepal. This is a problem we can solve. Last year, Nepal opened its very first Skin Bank where donated skin grafts can be collected and stored. These grafts act like super bandages for burn victims, preventing infection, reducing pain, and allowing the patient to heal.

The Nepal Skin Bank is ready to start saving lives, but we need your help!

Skin donation is not a common practice in Nepal. Registering as a skin donor at nepalskinbank.org is important but donation really hinges on consent from the donor's family members. Family members are often influenced by cultural and religious factors, as well as the perceived credibility of the donation process. By taking on this project, your club will act as catalyst for the critical steps of the donation process, including recruiting donors and helping those donors have conversations with their families.



To ensure the greatest success in doing so, your **Champion in a Box** kit includes the following:

1. The **Action Plan** that you completed for your club with the ReSurge Surgical Outreach Team during your orientation;
2. The **Awareness Video** (Introduce)
3. The **Donor Registration Card** (Induct)
4. The **FAQs and Conversation Card** (Involve)

Should you have questions along the way, do not hesitate to contact us at 01 4330660 or nepalskinbank@gmail.com.

Together, we can save lives!

Dr. Shankar Rai

Appendix 1b: Box Materials – Awareness Video

<https://www.youtube.com/watch?v=nSEfUzNFSwQ>

Frame 1 (Vani):

Namaste. My name is Vani, and I am 13 years old. I was living the life of a normal girl: climbing trees and running around with my friends. One day, while running through the house, I bumped into the stove and knocked over a pot full of boiling water that severely burned my skin. The pain was horrible. I was rushed to the hospital. The doctors told me that I would not survive without the protection of skin.

Frame 2 (Maha Jodi):

Unfortunately, burn injuries like Vani's are not uncommon in Nepal. Last year, more than 2,000 people died from burns like hers. Fortunately, this is a problem we can solve.

Frame 3 (Vani):

My life was saved thanks to the remarkable gift of skin from someone else, a complete stranger, who wanted to give me a chance to live a healthy life.

Frame 4 (Maha Jodi):

Nepal's new skin bank gives us all a way to save lives like Vani's. So how does the process work? When a donor passes away, the family can simply call 01 4330 660 to notify the skin bank. A highly trained team will be sent quickly to your home or to the hospital.

Frame 5 (animation):

Skin donation only takes about 45 minutes and will be integrated into traditional funeral practices so that no rites are disrupted. One of our team members will be with the family to answer any questions, and to collect some basic information about the donor's medical history. Meanwhile, the rest of the team will respectfully and expertly collect the skin donation using specialized equipment.

Frame 6 (animation):

The electric dermatome works fast and evenly to collect a paper-thin layer of skin. There will be no wounds, internal organs, or blood showing. All that will be revealed is a lighter patch of skin underneath the top layer. Donations will only be taken from places that are not visible: the back, the torso, and the thighs. Skin donation will never change the appearance of your face. The body will be respectfully covered and returned to the family in good condition for the funeral rites.

Frame 7 (animation):

The skin donation will be taken in a cooled container to Kirtipur Hospital, where it will be treated so that it can last up to 5 years in the skin bank. Each donation can save the lives of two severe burn patients. The skin donation acts as a "super bandage" and protects burn patients from life-threatening exposure, infection, and temperature loss, while they heal. Without the generous contributions of skin donors, many lives would be lost.

Frame 8 (Vani):

Thanks to my "super bandage" and my donor, today I am back to climbing trees and I have dreams of becoming an artist. I ask that you give others like me the same chance by registering to be a skin donor today.

Frame 9 (Maha Jodi):

Choosing to donate skin is a true act of righteous living and will increase good karma for your family. I have registered, along with Chief Secretary Leela Mani Paudel. Join us by calling 01 4330 660 or registering at NepalSkinBank.org. Together, we can save lives.

Appendix 1c: Box Materials – Donor Registration Card



I'M A REGISTERED SKIN DONOR
SIGNED: _____
IN THE EVENT OF MY DEATH, PLEASE CALL
0701 504 7537
LEARN MORE AT WWW.NEPALSKINBANK.COM

Appendix 1d: Box Materials – Frequently Asked Questions



How Skin Saves Lives (Frequently Asked Questions)

1. How can donated skin help save a life?

More than 2,000 people a year die from serious burn injuries in Nepal. These burn injuries are caused primarily by open cooking fires. Currently, if more than 40% of a patient's skin area is burned, it is not possible to save them. Skin donation can change this. Donated skin acts like a super bandage, protecting the victim's body from infection and giving it time to heal. It also reduces pain, reduces the cost of treatment, and increases the survival rate of patients.

2. When and where can skin be donated?

Skin can be donated within 6 hours of death. After being called, our doctors will arrive within 2 hours to conduct the donation. This can be done in a hospital, in the home of the deceased, or at another site that the family prefers. Our doctors can accommodate most locations.

3. How do you do it?

After placing the body in a sterile environment and sanitizing the area, trained specialists use a tool called a dermatome to remove a paper-thin layer of skin from the body.

4. Where will you take the skin from?

We usually take four grafts: one from each thigh, one from the chest, and one from the back. Your family may choose to leave any of these grafts undone, for any reason.

5. What does the body look like afterward?

We take only a paper-thin layer from the surface of the skin. The skin underneath will be a bit lighter in color. The body does not bleed, and no internal organs are exposed.

6. How long will it take?

The process takes about 45 minutes. Not much to save a life!

7. What happens to the skin next?

The skin is placed in sterile containers and taken to Kirtipur Hospital, where it will be stored and used by the Kirtipur Burn Surgeon team to save burn victims.

8. How long can skin be used?

Skin can be preserved and stored for a period of 5 years.

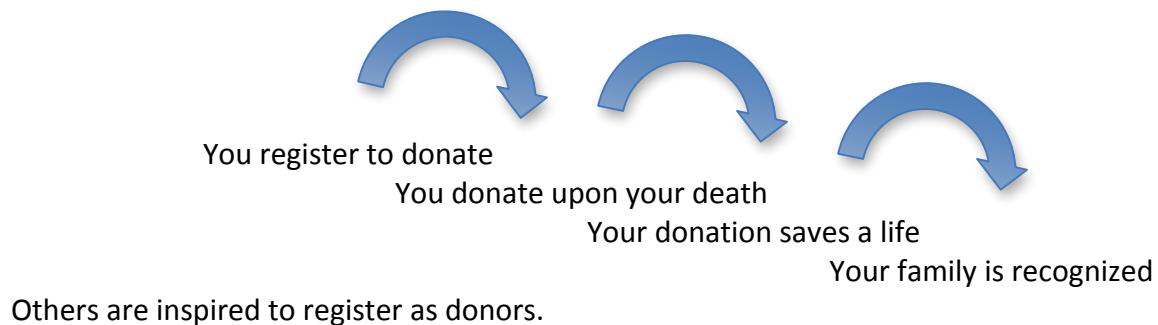
9. Can the donor and the recipient have different ages, races, or genders?

Yes! The skin graft protects the patient's body as they heal. While the "super bandage" provides protection, skin is gradually taken from other parts of the patient's own body to replace the temporary graft. After about three weeks, the super bandage has done its job and can be removed. Because the graft is temporary, no "matching" needs to be done. Any victim can use skin from any donor, and all skin helps! Persons suffering from certain rare skin or viral conditions may not qualify, but our doctors will test the skin for any of these conditions before the grafting process.

10. What do you need from me?

- Register as a skin donor today at nepalskinbank.com. The virtuous cycle begins with a registration.
- You will become part of our network of champions, and receive regular communications from our team about awareness events, recent success stories, and upcoming celebrations.
- If your address or phone number changes, keep us updated at nepalskinbank.com
- You can also visit nepalskinbank.com to request a donor card, give us feedback, or find materials and support for setting up an awareness event of your own!

A Virtuous Cycle



Appendix 1e: Box Materials – Conversation Card



I, _____

give you _____

this card as a formal statement of my wishes and a symbol of your commitment to consent.

As we discussed, I would like to help someone to live after my death.

I ask that you honor your commitment to respect these wishes by calling **Nepal's Skin Bank at 01 4330 660** within six hours of my death.

Together we can save lives!

Appendix 2a: Testing Materials - Agenda

Agenda

Prototype Testing

I. Overview of Extreme Affordability & Project – 5 mins.

II. Purpose of Testing – 5 mins.

- Questions we're testing
- Format for remainder of test

III. Champion Pre-Awareness Survey– 5 mins.

IV. “Champion in a Box” Presentations – 15 mins.

- Show revamped video prototype
- Provide FAQs
- Answer any outstanding questions

V. Champion Post-Awareness Survey – 5 mins.

VI. Phone Calls with Family– 40 mins.

Prompt: based on the presentation you just saw at a Rotary Club meeting, you've decided to register as a skin donor. Your club's next challenge is to have as many newly registered donors speak to family members about their decision to register, why it is important to them, and address any concerns they have about the process. Your goal is to try and get your family member to agree to give their consent for your skin to be donated when the time comes. An additional bonus would be for them to agree to call the Skin Bank on your behalf.

- Administer Pre-Conversation Survey with Family Member (10 mins)
- Convo with Family Member + Debrief (20 mins)
- Administer Post-Conversation Survey with Family Member (10 mins)

VII. Champion Post-Conversation Survey and Debrief – 15 mins

Appendix 2b: Testing Materials – Champion Pre-Awareness Survey

Champion Pre-Awareness Survey

1. Are you currently interested in registering as a skin donor?

2. Why/why not?

3. On a scale of 1-10, how passionate do you feel about the idea of skin donation?

1 2 3 4 5 6 7 8 9 10

4. On a scale of 1-10, how confident do you feel about having a conversation with your family about the skin donation process aimed at trying to convince them to give their consent for you to donate when the time comes?

1 2 3 4 5 6 7 8 9 10

5. What questions do you currently have about the skin donation process?

a. _____

b. _____

c. _____

d. _____

e. _____

Appendix 2c: Testing Materials – Champion Post-Awareness Survey

Champion Post-Awareness Survey

1. Has your interest in registering to be a skin donor changed?

2. Why/why not?

3. On a scale of 1-10, now how passionate do you feel about the idea of skin donation?

1 2 3 4 5 6 7 8 9 10

4. On a scale of 1-10, now how confident do you feel about having a conversation with your family about the skin donation process aimed at trying to convince them to give their consent for you to donate when the time comes?

1 2 3 4 5 6 7 8 9 10

5. What aspects of the “Champion in a Box” kit had the biggest impact on your scores?

6. Were your questions about the skin donation process answered?

Yes No

6. What else would you want in a “Champion in a Box” kit to make you feel more passionate and confident?

a. _____

b. _____

c. _____

Appendix 2d: Testing Materials – Family Pre-Conversation Survey

Family Pre-Conversation Survey

- 1.** On a scale of 1-10, how comfortable are you with the idea of one of your family members donating their skin after death?

1 2 3 4 5 6 7 8 9 10

- 2.** Would you be willing to call a Skin Bank on their behalf when the time comes?

Yes No

- 3.** Can you explain your responses to Questions 1 & 2?

- 4.** What questions do you currently have about skin donation?

a. _____

b. _____

c. _____

d. _____

e. _____

Appendix 2e: Testing Materials – Family Post-Conversation Survey

Family Post-Conversation Survey

- 1.** On a scale of 1-10, now how comfortable are you with the idea of one of your family members donating their skin after death?

1 2 3 4 5 6 7 8 9 10

- 2.** Would you now be willing to call a Skin Bank on their behalf when the time comes?

Yes No

- 3.** What aspects of the conversation had the biggest impact on your new responses to Questions 1 & 2?

- 4.** Were your questions about the skin donation process answered?

Yes No

- 5.** What else would help you feel more comfortable with skin donation?

a. _____

b. _____

c. _____

Appendix 2f: Testing Materials – Champion Post-Conversation Survey

Champion Post-Conversation Survey

- 1.** On a scale of 1-10 (best), how do you feel the conversation went?

1 2 3 4 5 6 7 8 9 10

- 2.** Were you able to answer all of your family member's questions?

Yes No

- 3.** What aspects of the “Champion of the Box” did you use in the conversation?

- 4.** Did your family member agree to give consent?

Yes No

- 5.** How could the conversation have gone better?

a. _____

b. _____

c. _____
