

Conversations with Charity Science Health, March 6 and 11, 2019

Participants

- Katriel Friedman – CEO, Charity Science Health
- Erik Hausen – COO, Charity Science Health
- Andrew Martin – Senior Research Analyst, GiveWell

Note: These notes were compiled by GiveWell and give an overview of the major points made by Mr. Friedman and Mr. Hausen.

Summary

GiveWell spoke with Mr. Friedman and Mr. Hausen of Charity Science Health to follow-up on a 2017 GiveWell Incubation Grant (<https://www.givewell.org/charities/charity-science/charity-science-health/july-2017-grant>). Conversation topics included Charity Science Health's recent leadership transition, updates to its door-to-door enrollment procedures, its work on partnering with hospitals and government agencies, and a potential randomized controlled trial (RCT) of its program.

Leadership transition

Charity Science Health recently underwent a leadership transition. Charity Science Health believes that Mr. Friedman and Mr. Hausen (its new CEO and COO, respectively) are particularly well-suited to take the lead on the next stage of Charity Science Health's work for a number of reasons; for instance, both Mr. Friedman and Mr. Hausen:

- are located in India full-time, which offers advantages in terms of guiding, monitoring, and supporting the field team on a day-to-day basis,
- have training and experience in program evaluation and troubleshooting,
- have connections to mainstream development organizations (e.g. the World Bank, UNICEF, etc.), and
- have experience working in developing countries and managing teams and projects effectively in that setting (e.g. Mr. Hausen previously worked as a Research Manager for J-PAL in India, managing up to four randomized controlled trials at a given point in time).

Charity Science Health has also hired four new staff members who have experience working at other development organizations (e.g. as research associates for J-PAL), which increases Charity Science Health's confidence in their ability to carry out their roles effectively.

Door-to-door enrollment

Charity Science Health has been acquiring the bulk of recipients for its Short Message Service (SMS) immunization reminders program by partnering with other

charities or third-party survey firms to perform door-to-door enrollment, which involves surveyors visiting houses to enroll children below the age of one and pregnant mothers. Surveyors typically collect a) the mother's name, b) the child's name and date of birth, and c) the phone numbers of the mother, father, and possibly other family members; they then send this information to Charity Science Health.

Charity Science Health currently expects having third parties perform the surveys to be the most effective model. These third parties are typically known in the communities, which makes it easier for them to approach community members, manage local teams, and generally ensure that the program runs smoothly.

Improving data collection procedures

Charity Science Health has currently paused most of its data collection to work on refining its data collection procedures and monitoring and evaluation structures to include, e.g., a digital survey system, automated report generation on surveyor/field partner performance, etc. The digital survey system includes built-in quality checks and GPS location information, and reduces the amount of time it takes for Charity Science Health to receive data. Charity Science Health also plans to record every survey in order to implement audio audits.

Charity Science Health has hired in-house surveyors to test and finalize the new data collection process in Delhi and the surrounding areas. and to experiment with various methods of deciding which blocks to cover, which houses to visit, etc.

Charity Science Health plans to start implementing the new system with one third-party surveying group within the next week or two, and to test it with two or three partners over the next few months. Charity Science Health's goal is to produce a set of surveying procedures that can be implemented effectively by any charity or third-party surveying partner it might work with, and to use that system during its planned RCT (see below).

Charity Science Health is hopeful that the quality of the data it receives from third parties can be improved with relatively little data monitoring and supervision, but there might be unexpected difficulties (e.g. the staff of third-party organizations might find it hard to use digital devices).

Motivation

Charity Science Health was motivated to design and implement better procedures in part by running a phone survey which found a wide range in the degree of accuracy in enrollment data collected. Under the old procedures, the best door-to-door data was about a) 70% confirmed valid (i.e., the enrollee is a child below the age of one or a pregnant woman, the phone number is valid, and the information is linked to the correct person), b) about 12% confirmed incorrect, or c) of uncertain validity (if e.g. recipients did not answer the phone during the phone survey). Charity Science Health estimates the total cost of working with third-party surveyors, including

management time, monitoring and evaluation, overhead, etc., was about \$0.60 to \$0.70 per valid entry.

Potential NGO partnerships

Some large NGOs have expressed interest in collaborating with Charity Science Health, including:

- IDinsight's "Data on Demand" team, which has a network of 800 surveyors across eight states in India. Those surveyors currently work on projects for about six months out of the year; IDinsight would ideally like the network to be working year-round in order to avoid needing to fire and re-hire surveyors. IDinsight has set up hiring and quality control procedures that make it easy to run surveys with this team at a relatively low cost of management time.
- Noora Health, which promotes child health practices, is working across health facilities in Madhya Pradesh. Charity Science Health is in discussions about working with Noora Health staff at hospitals to enroll new SMS reminder recipients, which could potentially offer a way to scale the SMS program rapidly. Noora Health also sends messages to mothers through WhatsApp and Charity Science Health is working to add vaccination reminders to this system.
- A nationwide federation of women's self-help groups, which has significant surveying capacity and a broad membership base.

Partnering with hospitals

Charity Science Health has tried partnering with hospitals to enroll recipients in its SMS reminders program; by and large, this has been more difficult than Charity Science Health initially expected. Charity Science Health has gotten agreements from five hospitals to enroll patients in its program.

Charity Science Health thinks working with hospitals might potentially be the most cost-effective method of enrollment if hospitals agree to it. However, the amount of staff time required and low success rates at reaching agreements with hospitals have so far made this strategy not worthwhile.

Charity Science Health has also been trying to partner with larger organizations and other charities (e.g. Noora Health, Doctors For You) that have existing relationships with hospitals.

Many hospitals have asked Charity Science Health to procure district- or state-level permissions before they would consider partnering.

Partnering with government agencies

Charity Science Health is working on partnering with government agencies. It has been prioritizing reaching out to state-level governments rather than smaller administrative units (e.g. districts), in part because it has found it relatively easy to

get meetings with state-level officials. Charity Science Health also has the impression is that state governments are generally more involved in the oversight of routine immunization than the central Indian government is. (For instance, while the databases used for immunization and vaccine delivery are somewhat centralized, the program is administered via separate systems in each state.)

Charity Science Health is pursuing two types of partnership with state governments:

1. In states without an existing SMS reminder program, Charity Science Health might ask for authorization to digitize hard copies of phone records from health facilities, or ask to use phone number information from a central state database, either by setting up an SMS reminder system on a server run by the government or by using that data to enroll families in Charity Science Health's core program.
2. As a lower priority, in states that already have an SMS reminder program of some kind, there is some evidence that those programs are not reaching the whole target population. For instance, Charity Science referred to a study finding that in health records in two states, mobile numbers were available for 41% and 12% of children's families, respectively. Another study found 6% of a sample of caregivers recalled receiving and understanding the SMS reminders they were supposed to under the state program (though systems may have improved since that study). In such states, Charity Science Health has offered to identify ways to improve the coverage and accuracy of state databases in order to increase the percentage of people receiving SMS reminders.

May 2019 update: Charity Science Health has made progress partnering with the governments of three states:

1. *Maharashtra has verbally agreed to sending vaccination and other health reminders through the state's health database and Charity Science Health is currently piloting sending out vaccination and other health reminders in two districts of Maharashtra.*
2. *Charity Science Health has been asked to submit a proposal in Madhya Pradesh to help build the state's capacity to implement a vaccination reminder system.*
3. *Bihar, which does not have an existing SMS reminder system, has accepted Charity Science Health's proposal to enroll mothers using data from health facilities.*

Other aspects of the SMS reminders program

Ranking geographies by potential impact

Charity Science Health has ranked the geographies it currently works in based on its best intuitive predictions about how impactful it expects its SMS program to be in those areas, taking into account, e.g., rates of vaccination, mobile penetration, and literacy. Charity Science Health plans to do some additional research on current

vaccination and literacy rates in the communities it serves in order to better inform its program.

Taking into account individual vaccination history

Charity Science Health's system now takes into account a child's immunization history at the time of enrollment and schedules subsequent SMS reminders based on the child's immunization needs. (For example, if a child is enrolled at 20 weeks old but missed their 14-week immunization, the caregiver will receive SMS reminders for the missed immunization, rather than only for the default upcoming immunization dates based on the child's age).

Coordinating SMS reminders with immunization outreach sessions

Many households are immunized at "vaccination camps" during intermittent outreach sessions, rather than at permanent health facilities. Charity Science Health has been having its Delhi team attempt to collect information from local frontline workers about the schedule for those outreach sessions (as well as reaching out to higher-level administrators) in order to be able to adjust the timing of its SMS reminders by between one and fourteen days so that recipients receive the reminders just before a camp is planned nearby. Charity Science Health believes this will make it more likely that caregivers bring children to the camp.

Vaccines for rotavirus and PCV are still being rolled out; Charity Science Health is maintaining an updated map of where those are available.

Qualitative data collection

Charity Science Health plans to hold focus groups and conduct qualitative interviews with recipients to learn (for instance):

- whether caregivers are receiving the SMS messages,
- what percentage of caregivers understand the messages,
- whether the program has any adverse effects,
- what the best timing for its messages is (e.g. if mothers have preferences about what time of day or how long before immunization deadlines to receive messages),
- what framings are most effective to use in its messaging, and
- what proportion of caregivers who receive messages are actually able to get high-impact vaccines for their children.

Randomized controlled trial (RCT)

Charity Science Health is planning an RCT of its SMS reminders program. The RCT would likely use some kind of clustered randomization.

Excluding other methods of enrollment from the RCT

Charity Science Health would plan to treat "cold enrollment" methods (e.g. enrollment through hospitals or via data from government records) as a separate

treatment arm from door-to-door enrollment, since it would expect cold enrollment to have a different cost structure and different effects.

Coordinating with governments to do a randomized study may not be feasible on the timeline Charity Science Health is aiming for, but it would still be possible to test cold enrollment through the hospitals it is partnered with individually.

The other treatment arm would focus on Charity Science Health's method of signing up mothers for vaccination reminders by going to disadvantaged communities and asking parents if they would like to sign up to receive vaccination reminders. This "warm enrollment" strategy involves family members agreeing to be part of the program and has the added benefit of a community social worker directly talking to parents about the importance of vaccinating their children.

Distributing other health interventions

Charity Science Health plans to take advantage of its contact with households during door-to-door enrollment to provide other health interventions with a strong evidence base, such as: prenatal vitamin supplementation (e.g. iron and folic acid, other micronutrients), vitamin A supplementation (for children older than six months), and deworming tablets (for households with children over one year old). Vitamin Angels has agreed to provide Charity Science Health with training materials and supplements for this purpose. Charity Science Health plans to train its field teams to administer supplementation and then roll out the program.

Charity Science Health is also planning to roll out SMS reminders about exclusive breastfeeding and prenatal checkups at the appropriate ages. For the most part, those reminders would be fairly widely spaced out from its core vaccination reminders to reduce the risk of causing recipients to start disregarding messages.

Reported increases in immunization rates

The Indian government reports fairly rapid increases in immunization rates due to government vaccination programs. Charity Science Health is trying to gather as much up-to-date information as possible about immunization rates in the areas where it works.

The government claims a substantially higher vaccination rate as of the end of 2018 than what was found by the last major round of household surveys, in 2015-16. Charity Science Health plans to do more research to understand how much room for improvement in immunization rates there currently is. It also plans to try to estimate how well households' vaccination cards reflect children's actual vaccination status by comparing the cards to administrative data from health facilities.

Potential overlap with other vaccination reminder programs

Charity Science Health's impression is that there is now more activity on health reminders from other groups than when it began working in India. Charity Science

Health aims to stay aware of other successful efforts to give vaccination reminders and to avoid overlapping with them.

For instance, Kilkari is a program that sends recipients weekly voice calls on child health issues, including immunization reminders. It has been adopted by the government, including in some of Charity Science Health's priority states. Charity Science Health is currently uncertain about how much impact Kilkari's activities are having; it seems plausible there might be less room for Charity Science Health to have an impact if households are already receiving voice reminders.

Charity Science Health did a follow-up phone survey of 300 of its SMS recipients in Rajasthan who were supposed to have received voice call reminders from Kilkari. 15% of those surveyed remembered receiving voice calls; none remembered the name of the program the call was from. Based on those results, Charity Science Health estimates that about one-third of the target population in Rajasthan is in fact enrolled in the Kilkari database. Charity Science Health has seen evidence that gaps in Kilkari coverage are this low or lower in most other Kilkari states.

All GiveWell conversations are available at <http://www.givewell.org/conversations/>