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HIMserve CHV Program Evaluation



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Introduction

In 2009, the Indian government introduced the National Health Bill, declaring health care as a public good, meaning that every citizen, in principle, is covered by a tax-financed public health care system. However, the government has its own limitations, and has not been able to provide equitable access to quality healthcare services for some of India's most marginalized communities. Further, 80 percent of India's population is uninsured, meaning that much of the population is prone to severe losses of income due to healthcare related needs. Thus, NGOs are left with the task of filling gaps left by private market and government inadequacies, while also aiming to provide a stronger political voice to marginalized communities.

The Community Health Volunteer (CHV) Program at HIMserve provides primary and midwifery healthcare training to mothers from rural Himalayan communities of Northeastern India. The training module lasts 40 days, which is conducted over a span of 8 months, and administered in the trainee's home community. To date, HIMserve has been involved in the training of over 250 health workers, all of whom work to promote and provide healthcare services within their communities.

HIMserve's four-year program monitoring and evaluation process assesses the impact and further needs of each of the organization's programs. In this report, we assess multiple facets of the Community Health Volunteer (CHV) program, including effects on both the financial and physical elements of disease in rural communities. It is compulsory to take a critical look at the positives and negatives of both aspects, especially as HIMserve aims to improve the overall impact of the CHV program.

Evaluation Methods

Evaluation Team:

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Interviewers: Lalita Bhujel & Amardeep Rana

Analyst & Report Writer: Joseph Millward, Monitoring & Evaluations Consultant, Seattle

Questionnaire and Survey Preparation and Administration:

1. Questionnaires were prepared by staff, and based on questionnaires utilized in previous evaluation projects. Further, a survey and questionnaire were also recently developed to assess effects on the alleviation of physical and financial burdens of disease of the CHV program.
2. Questionnaires and surveys were administered by the evaluation team of HIMserve, who had no personal connection to the respondents.
3. Respondents were all given information regarding response confidentiality by HIMserve staff, and each provided informed consent before interviews and surveys were conducted.

Surveyed Population Statistics:

1. All respondents were graduates of the CHV program at HIMserve, which is comprised entirely of women from each village community.
2. The number of respondents was 9-12 individuals, which was based upon an individual's knowledge and desire to answer questions about certain topics (i.e. some CHVs did not provide responses for parts of a survey or interview).
3. Respondents were from various village communities in the Kalimpong, Darjeeling, and Dooars regions of Northern West Bengal.

Subjects Evaluated: [Raw Data Available Here](#)

HIMserve General Evaluation Questionnaire:

- A. CHV motivation, successes and difficulties
- B. Malnutrition and Immunization
- C. Family Planning

HIMserve CHV Questionnaire:

- A. Community Health
- B. Disease Prevalence
- C. Financial Burden of Disease
- D. Physical Burden of Disease
- E. Healthcare Access and Quality
- F. Social Learning

HIMserve CHV Survey:

- A. CHV Disease Recognition Confidence
- B. CHV Disease Treatment Confidence
- C. CHV Curriculum Comprehension

Results

HIMserve General Evaluation Questionnaire Results

A. CHV Motivation, Successes, and Difficulties

1. 100% of CHVs stated that they gained motivation to attend training through HIMserve, with some other forms of motivation coming from church leaders and family members.
2. 100% of CHVs stated that they believe the purpose of their training to be community development by providing their services to the community.
 - a. One woman from the Dooars region states that “We not know many things about health before the training, and wanted to learn so that we could serve the community.”
 - b. Another woman from Dooars also stated that “We did not know how to dress wounds prior to the training... [and] used to panic earlier when these situations arose, but now are able to help others.”
3. 100% of CHVs stated that the subjects provided by the CHV curriculum were relevant and implementable within their communities.
4. 55% of CHVs stated that the curriculum was difficult to learn, 36% stated that they found the curriculum to have average difficulty, and 9% (1 respondent) found the curriculum easy to learn and comprehend.
 - a. One woman from Dooars highlights a cause for her difficulty comprehending some of the curriculum, stating that “the practical training was difficult, partially because Nepali is my second language.”
 - b. Many respondents also stated that they had difficulty comprehending the health trainings at the beginning of the module, but found that comprehension came easily as the CHV training module progressed.
5. 73% of CHVs stated that they found the subjects taught in the CHV curriculum to be easy to teach community members. The remaining 27% of CHVs stated that they had difficulty in teaching community members about health topics in the CHV training module.
 - a. One woman from Dooars stated that “It was not difficult to teach the topics to others, but a few [patients] were rude regarding the approach that I took in teaching.”
 - b. Another woman from Dooars mentioned that “There has mostly been difficulty teaching subjects related to pregnancy.”
6. 100% of CHVs stated that refresher courses of the CHV curriculum were helpful.
7. Computation of 90% confidence intervals were done for the total numbers of births from respondents in Kalimpong and Dooars.

- a. Kalimpong (Appendix 1A) – We are 90% confident that, on average, any CHV in the Kalimpong region has helped deliver 3.11 – 25.56 babies.
 - b. Dooars (Appendix 2A) – We are 90% confident that, on average, any CHV in the Dooars region has helped deliver 0.60 – 8.91 babies.
 - c. One CHV from the Dooars region commented on the success of deliveries, stating that “before the training, we were unaware of the issues that could happen during delivery, and now we are able to safely help mothers.”
8. 70% of CHVs have stated that they have had no difficulties while assisting with deliveries, while the other 30% have reported mild obstacles during some cases of child delivery. One CHV from Dooars did not respond.
- a. CHVs have noted that even when there are obstacles, they have been able to overcome them due to their training, leaving the child and mother unharmed in all cases.
9. 100 % of CHVs stated that pre and post-natal care of pregnant mothers has improved within their communities. One CHV from the Dooars region chose not to respond.
- a. One CHV from the Dooars region states that “Previously, mothers did not know what foods to eat and how to keep themselves healthy, but now they have all been very well taken care of and have had proper diets and behaviors for themselves and their child.”
 - b. Another CHV from the Dooars regions states that her “training and availability for pregnant mothers has greatly helped to improve pre and post-natal care. Mothers are much more aware of issues, such as hygiene, and take much better care of themselves for their own health, as well as the health of their child.”
10. Computation of 95% confidence intervals were done for the total number of patients referred to the hospital by CHVs in the Kalimpong and Dooars regions. One CHV from the Dooars region did not provide a response.
- a. Total patients sent to hospital (Appendix 1C)– We are 95% confident that, on average, any CHV in the Kalimpong or Dooars region referred 7.3 – 29.1 patients to the hospital for illnesses.
11. 82% of CHVs stated that they have done multiple health awareness trainings, while 18 % (2 respondents) stated that they have done 0 – 1 trainings. One of the two CHVs is from the Dooars region, and has only done trainings with HIMserve, but none in the community yet.
- a. Topics of health awareness training included the following: pre and post-natal care, family planning, preventative health, common illnesses, infectious disease, and hygiene.
 - b. CHVs stated that they have done health awareness trainings with members of the community, and one stated that she has been spreading health awareness through her church, when given the opportunity.
12. CHVs noted that their training has developed respect and trust from community members in their ability to treat and prevent illness. Many CHVs further noted that they have been able to spread knowledge easily throughout the community. One CHV from Dooars had no response.
- a. One CHV from Dooars comments that “The training has helped me to provide a lot of new knowledge to the community, so that they are able to act in healthier ways.”

13. 60% of CHVs stated that they were not currently receiving help from any other NGOs or government programs, while the other 40% stated that they were receiving help from other sources. One CHV from the Dooars region did not provide a response.
 - a. Two CHVs in the Dooars region have received help from the Family Planning Association of India (FPAI).
 - b. Two CHVs in the Kalimpong region have stated that they are currently receiving training and help from doctors and staff from Kalimpong hospital, and other government facilities.
14. CHVs have stated that there has been a vast improvement in the health of community members since their trainings. Two CHVs from the Dooars region did not respond.
 - a. CHVs from the Kalimpong region have stated that there have been changes in hygiene and utilization of boiled drinking water, as well as a lowered prevalence of Tuberculosis and Diarrhea.
 - b. CHVs from the Dooars region have stated that there have been vast improvements in hygiene, pre and post-natal care, and child delivery. One CHV also states that “earlier there used to be only one government hospital, and care wasn’t up to the mark, but since the training, we are able to assist [community members] in their health condition and refer them to better hospitals if required.”
15. 90% of CHVs stated that community members implement elements of the health awareness that they have provided. 10% of CHVs (1 respondent from the Dooars region) states that community members have not implemented elements of the teachings that they have provided to the community. One respondent from the Dooars region did not provide a response.
16. CHVs stated that they believe improvements to teaching and practices can be made by the provision of more refresher courses, specifically on taking Blood Pressure, and further training on community motivation. Five CHVs had no comments or criticisms to offer.
17. CHVs noted that they would like training on the following subjects: Injection, Diabetes (Blood Sugar Testing), Blood Pressure, Ringworm, and Leprosy. 5 CHVs did not comment on desire to add subjects to the CHV curriculum.

B. Malnutrition and Immunization

1. One CHV in the Kalimpong region noted that she has seen 2 malnourished children in her community after her training. Another CHV in the Dooars region stated that she had seen 1 malnourished child after her training. All remaining CHVs have stated that they have not seen any malnourished children.
2. CHVs stated that they utilize the growth chart to assess and address issues of malnourishment. One CHV from Dooars mentioned that she referred her patient to a doctor for malnourishment treatment.
3. Besides 2 CHVs, there has been no need for malnourishment teachings, however in the two communities where malnourishment was noticed in children, the CHVs provided awareness training and teaching on the prevention and treatment. In both cases, CHVs met with the mother of the child and took appropriate steps to provide proper nourishment to the child.
4. The CHV from the Kalimpong region states that it has been difficult to teach on malnutrition, while the CHV from the Dooars region states that she has had no difficulty teaching on malnutrition to community members.

5. Both CHVs who lived in areas where there was a malnourished child state that there has not been interest in the teachings on malnutrition. The CHV from the Kalimpong region states that she has “noticed that even after the teachings, there has been no change in the mother’s behavior. Community members indulge in alcohol, and mothers are engaged to take care of the family, but are not able to provide proper care to the children.”
6. Both CHVs who have seen malnourished children have state that there are other groups treating malnourishment in the area.
 - a. The CHV in the Kalimpong region is helping the group working in her region, but the CHV in the Dooars region has not helped this group.
 - b. The following are groups that have been working in the Kalimpong and Dooars regions
 - i. Kalimpong – ICDS, SSK, and Midday Meal
 - ii. Dooars – ICDS
7. CHVs stated that they inform mothers about the risks for malnourished children, while also stressing the importance of a balanced diet.
 - a. The CHV from Dooars states that “for pregnant women, I tell them to eat for both themselves and the baby, and further tell them to maintain a time table of food intake.”
8. 45% of CHVs have not taken direct steps to promote immunization. The remaining 55% of CHVs have taken steps to promote immunization.
 - a. CHVs have utilized the following methods to promote immunization within their communities: door-to-door awareness, meetings, health awareness trainings, utilization of visual aids, and collaboration with government hospitals and programs.
9. Roughly half of the CHVs have aided in taking children for immunization, while the other half has either not taken any steps, or has not provided a response to the question.
10. All CHVs, besides two that provided no response from the Dooars region, stated that parents understand the importance of immunization for their children. Immunization comprehension is achieved by government clinics and programs, alongside immunization promotion efforts done by CHVs.
11. 77% of the CHVs have stated that they are working with the government immunization team, While the other 23% have noted that they are not currently working with the government immunization program. Three respondents from the Dooars region did not provide an answer to this question.
12. CHVs have stated that they believe it is important for there to be improved consultation and teaching to families who have not had their children immunized. Seven CHVs had no comments or recommendations on steps to be taken to reduce the levels of malnutrition and increase immunization uptake.

C. Family Planning

1. 100% of CHVs stated that Family Planning promotion has been helpful to members within their communities. One CHV from the Kalimpong region, and one CHV from the Dooars region did not provide responses.
 - a. CHVs have stated that males are afraid of the sterilization methods, and that there has been a true mix of acceptance within the communities.

2. No males have been sterilized in any of the villages over the past three years, however 1 female was sterilized in the Dooars region, and 25 females have been sterilized in villages within the Kalimpong region.
3. There were complications in two cases, both of which occurred in the Kalimpong region. In one case, a woman's stitches came out after her procedure, and another woman had some bleeding and weakness.
4. 75% of CHVs noted that there has been no change in community members' attitudes towards family planning, especially regarding male sterilization, While the other 25% (2 respondents) highlight changes in the behavior and acceptance of family planning methods by community members. 2 CHVs from the Dooars region did not provide responses to this question.
 - a. One CHV from the Dooars region stated that "there are no misconceptions about family planning now. People understand the treatment and options available."
 - b. Although there seems to be increased comprehension of family planning usefulness, there remains a high level of reluctance or potential disinterest in implementing family planning methods.
5. All CHVs who provided responses stated that they have highlighted the effect on finances that the utilization of family planning can have, and have further highlighted that all community members understand financial effects of family planning. Knowledge about financial benefits to family planning have been easily comprehensible. 3 CHVs did not provide responses to this question.
6. 67% of CHVs stated that community members do show interest in learning about family planning, 22% show no interest in family planning methods, and one CHV states that females are more willing than males to learn about and implement family planning methods.
 - a. One CHV from the Dooars region stated that "community members are interested because they understand the benefits of planning and how this can affect the burdens on their finances, however people do not show much interest in the methods of family planning."
 - b. Another CHV from the Kalimpong region states that "Community members show interest, but their actions show reluctance to truly implement family planning practices. Only females have done sterilization, but often husbands may stop their wives from receiving sterilization, or they will be reluctant to receive vasectomies.
7. The results of the data are mixed for this question, however all CHVs have spoken with villagers and taken active measures to promote knowledge and importance of family planning methods within their communities.
8. CHVs state that their primary method for promoting family planning are through counseling with patients. Most CHVs actively promote family planning methods, but some wait until interested community members approach them. One CHV in the Kalimpong region held an awareness meeting about family planning methods.
9. CHVs stated that in Darjeeling there was government help for family planning, in Dooars FPAI has been working to promote family planning methods, and in the Kalimpong region, World Vision has been promoting family planning methods.

10. Topics covered by CHVs include the following: Copper T (IUD), Abortion, Natural Calendar Method, general family planning, birth control, finances, child care, sterilization, and KAPTI.
11. 78% of CHVs stated that it has been difficult for community members to comprehend family planning methods, while the other 22% of CHVs (2 respondents) stated that it has been easy for community members to comprehend family planning methods. One respondent from the Dooars region did not provide a response to the question.
12. 88% of CHVs stated that that community members have been implementing family planning methods, however there is room for improvement in the adoption of these methods by other community members. One CHV stated that, due to a lack of attitude change within the community, there have been no community members utilizing family planning methods. 2 CHVs noted that they were unsure if community members have been putting family planning methods into place.
 - a. One CHV from Darjeeling stated that community members wish to utilize IUDs, however they do not have access to this equipment.
 - b. Sterilization seems to be the least popular method, however IUDs and birth control seem to have been the most successful family planning methods in each community.
13. CHVs state that it is important to further stress the effects of family planning on family financial well-being, focus on safe sex, counseling at the time of child delivery, and more focus on natural methods of family planning. 4 CHVs had no recommendations to improve family planning adoption.
14. Over half of the CHVs have stated that due to their gender, they have had issues in speaking to males about family planning, however a small percentage (one respondent was male) of respondents stated that they have not had issues because of their gender, but merely because community members have not shown interest in some methods, especially sterilization.

HIMserve CHV Questionnaire Results

A. Physical Burden of Disease

1. Common illnesses reported by CHVs included the following: Cough and cold, Diarrhea, Hypertension, joint pain, Tuberculosis, Diabetes, UTI, kidney stones, and liver jaundice.
 - a. Kidney stones are a newly developing trend in of the communities in the Kalimpong region. CHVs believe that it is due to water deficiency that many patients have been developing kidney stones.
 - b. One CHV in the Dooars region noted that liver jaundice has become a new issue in her community due to careless and irresponsible utilization of alcohol for long periods of time.
 - c. Another CHV from the Dooars region noted that joint pain is a newly prevalent disease in her community, and that she believes this is due to the prevalence of fevers in her village.
 - d. CHVs point to carelessness and disinterest in personal health as being the primary causes of both the prevalence of emerging diseases, and the continued prevalence of previously existing community health conditions.

2. 100 % of CHVs stated that they provide consultations to patients at least more than once a month, often providing multiple consultations in one day.
 - a. One CHV from the Kalimpong region states that she “visits the houses of community members. When there is an emergency, people will come to my home. I provide awareness and direct them to other sources of care if necessary, and talk to them about proper medical treatment.”
3. 89% of CHVs stated that community members seemed interested in learning about their health. One CHV from the Dooars region stated that she believes members of her community are not interested in learning about their health.
 - a. The CHV from the Dooars region who stated that members of her community do not seem interested in their health highlighted that community members “only come when they are severely ill, and do not show interest at other times.”
 - b. CHVs stated that community members trust their judgement, and go to them because they desire treatment as soon as possible when they do fall ill.
 - c. Interest and trust in the treatment provided by CHVs has been due to the health awareness and promotion efforts of CHVs, as this has piqued the interest of many community members, and provided them with motivation to lead healthier lives.
 - d. Some CHVs have stated that there are stubborn members in their community who prioritize work over personal health, or simply do not believe that they need medical treatment for diseases.
4. Computation of a 95% confidence interval for access to clean drinking water was done for all regions. (See Appendix 1B)
 - a. We are 95% confident that, on average, community members in the Darjeeling, Kalimpong, and Dooars regions have 54 – 86% access to clean drinking water.
 - b. 100% of CHVs state that access to clean drinking water has increased within their communities.
 - c. CHVs have noted that promotion of preventative healthcare, as well as knowledge about waterborne diseases has provided villagers the motivation to utilize clean drinking methods, such as boiled water.
 - d. Many community members noticed that themselves or family would fall ill after drinking unclean water. CHVs informed them that the unclean water was the source of their illness, and knowledge of the benefits of preventative health spread throughout their communities.
5. 100% of CHVs have stated that they believe their community members have become healthier in the past two years.
 - a. CHVs resoundingly highlighted that the increase in health of their community was due to the effectiveness of health awareness trainings and promotion of healthy practices.
 - b. In one case, a CHV from the Kalimpong region mentions that there is a doctor who visits the village from Kalimpong hospital, and that he has gained trust from community members, who heeded his request for them to adopt preventative health practices.

- c. One CHV in the Dooars region mentioned that although most of the community is healthy, there are still a few stubborn individuals who do not have any interest in their health.

B. Disease Prevention

1. 88% of CHVs stated that there have been infectious diseases in their communities within the past four years, while one CHV mention that there have been no infectious diseases in their community over the past four years.
 - a. Tuberculosis is the most common infectious disease, with over half of the CHVs mentioning its prevalence within their communities. Other infectious diseases included ringworm, scabies, fungal infection, and conjunctivitis.
 - b. In most cases, patients were either referred to a hospital or given natural treatment, such as bathing in Neem water to alleviate their symptoms.
2. 88% of CHVs have stated that there has been a decrease in the prevalence of disease within their communities, with one CHV from the Darjeeling region stating that she has seen increase in disease prevalence within her community.
 - a. The CHV from the Darjeeling region states that there has been an increase in the prevalence of Diabetes and High BP in her community.
 - b. CHVs who have seen a decrease in disease prevalence within their communities highlight that they believe this reduction is due to their health awareness trainings and promotion of preventative health measures to community members. Further, they state that there is a lot of trust in the CHVs, meaning villagers are more likely to respect health requests made by these women.

C. Financial Burden of Disease

1. 67% of CHVs stated that they have seen an increase in the financial burden of disease on community members, while the remaining 33% of CHVs have noticed a decrease in the financial burden of disease on community members. Three CHVs did not provide responses to the question when asked, as they have not made an effort to notice financial impacts of disease.
 - a. One CHV from the Kalimpong region states that the reason for decrease in the financial burden of disease for community members is due to efforts out forth by staff at Kalimpong hospital to alleviate this burden by reducing fees, and sometimes even offering free services.
 - b. CHVs state that financial burden of disease is highly prevalent for community members in need of chronic and acute care, whereas care for non-acute and non-chronic diseases can be provided by CHVs, meaning that there is no financial burden from these forms of disease.
 - c. CHVs further state that the main cause for the financial impact of disease on a family is due to the breadwinner falling ill, leaving nobody in the family to work and earn money.
2. 86% of CHVs stated that they believe families have difficulty providing finances for their healthcare, while one CHV from the Dooars region stated that she does not believe families do not have difficulty financing their healthcare. 2 CHVs did not provide responses to the question.

- a. One CHV from the Dooars region states that “it is difficult because there is a large lack of savings for families, and they find treatment difficult to manage due to limited income.”
- b. Another CHV from the Dooars region states that “it is hard for health finances to be taken care of due to the financial climate of the village. Many people are out of jobs, and do not have enough income to pay for disease treatment.”
- c. A CHV from the Kalimpong region states that finances are “most difficult for long term and illnesses.”
- d. Another CHV from the Kalimpong region highlights the fact that they have trouble getting blood products to patients, which forces community members in need of blood donations to pay for travel and treatment at a clinic, which ends up putting stress on their finances.

D. Healthcare Access and Quality

1. CHVs in the Darjeeling and Kalimpong regions noted that most of their community members seek treatment at private clinics, while most CHVs from the Dooars region noted that their community members seek out treatment at a public institution.
 - a. All CHVs agree that “community members seek out care at public facilities because they are unable to pay for the cost of services and treatment at private health centers.”
 - b. All CHVs also agree that “most community members prefer private clinics because they are able to receive better care and quicker diagnosis than public health centers.”
 - c. One CHV from the Dooars region states that community members “go to public clinics because they feel that these clinics provide adequate care, and cost a significant amount less than private clinics.”
2. 88% of CHVs stated that they believe patients have easy access to them as healthcare resources, while one CHV from the Kalimpong region stated that they are not able to meet all the needs of their patients.
 - a. The CHV from the Kalimpong area that mentioned lack of access for their patients highlights that she “needs a blood sugar testing machine to help attend to patients’ needs. This is the most important device that is lacking, and that need is not currently being met.”
 - b. Many CHVs mention that they go to their patient’s houses when necessary, and often go out of their way to provide adequate resources for their patients.
 - c. Many CHVs state that more equipment would help them better serve the needs of their patients, however they are able to manage for now.
3. 56% of CHVs do not feel that they have the necessary tools to care for the needs of their patients. The remaining 44% of CHVs do believe that they have adequate tools for now, but many note that improved access to healthcare technology would allow for them to better serve the members of their communities.
 - a. One CHV from the Kalimpong region states that she “has some health tools, but not all that she would like. Even some basic things like scissors, gloves, digital thermometer, and diabetic test machine are not available. We manage by getting supplies from government clinics every once in a while, but this is only because we

- are helping those clinics, and we only receive basic things like gloves, scissors, and gauze.”
- b. CHVs from the Dooars region state that they need more medicines, as they believe that they have issues of access to things like Iodine.
 - c. CHVs who have stated that they are satisfied mention that they feel that the tools are “adequate for the amount of training we have received.”
4. 78% of CHVs stated that they felt they had easy access to medications for their patients, However, 22% (2 respondents) found that they had difficulty in accessing medication for their patients.
 - a. One CHV from the Kalimpong region states that “I can only provide what I have to the patient, but in other cases I have to take them to the hospital and suggest that they can get the proper medication for their ailment. I can’t prescribe medication, but am able to provide what I have on hand. I will prepare home-made remedies for patients.”
 - b. Some CHVs receive medicines from FPAI and government facilities, however most provide the medicine themselves or refer patients to clinics if they are unable to treat them.
 5. 56% of CHVs stated that they are satisfied with their current level of healthcare knowledge, while the other 44% stated that they desire to gain more knowledge so that they can better serve the members in their community.
 - a. One CHV from the Kalimpong region stated that “I would like to learn more. A lot of help has been provided so far. I am interested in learning how to conduct IV treatment.”
 - b. Most CHVs agree that they are content with their knowledge, as it allows them to serve most needs within their communities, however they are eager to receive more training, and wish to further serve the health-related needs within their communities.
 6. 56% of CHVs have no specific preference of private or public clinics for patient referral, 33% of CHVs have preference for referrals to public clinics, and 11% prefer reference to private clinics for patients.
 - a. One CHV from the Kalimpong region states that “the private clinic definitely treats the person better than the public health center. There is a higher chance of the disease being diagnosed through private care.”
 - b. CHVs state that they mostly tailor their referrals to the economic situation of their patient, and will only refer them to private care if they have the necessity or funds to pay for such care. Many CHVs also note that only severe or acute cases get referred to private clinics, as most non-chronic and non-acute cases are manageable by public clinics and CHVs.

E. Social Learning:

1. 88% of CHVs reported that they have seen sharing of health knowledge within their communities, with one CHV from the Dooars region stating that they have not seen community members sharing health knowledge.
 - a. Two CHVs from the Kalimpong region stated that they have “seen mothers talking about the positive effects of certain health behaviors, especially cleanliness and

hygiene. Because of their talking, [they] believe that the understanding and importance of public health has spread throughout the community.”

- b. A CHV from the Darjeeling region has stated that she has seen community members “teach health practices to others, such as boiling water before consumption.”

CHV Survey Results

A. Survey Analysis Methods and Definitions

The CHV Survey assesses two crucial metrics of success for comprehension and effectiveness of the CHV training module: Disease and health practice recognition confidence, and disease and health practice treatment confidence. The confidence of disease and health practice recognition aims to assess how comfortable CHVs are in correctly diagnosing and recognizing specific types of illness or needs for health practices. The confidence of disease and health practice treatment aim to gauge how comfortable CHVs are providing, performing, or referring treatment for diseases and health practices. The CHV survey also acts as a proxy to gauge improvements in physical health of communities, by assessing CHV capability to provide services and knowledge to members of their communities. Responses were marked on a scale of confidence (Not at all Confident [1], Slightly Confident [2], Moderately Confident [3], Highly Confident [4], Extremely Confident [5]), which allows for numerical analysis of survey results.

1. To determine macro data trends in the CHV survey, three subject subgroups were created for data analysis of specific types of health issues. The subject subgroups and associated health issues from the survey are provided below.
 - a. Common Disease and Community Health: Malnourishment, Blood Pressure, Toxin, Diarrhea/Vomiting, Cough & Cold, Pneumonia, Gastric, Kidney Stones, Giardia/Dysentery, Diabetes, Stroke & Heart Disease, Arthritis, Cancers/Tumors/Cysts (CTC), Epilepsy, Allergies, Burn/Fall/Road, and Cardiopulmonary Resuscitation (CPR)
 - b. Pre & Post-Natal Care and Reproductive Health: Child Delivery, Infertility, Pre & Post-Natal Care
 - c. Infectious Disease: HIV/AIDS, Tuberculosis, Chickenpox/Shingles, Diphtheria/Pertussis/Tetanus, Mumps/Measles/Rubella, Polio, UTI/STD, Hepatitis, Typhoid, Malaria, and Worms.
2. To highlight health topics in need of further knowledge, I have created “Critical Health Issues,” which have been individually analyzed based upon the responses provided by CHVs. “Critical Health Issues” are any health issues or practices whose 95% confidence intervals have an upper bound of approximately “3,” meaning “moderate confidence.”
 - a. When taking a confidence interval this means that we can say that we are 95% confident that the true confidence of any given CHV, on average, would be moderate in a best-case scenario. This highlights a need for re-training and further focus on these “Critical Health Issues,” so that CHVs can better serve the healthcare needs of community members.

B. Aggregate Confidence Recognition:

A. Disease Recognition Confidence:

- a. Common Disease and Community Health - We are 95% confident that, on average, any given CHV has a 2.8 - 3.2 recognition confidence level of Common Disease and Community Health. (Appendix 1C)
- b. Pre & Post-Natal Care and Reproductive Health – We are 95% confident that, on average, any given CHV has a 2.92 – 3.84 recognition confidence level of Pre & Post-Natal Care and Reproductive Health. (Appendix 2C)
- c. Infectious Disease – We are 95% Confident that, on average, any given CHV has a 2.7 – 3.2 recognition confidence level of Infectious Disease. (Appendix 3C)

B. Disease Treatment Confidence:

- a. Common Disease and Community Health – We are 95% confident that, on average, any given CHV has a 2.8 - 3.9 treatment confidence level of Common Disease and Community Health. (Appendix 4C)
- b. Pre & Post-Natal Care and Reproductive Health – We are 95% confident that, on average, any given CHV has a 2.86 – 3.29 treatment confidence level of Pre & Post-Natal Care and Reproductive Health. (Appendix 5C)
- c. Infectious Disease - We are 95% Confident that, on average, any given CHV has a 2.84 – 3.81 treatment confidence level of Infectious Disease. (Appendix 6C)

C. Critical Health Issues:

1. Disease Recognition Confidence:

- a. Harmful Toxins - We are 95% confident that, on average, any given CHV has a 1.47 – 3.19 recognition confidence level of Harmful Toxins. (Appendix 7C)
- b. HIV/AIDS - We are 95% Confident that, on average, any given CHV has a 1.47 – 3.19 recognition confidence level of HIV/AIDS. (Appendix 8C)
- c. Diabetes - We are 95% Confident that, on average, any given CHV has a 1.14 – 2.86 recognition confidence level of Diabetes. (Appendix 9C)
- d. Stroke & Heart Problems - We are 95% Confident that, on average, any given CHV has a 1.22 – 3.22 recognition confidence level of Stroke & Heart Problems. (Appendix 10C)
- e. Cancers/Tumors/Cysts - We are 95% Confident that, on average, any given CHV has a 1.14 – 2.46 recognition confidence level of Cancer/Tumors/Cysts. (Appendix 11C)
- f. Epilepsy - We are 95% Confident that, on average, any given CHV has a 1.4 – 3.27 recognition confidence level of Epilepsy. (Appendix 12C)
- g. Cardiopulmonary Resuscitation (CPR) - We are 95% Confident that, on average, any given CHV has a 0.75 – 2 recognition confidence level of Cardiopulmonary Resuscitation (CPR). (Appendix 13C)

2. Disease Treatment Confidence:

- a. Harmful Toxins - We are 95% confident that, on average, any given CHV has a 1.58 – 3.31 treatment confidence level of Harmful Toxins. (Appendix 14C)
- b. Diabetes - We are 95% confident that, on average, any given CHV has a 1.14 - 3.09 treatment confidence level of Diabetes. (Appendix 15C)
- c. Cancers/Tumors/Cysts - We are 95% confident that, on average, any given CHV has a 1.15 – 3.3 treatment confidence level of Cancer/Tumors/Cysts. (Appendix 16C)

Analysis of Evaluation Results

HIMserve General Evaluation Questionnaire Analysis:

A. CHV Motivation, Successes, and Difficulties Results Analysis:

- CHVs find the content from the curriculum relevant and implementable in their daily lives, which we can see has had tremendous success in Pre & Post-Natal Care, as well as child delivery, which have both seemed to have increased in implementation and success.
- CHVs have stated that they have been conducting health awareness trainings, however not all CHVs have yet engaged with the community by providing education sessions. It seems that there is stubbornness in some of the villages within the Dooars region, as CHVs from this region have had lower amounts of activity, and reported a lack of implementation of knowledge gained from awareness trainings. It may be worth conducting additional outreach to CHVs in this region to further assess ways to promote community health trainings and implementation.
- Most CHVs appreciated refresher trainings, and wish to receive more whenever possible. CHVs also noted desire of learning additional subjects through CHV mentors. Perhaps an advanced module for current CHVs can be added, however the addition of such a program highly depends upon the capacity of staff to provide trainings.

B. Malnutrition and Immunization Analysis:

- Based off CHV responses, it appears malnutrition in the surveyed villages has reached 0%, which is an amazing accomplishment. The number of CHVs sampled is small, so there is a possibility that there are still many cases of malnutrition that were not mentioned due to the capability of evaluation staff to interview enough individuals to receive the “full picture” of Malnutrition prevalence in each region.
- A highlight of Malnutrition reduction has been the intertwined teaching of Pre & Post-Natal care, Child Delivery, and Malnutrition reduction (nutrition, finances, etc....) during visits with pregnant women. CHVs stress the importance of all 3 elements while consulting with pregnant women, which has proven extremely successful in reducing complications and negative results of care for each of these health topics.
- 45% of CHVs stated that they have not taken active steps to promote immunization, which is concerning. Immunization is a crucial part to community well-being. CHVs have stated that ICDS is working in both the Kalimpong and Dooars regions, so it may be in HIMserve’s interest to foster relations with ICDS and collaborate on efforts to improve immunization uptake in the regions. HIMserve should also aim to provide more motivation to CHVs who have not yet taken steps to promote immunization.
- CHVs stated that there have not been issues of comprehension by community members, rather community members have not had proper motivation to receive immunization. HIMserve should work to answer the following question: “Why do community members, who are knowledgeable about the benefits of immunization, not seek out immunization for themselves and their children?” The reason could be due to many things, however, it is crucial to figure out why there has not been more progress in the motivation of community members to receive immunization. Focus on risks of not being immunized may provide motivation and a new perspective for community members.

- One study in India on promotion of immunization found success by providing lentils to patients who came in for immunizations to clinics. The lentils in this study acted as an incentive for community members to go to the doctor for immunization, and immunization rates rose to essentially 100%. This study is mentioned in the book “Poor Economics” by Esther Duflo, and may be knowledge worth passing on to government and other NGO immunization promotion programs.

C. Family Planning:

- Issues remain with community member perspectives on Family Planning methods, especially sterilization procedures. CHVs have noted that males in the community are highly reluctant to adopt family planning methods, and that in some cases they will intervene in the ability of their wife to receive and maintain her treatment.
- It has become clear from results that there is not a problem with comprehension of family planning methods and benefits that may come from implementing these methods or CHV inactivity, however there is a lack of implementation and motivation shown by community members. CHVs who had knowledge of, and provided awareness on, the financial benefits of family planning stated that this seemed to be highly successful. It may be in HIMserve’s interest to expand training to CHVs regarding financial benefits of family planning practices, and encourage them to focus on these aspects when speaking with community members.
- Some CHVs noted that they do not have the adequate amount of equipment for the Family Planning desires within their communities. HIMserve should reach out to CHVs in each community and do a full assessment of medical supplies that are needed, and should work with local government clinics, FPAI, and NGOs to allow for successful provision of medical supplies to CHVs.

HIMserve CHV Questionnaire Analysis

A. Physical Burden of Disease Analysis:

- CHVs noted that there seems to be a decrease in overall prevalence of disease, especially for non-chronic and non-acute illnesses, populations have become healthier, and there has been increased access to clean drinking water. The amount of CHVs interviewed was low, so results for all sections are prone to inaccuracy, so it is important for HIMserve staff to interview patients, and even community members unaffiliated with HIMserve to receive a “full picture” of the effects that programs may have had on the reduction of physical burdens of disease on community members.
- Access to clean drinking water is most likely at 54 – 86% for communities where CHVs were interviewed, however there is still room for improvement in access to clean drinking water. HIMserve should coordinate efforts with local government and other NGOs in the region to consider discovering why some communities do not have easy access to clean drinking water or have not adopted practices such as boiling drinking water.
- In the Kalimpong region there has been a doctor from Kalimpong hospital who has been going out into communities and providing health awareness, and even treatment. He has built trust with community members, and may be an excellent person for HIMserve to consult with for increasing the impact and reach of HIMserve’s programs.

- CHVs stated that patients mostly go to private hospitals if they need treatment for chronic cases or if they have had an acute illness that would not be treated well at a public hospital. This means that there has been success by CHVs in alleviating the physical burden of disease for illnesses treatable by themselves, which are primarily non-chronic and non-acute, however there is still an unmet need of patients diagnosed with chronic and acute illnesses.
- Throughout evaluations, we learned that often it is difficult for community members to access healthcare services, especially due to lack of infrastructure and road conditions. Local government offices do not come to the villages often, so it is difficult for community members to even voice their concerns and needs to the government. HIMserve should increase reporting to the government and work to collaborate on efforts to improve the health of these communities.

B. Disease Prevention Analysis:

- While CHVs assert that there has been an overall decrease in the prevalence of disease, they still show concern for certain diseases, such as Diabetes and Tuberculosis, which have been showing increased prevalence within their communities. Higher prevalence of these two diseases is particularly troubling, as Tuberculosis is an infectious disease, and CHVs have noted trouble in improving immunization adoption. Further, the CHV survey revealed low confidence in recognizing and treating Diabetes, so an increase in prevalence of this disease may be disastrous for community members if CHVs are not equipped to provide timely treatment or referral of treatment.
- Spreading of knowledge about how Tuberculosis spreads, and especially how active disease can be asymptomatic in individuals, may provide more motivation for community members to receive immunization, as they will have an incentive to protect themselves from contracting this disease.
- CHVs noted that the most important reason for disease reduction has been due to the trust that they have received from other community members regarding health awareness and best practices.

C. Financial Burden of Disease Analysis:

- Many CHVs highlight that there has been an increased level of financial burden on community members, and some CHVs are not knowledgeable on these effects. It is important for CHVs to learn about the effects that financial burden of disease has on the health of their community, especially because many community members seek out private treatment and do not have insurance to help pay for their treatment. Effects of disease on community development and healthcare finances may be a good module to add to the CHV curriculum.
- HIMserve may be interested in seeking ways to provide further financial stability to community members, especially for areas such as healthcare. Increased advocating on behalf of communities regarding health-related needs to government offices may aid in increasing the accessibility and quality of services in government health clinics. Further, microinsurance may be an option worth investigating, as this could help provide an alleviation of disease burden to patients with chronic and acute illnesses.

- CHVs stated that patients mostly go to private hospitals if they need treatment for chronic cases or if they have had an acute illness that would not be treated well at a public hospital. This means that there has been success by CHVs in alleviating the financial burden of disease for illnesses treatable by themselves, which are primarily non-chronic and non-acute, however there is still an unmet need of patients diagnosed with chronic and acute illnesses.
- Lack of insurance, paired with subpar care being provided at government clinics may be leading to an increase in the burden of disease on finances for patients. If this is the case, HIMserve should work to collaborate with the government and other NGOs to reform and incentivize treatment at public clinics, or begin microinsurance programs so that community members are less prone to catastrophic losses in income.

D. Healthcare Access and Quality:

- In the Dooars region, some CHVs stated that community members prefer treatment at public clinics over private clinics because they feel that their needs are met by the public clinics. It may be worth HIMserve's time to discover why community members in this region are more willing to receive care in public facilities, as compared to communities in the Kalimpong and Darjeeling regions. Is this clinic comparatively better than public, and maybe even private clinics in the region? Is it better than clinics in other regions, such as Kalimpong? These questions may help HIMserve inform local government about practices to improve the motive of community members to seek treatment at their clinics.
- More than half of the CHVs interviewed stated that they do not feel that they have appropriate access to healthcare tools necessary to serve the needs of members in their communities. HIMserve should set up meetings with CHVs from each region and create a comprehensive list of tools that are necessary, and the needs that are being unmet due to this lack of access to medical equipment. HIMserve can then work to provide these tools by collaborating with other NGOs and local government, as well as seeking donations from individuals.
- CHVs have also stated that they would like to receive more training through the CHV program, so it may be a good idea for HIMserve to also assess further opportunities for CHV graduates, and may want to consider adding a second module to the CHV program.

E. Social Learning

- It seems that mothers in the community have been sharing knowledge about the benefits of health practices taught by CHVs. This is good because it seems to have a ripple effect in each community, leading to an exponential adoption of healthcare practices within communities served by CHVs.

CHV Survey Results Analysis

A. Aggregate Confidence Recognition Analysis

- There seems to be a need for improvement on the teaching and comprehension of "common disease and community health" and "infectious disease" subject areas, as the average confidence level of the CHV population may be very low regarding recognition of these types of diseases.

- “Pre & Post-Natal Care and Reproductive Health” has very high recognition confidence levels for the CHV population, which may explain why CHVs have reported reduction and increased success in treating illnesses in this area.
- CHVs seem comfortable overall in understanding treatment of diseases, however there is a lack of confidence in CHV capability to recognize signs and symptoms of diseases. Health cards or a health booklet that provides the signs, symptoms, and treatment of illnesses covered in the curriculum may be a good project for HIMserve to pursue, as this could allow CHVs to provide refresher training to themselves if HIMserve is unable to provide official refresher training.

B. Critical Health Issues:

- There is need for immediate refresher training on recognition and treatment of Diabetes, Cancers/Tumors/Cysts, and Cardiopulmonary Resuscitation (CPR). There is a high probability that CHVs have extremely low confidence in diagnosing and knowing treatment options (actions to take in the case of CPR) for these diseases.
- Other diseases that should be focused on in refresher training are Harmful toxins, HIV/AIDS, Stroke and Heart problems, and Epilepsy. There is high probability that CHVs have, at best, only moderate confidence in their knowledge on recognition and treatment options available for these diseases. HIMserve should try to ensure that these subjects are understood, and should provide refresher training to current CHVs regarding these topics.

Assessment of Evaluation Strategy and Methodology

- The number of respondents for HIMserve evaluations is low, and should be expanded to a sample size of ≥ 30 respondents for each topic of evaluation by HIMserve staff. If HIMserve interviews more community members, especially those who are patients of the CHVs, or who have not been recipients of benefits of HIMserve programs, the organization will be able to receive the “big picture” results of the programs that have been implemented.
- HIMserve should aim to continue collecting and recording data in a database such as excel so that it is easy to keep track of data trends over time. Evaluation staff also needs to make sure that there is consistency in the data entries and responses from interview participants, such as ensuring that the evaluation team receives a response in the form of a percentage for questions that will be recorded this way in the excel document. If data is not consistent, then it becomes hard for analysis to be done. For instance, if I have been given 8 responses regarding access to clean drinking water as a percentage, but I have one response noted as “Most community members”, then I do not have a consistent input to base a statistical analysis on.
- HIMserve may seek to pair with other NGOs and government programs working in the area so that the evaluation staff is able to expand evaluation beyond HIMserve work areas. If HIMserve can gather information about similar communities, which have not been recipients of HIMserve programs, then the evaluation team can compare the results between areas where HIMserve programs have been implemented and areas where HIMserve has not provided service.
- Further training on statistical methods of monitoring and evaluations analysis and data management would be very helpful to the evaluation staff, as this would allow for more complex and accurate reports to be generated by HIMserve staff.

- HIMserve should also expand grant-writing and fundraising efforts so that they can expand operations and further provide necessities, such as medical equipment, to the community members being served by the organization.

Statistical Appendix

A. HIMserve General Questionnaire Tables

<i>1A. Kalimpong Child Deliveries</i>		<i>2A. Dooars Child Deliveries</i>		<i>3A. Total Patients Sent to Hospital</i>	
Mean	14.33333	Mean	4.75	Mean	18.2
Standard Error	3.844188	Standard Error	2.193741	Standard Error	4.804627
Median	16	Median	2.5	Median	17.5
Mode	#N/A	Mode	6	Mode	22
Standard Deviation	6.658328	Standard Deviation	6.204837	Standard Deviation	15.19357
Sample Variance	44.33333	Sample Variance	38.5	Sample Variance	230.8444
Kurtosis	#DIV/0!	Kurtosis	4.903125	Kurtosis	3.634687
Skewness	-1.05583	Skewness	2.102017	Skewness	1.661406
Range	13	Range	19	Range	52
Minimum	7	Minimum	0	Minimum	3
Maximum	20	Maximum	19	Maximum	55
Sum	43	Sum	38	Sum	182
Count	3	Count	8	Count	10
Confidence Level(90.0%)	11.22497	Confidence Level(90.0%)	4.156215	Confidence Level(95.0%)	10.86882

B. HIMserve CHV Questionnaire Tables

<i>1B. Percent Access to Clean Water</i>	
Mean	0.7
Standard Error	0.068139
Median	0.7
Mode	0.5
Standard Deviation	0.192725
Sample Variance	0.037143
Kurtosis	-1.2716
Skewness	0.319307
Range	0.5
Minimum	0.5
Maximum	1
Sum	5.6
Count	8
Confidence Level(95.0%)	0.161122

C. HIMserve CHV Survey Tables

<u>1C. Community Health Recognition Confidence</u>	
Mean	3
Standard Error	0.10565757
Median	3
Mode	3
Standard Deviation	1.336474288
Sample Variance	1.786163522
Kurtosis	-1.10037084
Skewness	-0.224111031
Range	4
Minimum	1
Maximum	5
Sum	480
Count	160
Confidence Level(95.0%)	0.2086733

3C. Infectious Disease Recognition Confidence

Mean	2.94
Standard Error	0.115312487
Median	3
Mode	3
Standard Deviation	1.153124872
Sample Variance	1.32969697
Kurtosis	-0.762447993
Skewness	0.078762361
Range	4
Minimum	1
Maximum	5
Sum	294
Count	100
Confidence Level(95.0%)	0.228804992

<u>2C. Natal & Reproductive Recognition</u>	
Mean	3.3846154
Standard Error	0.2224128
Median	4
Mode	4
Standard Deviation	1.1340872
Sample Variance	1.2861538
Kurtosis	-0.356569
Skewness	-0.849069
Range	4
Minimum	1
Maximum	5
Sum	88
Count	26
Confidence Level(95.0%)	0.4580677

4C. Community Health Treatment

Mean	3.072368
Standard Error	0.110096
Median	3
Mode	3
Standard Deviation	1.357354
Sample Variance	1.84241
Kurtosis	-1.0696
Skewness	-0.24542
Range	4
Minimum	1
Maximum	5
Sum	467
Count	152
Confidence Level(95.0%)	0.217527

5C. Natal & Reproductive Treatment

Mean	3.346154
Standard Error	0.247711
Median	4
Mode	4
Standard Deviation	1.263085
Sample Variance	1.595385
Kurtosis	-0.67813
Skewness	-0.5913
Range	4
Minimum	1
Maximum	5
Sum	87
Count	26
Confidence Level(95.0%)	0.510171

7C. Toxin Recognition Confidence

Mean	2.333333
Standard Error	0.372678
Median	3
Mode	3
Standard Deviation	1.118034
Sample Variance	1.25
Kurtosis	-1.48571
Skewness	-0.15333
Range	3
Minimum	1
Maximum	4
Sum	21
Count	9
Confidence Level(95.0%)	0.859397

9C. Diabetes Recognition Confidence

Mean	2
Standard Error	0.372678
Median	2
Mode	1
Standard Deviation	1.118034
Sample Variance	1.25
Kurtosis	-0.8
Skewness	0.689987
Range	3
Minimum	1
Maximum	4
Sum	18
Count	9
Confidence Level(95.0%)	0.859397

6C. Infectious Disease Treatment

Mean	3.07767
Standard Error	0.117634
Median	3
Mode	3
Standard Deviation	1.193851
Sample Variance	1.425281
Kurtosis	-0.75081
Skewness	-0.08181
Range	4
Minimum	1
Maximum	5
Sum	317
Count	103
Confidence Level(95.0%)	0.233326

8C. HIV/AIDS Recognition Confidence

Mean	2.333333
Standard Error	0.372678
Median	2
Mode	2
Standard Deviation	1.118034
Sample Variance	1.25
Kurtosis	-0.8
Skewness	0.536656
Range	3
Minimum	1
Maximum	4
Sum	21
Count	9
Confidence Level(95.0%)	0.859397

10C. Stroke/Heart Disease Recognition Confidence

Mean	2.22222222
Standard Error	0.43390276
Median	2
Mode	1
Standard Deviation	1.301708279
Sample Variance	1.694444444
Kurtosis	-1.806426844
Skewness	0.354425274
Range	3
Minimum	1
Maximum	4
Sum	20
Count	9
Confidence Level(95.0%)	1.000581558

11C. Cancer/Tumors/Cysts Recognition

Mean	1.8
Standard Error	0.2905933
Median	1.5
Mode	1
Standard Deviation	0.9189366
Sample Variance	0.8444444
Kurtosis	-1.807479
Skewness	0.4725141
Range	2
Minimum	1
Maximum	3
Sum	18
Count	10
Confidence Level(95.0%)	0.6573676

13C. CPR Recogniton Confidence

Mean	1.375
Standard Error	0.263052
Median	1
Mode	1
Standard Deviation	0.744024
Sample Variance	0.553571
Kurtosis	3.204995
Skewness	1.95103
Range	2
Minimum	1
Maximum	3
Sum	11
Count	8
Confidence Level(95.0%)	0.622019

15C. Diabetes Treatment Confidence

Mean	2.111111
Standard Error	0.423099
Median	2
Mode	1
Standard Deviation	1.269296
Sample Variance	1.611111
Kurtosis	-1.25055
Skewness	0.683052
Range	3
Minimum	1
Maximum	4
Sum	19
Count	9
Confidence Level(95.0%)	0.975667

12C. Epilepsy Recognition Confidence

Mean	2.333333
Standard Error	0.408248
Median	2
Mode	1
Standard Deviation	1.224745
Sample Variance	1.5
Kurtosis	-1.55556
Skewness	0.233285
Range	3
Minimum	1
Maximum	4
Sum	21
Count	9
Confidence Level(95.0%)	0.941422

14C. Toxin Treatment Confidence

Mean	2.444444
Standard Error	0.376796
Median	3
Mode	3
Standard Deviation	1.130388
Sample Variance	1.277778
Kurtosis	-1.39022
Skewness	-0.49178
Range	3
Minimum	1
Maximum	4
Sum	22
Count	9
Confidence Level(95.0%)	0.868893

16C. Cancer/Tumors/Cysts Treatment Confidence

Mean	2.222222222
Standard Error	0.464811126
Median	2
Mode	1
Standard Deviation	1.394433378
Sample Variance	1.944444444
Kurtosis	0.356851312
Skewness	0.920569953
Range	4
Minimum	1
Maximum	5
Sum	20
Count	9
Confidence Level(95.0%)	1.071856378