Preparatory Survey on BOP business on Mobile Medical Checkup and Preventive Care Service (India)

Final Report (Summary)

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Japan International Cooperation Agency (JICA)

Secom Medical System Co., Ltd.
PricewaterhouseCoopers Sustainability Co., Ltd

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1. Study Overview

This is a summary of the report titled “Feasibility Study into the Provision of Health Checks and Preventive Health Care Education for BOPs in India Using Japanese Mobile Health Vehicles” conducted by Secom Medical System Co., Ltd., (Secom MS), in cooperation with PricewaterhouseCoopers Sustainability Co Ltd, Japan.

1.1 Background and Objective of the Study

1.1.1 Background of the Study

●Background of the Study

Since its establishment in 1962, the Secom Group has grown operations around its core business of providing services around social security and social safety. In addition to the security businesses, Secom Group has 8 business divisions operating in the medical, disaster prevention, insurance, and geographical information service, telecommunications, real estates, and international business sectors. Secom Group operates internationally providing services in 21 countries around the world. The medical division, Secom MS, was established in 1988 and has been operating for over 25 years in Japan with overall responsibility for the management of medical care services offered by the Secom Group. Its services focus on the areas of (1) preventive medicine, (2) services to hospitals, (3) home health care and (4) remote medical care through the use of Information Technology.

Secom MS aims to deliver high-quality medical services, both domestically and internationally, based on its experience in delivering services to the medical sector. Its first foray into the Indian market was in Bengaluru with the establishment of a 294 bed general acute care hospital, SAKRA WORLD HOSPITAL (SAKRA WH), in March 2014. The approach adopted by Secom MS follows that practiced in Japan which goes beyond the provision of acute care medical services to include raising awareness around disease prevention and medical rehabilitation following hospital discharge. The establishment of SAKRA WH is expected to make a significant contribution to the way in which medical services are provided in India. One of the significant challenges in India’s medical sector that remains to be addressed is how to provide services not only to the middle and upper classes, but also to people at the Base of Pyramid (BOPs). Taking this into consideration, this study will investigate 2 options for overcoming this challenge, namely (1) The use of specially equipped vehicles, as used in Japan, to provide health checks for BOPs and (2) Provision of simple health checks and education regarding disease prevention to BOPs.

Figure 1.1.1：SAKRA WH

Reference：SAKRA WH

●Objective of This Study

This study aims to assess the feasibility of a establishing a business model for the provision of mobile health check services using specially equipped Japanese vehicles to BOP residents in the rural area of Bengaluru. The study will assess the viability of selling the mobile health clinic services and identify appropriate services, pricing and delivery methods. Through the provision of this service, it is expected that both access to medical services and levels of awareness regarding preventive medicine will be gradually increased among BOPs.

(2) **Expected scheme for the study**

The feasibility study envisions a business model that will allow the provision of mobile health check services using specially equipped Japanese vehicles to BOP residents in the rural area of Bengaluru. To support the financial viability and sustainability of the service, consideration is being given to delivering the service to people in the Middle of `Pyramid (MOPs) using the same equipment which would allow cost sharing. Inspection facilities and staff will be provided from SAKRA WH, with health checks provided by the doctors, nurses and other medical staff of SAKRA WH. Alongside the provision of the health check service, education will be provided regarding nutrition improvement and maternal and child health, performed in collaboration with local NGOs.

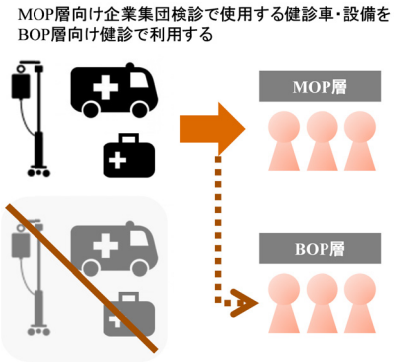

Figure 1.1.2：Equipment Sharing between the MOP and BOP schemes

Reference: Study Team

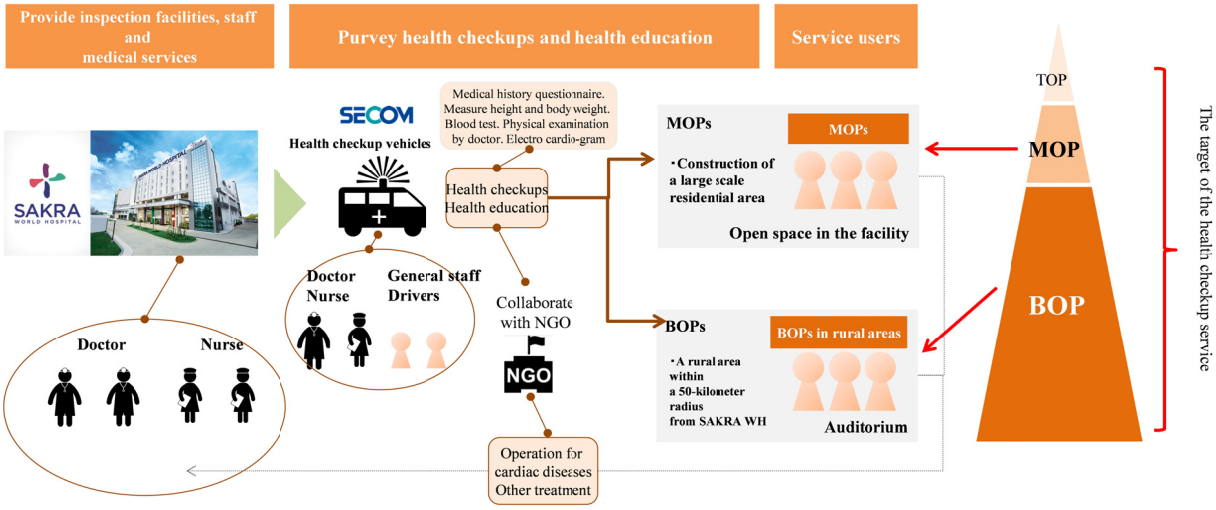

Figure 1.1.3: Overview of Mobile Health Check-up

Reference: Study Team

●Development goals and consistency

The development goals which this study will contribute are medical (in particular the health checks implying primary health care and primary medical care), and women and poverty. These are significant elements in the execution of JICA's country assistance program for India, particularly as the study is congruous in solving the severe health issues in India including primary health, prevention of communicable diseases, and improving maternal and child health, issues for which there is a strong need to be addressed.

1.2 Methodology of This Study

1.2.1 Study Items

The following study items were included in the performance of this assessment:

表 1.2.1：Study Items

Study Items	Methodology		
	Desktop	Interview	Field Survey
1. Arrangement & Reporting			
1-1) Assessment of development impact			
2-2) Study on projects that could be collaborated with JICA			
2. Investment environment/business environment			
2-1) Research on political and economic trends			
2-2) Research on tax, legal systems and regulations			
Research on highly-important domestic tax system & tax breaks	○	○	
Research on import of medical check-up related equipment	○	○	
Research on visiting & remote medical diagnosis related systems	○	○	
Research on micro insurance related systems	○	○	
2-3) Research on mobile checkups, micro insurance markets			
Research on the potential market for mobile check ups in Karnataka State	○	○	
Benchmark study of competitors in mobile check ups	○	○	
Research on potential markets for micro insurance in India	○	○	
Research on micro insurance players in the Karnataka State	○	○	
2-4) Preliminary research on the overview of the local disease structure			
Research on the overall structure of diseases in India	○	○	
Research on the overall structure of diseases in the Karnataka state	○	○	
Research on endemics in the suburbs of Bangalore	○	○	
2-5) Research on possible partners			
Research on insurance companies	○	○	
Research on players that provide insurance except for insurance companies	○	○	
Research on NGOs that could be collaborated with in health education	○	○	
Research on prospective hospitals and clinics for reference	○	○	
Research on BOP communities	○	○	
Research on Institutes that accept medical checkups	○	○	
Research on the MOP sector			
Research on issues related to infectious disease	○	○	○
Research on needs and issues related to access in medical services	○	○	○
Research on income, expenditure and living conditions	○	○	○
2-6) Research on the BOP sector			
Research on BOP issues related to infectious disease	○	○	○
Research on BOP issues related to mother and child health	○	○	○
Research on BOP needs and issues related to access in medical services	○	○	○
Research on BOP status of subscription and acceptability of micro insurance	○	○	○
Research on BOP income･expenditure and living conditions	○	○	○
Research on Issues related to social hierarchy	○	○	○
3. Confirmation of acceptance of health checks			
3-1) Confirmation of acceptance of health checks			
Design of medical examinations	○		
Plan a research on acceptability of medical examinations	○		
Conduct a research on acceptability of medical examinations		○	○
4. Drafting the business model			
Define Check-up Items	○		
Define filtering items of laboratory test	○		
Selection of partner insurance carriers	○		
Selection of partner NGOs	○		
Define a model of check-up fee collection	○		
Define round routes of mobile health check-up vehicles	○		
Define an operation model and health check-up procedures	○		
Define contents of education session for BOPs	○		
5. Business planning			
Plan procurement of medical equipments	○		
Plan sales budgets	○		
Conduct a personnel planning	○		
Plan financing arrangements	○		
Conduct financial analysis(PL, CF, overall profitability)	○		
Create schedule for the business	○		

Reference: Made by Study team

※Items for MOP Market are omitted as they are outside of the scope of this feasibility study.

1.2.2 Study Area

The underlying assumption built into the business model is for the provision of health check services during the daytime with the specially equipped vehicles and staff returning to SAKRA WH within the same day. As a result of this assumption, the target area for service provision is within a 50-kilometer radius of SAKRA WH i.e. areas which can be reached in less than 2 hours. The rural area of Bengaluru consists of 8 districts; Nelamangala, Dod Ballapur, Devanahalli, Hosakote, Magadi, Ramanagara, Channapatna and Kanakapura. All of the 8 districts are within a 50-kilometer radius of SAKRA WH, thus covering approximately 1,500 villages with a toal population of 1,658,000 people. These parameters were assessed as being significant in the selection of the Bengaluru area as relevant for the study.

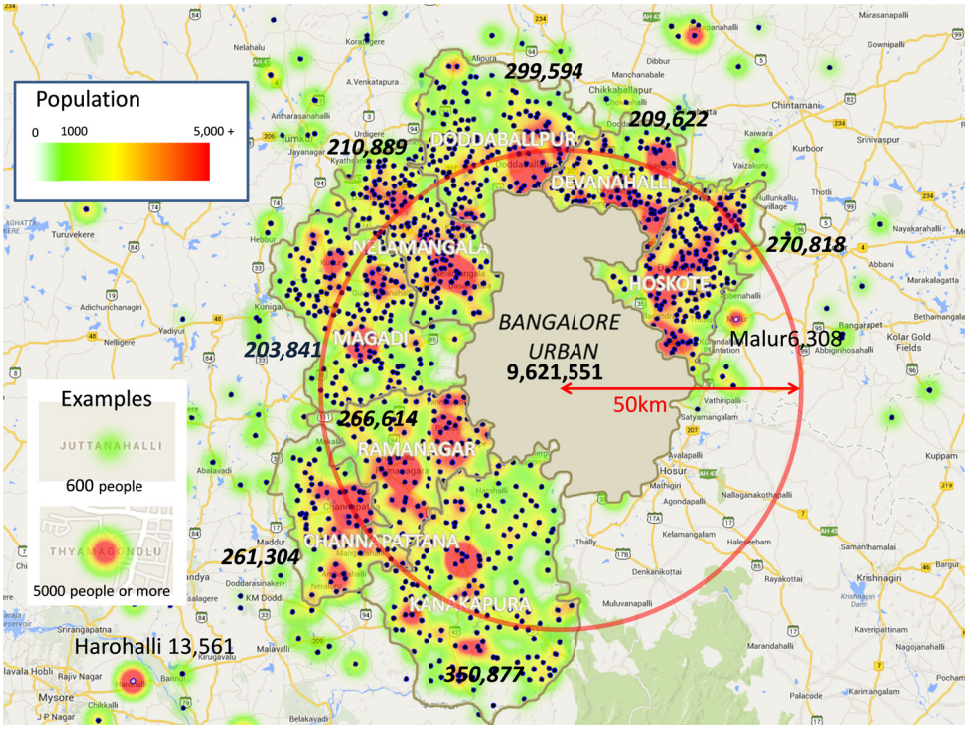

Figure 1.2.1 : Study Area

Reference: Study Team

1.2.3 Study Schedule

The study was conducted between March 2014 and January 2015 with the study in India comprising of three stages; partnership research in March, field survey of BOPs in June- July, and the pilot survey in August-September. The first survey took place over a 1 week period with the second and the third surveys lasting for 2 months each. To allow for additional research in India, time allocated to these tasks was increased to 2 months from an originally planned 1.5 months. This facilitated execution of the project avoiding potential days such as those resulting from cultural and religious events, and allowed the project to be implemented according to the planned schedule. This approach allowed for additional research relating to the feasibility of the modified business plan, as described in part *2. Result of the Study*. The final report includes the result of this additional survey.

1.2.4 Study Method

This study was conducted using a combination of 4 research methods; desktop survey, interview survey, questionnaire survey, and pilot survey. The desktop survey was performed in Japan, with the remaining surveys conducted in Bangaluru, India.

2. Result of the Study

2.1 Conclusion

2.1.1 Feasibility of Commercialization

The study team concluded that to determine the feasibility of commercialization of the business model for the provision of health check services using specially equipped vehicles, additional consideration of 3 areas is required. These reasons for this are discussed in *2.1.2 Reasons for the Feasibility Study Result*.

2.1.2 Reasons for the Feasibility Study Result

Based on the assessment, the study team considers that the financial sustainability of the provision of health check services to BOPs will require the shared use of medical equipment, such as vehicles and blood test machines, with the mobile health check service provided to MOPs. Therefore, when judging the feasibility of the business model, the study team needed to consider the profitability of the MOP scheme alongside that of the BOP scheme. With respect to commercialization, the minimum requirements are for the *MOP scheme to operate at a profit* with the *BOP scheme achieving at least break-even operations*. The study results indicate that there is the potential for these requirements to be met and as a result, Secom MS will continue to consider the feasibility of commercialization of the business model. The reasons for the study team reaching this conclusion are explained below.

●Reason 1: Potential Profitable Operation of the MOP Scheme

As stated above, the profitable operation of the MOP scheme is one of the minimum requirements in the decision to proceed with commercialization of this business model. Assessment of the potential market demand for health checks in the MOP market by Secom MS indicates that there is potential demand for mobile health checks in the MOP market which would allow Secom MS to increase their customer base. It was also assessed that the MOP scheme would provide a stable source of profits. As a result, the study team concluded that the commercialization of the BOP scheme might be possible, since Secom MS can probably operate the MOP scheme profitably.

●Reason 2: Possibility of the Break-even in BOP Scheme

The study concluded that there is the possibility that the BOP scheme can operate on a break-even basis based on the following.

A. Key assumptions behind conclusions on assessment of revenues:

Assumption 1: Stages at which costs are incurred and profit generated

In the business model, Secom will provide mobile health checks and screenings for patients with cardiac diseases or diabetes. Based on the results of these initial investigations, in cases of people with suspected serious cardiac disease SAKRA WH will perform additional examinations and in some cases may perform the necessary operations to address symptoms identified. Costs will be incurred at each stage, notably the mobile health checkup, examination by SAKRA WH and performance of the necessary operations. At the start of the study, it was assumed that all three stages could be operated at a profit however following the study, it is expected that only performing operations can operate profitably.

Assumption 2: The Occurrence of Serious Cardiac Disease in the Target Area

In this study, based on the pilot result and experiences of SAKRA WH doctors, it is assumed that approximately 2 percent of people participating in checkups are diagnosed as having serious cardiac disease. Of these, approximately 50 % will be required to undergo medical procedures (i.e. 1% of the total number of BOPs participating in checkups). The assumptions regarding need for operations for cardiac disease patients are described in section "3.2.1 Marketing related information".

Assumption 3: Unit for revenue account

As stated in Assumption 2, under the business model revenues will be generated from people with serious cardiac disease in urgent need of operations who account for 1% of the total number of people undergoing checks (1 out of every 100 people). For revenue calculation purposes, as the number of people participating in checks per vehicle trip is 80, to maintain the metric of profit and cost per 100 patients, a multiplier of 1.25 is applied to profit and costs associated with the mobile checkups.

B. Examining estimated profit and costs

In order to achieve operations that exceed break-even revenue from BOP targeted mobile health checkups, the average profit generated per operation at SAKRA WH (approximately 100,000 rupees) must be greater than the total cost of provision of the initial investigation stages, notably a) operation of the mobile clinic b) thorough examination/hospitalization treatment/operations for patients requiring operations and c) thorough examination of patients not requiring operations. As a result of the calculation of the (1) estimated costs and (2) estimated profits for 5 years, in the first year of the business model, the estimated cost will exceed revenues generated, however, after the second year the revenues generated will be greater that the costs indicating that the business model has the potential to achieve break-even operations.

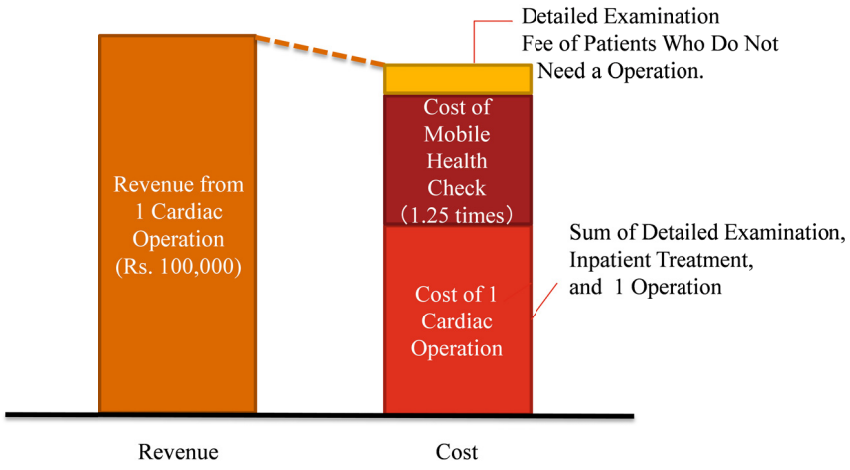

Figure 2.1.1：Breakeven of Mobile Health Check-up for BOPs (Per 100 BOP Check-up)
Reference: Study Team

B-1 Estimated cost

As described above, key costs associated with this business relate to a) operation of the mobile clinic b) thorough examination/hospitalization treatment/operations for patients requiring operations and c) thorough examination of patients not requiring operations. Based on the above the study team calculated the cost per 100 examinees (applying a 1.25 multiplier to account for actual number of people participating in the mobile checks).

The cost of a) mobile clinic operation fluctuates annually because of purchase of fixed assets. Costs incurred under (b and c) are assumed to be fixed costs.

B-2 An average revenue per medical procedure is approximately Rs.100,000. This Rs.100,000 should cover expenses incurred from thorough examination, hospitalization treatment, and operations to attain breakeven. Although the average operation fee will be set at approximately Rs.100,000, there may be around Rs.1,000 difference depending on the contents of operation. The pricing structure for provision of operations is under finalization. Example operations for cardiac disease are coronary artery bypass, catheterization, cardiac pacemaker, valve replacement, and pediatric heart surgery.

B-3 Possibility of generating estimated profit

- Price setting

Generally, the cost of operations charged to a BOP is expected to be between Rs.10,000-20,000 rupees with the remaining cost of Rs.80,000-90,000 rupees paid for by support funds such as those from affiliated medical foundations and NGOs. The final cost to a BOP will be determined following interviews regarding their financial status with SAKRA WH. Although the income levels of BOPs in the target area is relatively high, in cases of serious cardiac disease where the BOP is unable to pay, additional support funds will be sought to cover the costs although it is expected that these cases will be rare. It should be noted that one of the affiliated foundations, Have a Heart Foundation, has confirmed their willingness to compensate a patient for the full coverage of the cost of

operations in the cases where the patient is unable to pay. The study team concludes that the operation price is affordable and acceptable.

- Measures for BOPs who are unable to pay

BOP patients without appropriate means to pay for operations will have the cost of their procedures compensated by Have a Heart Foundation as stated above along with other possible foundations that are willing to support such patients. These approaches will enable BOPs to receive treatment.

2.2 Business Model

2.2.1 Overview of the Business Model

(1) Overview

The study team created the business model for the provision of mobile health checks for the screening of cardiac diseases and diabetes. The patients identified with conditions from the mobile health check undergo additional examination, and, where necessary, operations in SAKRA WH. For patients with mild cardiac diseases, diabetes, and other illnesses, SAKRA WH refers them to government run hospitals in the Bengaluru area. The revenue source of the business model is fees for cardiac operations of BOPs in SAKRA WH. They offer cardiac operations to BOPs diagnosed with severe cardiac diseases from the mobile health checks at a charge of 10-20% of the total price of inpatient care for an operation in SAKRA WH, which is approximately equivalent to Rs.10,000-20,000. The remaining 80-90%, which is equivalent to Rs.80,000-90,000, would be paid by foundations working to provide medical support for BOPs. SAKRA WH will sign agreements with the foundations in India for supporting BOPs who need a heart operation. The study team decided to focus on cardiac diseases and diabetes for their mobile health check-up, because these 2 diseases are critical issues in India. In addition, the study team assumes the provision of education sessions to BOPs in target areas. The education sessions are operated by staffs of SAKRA WH who can speak local language, *Kannada*, and NGO staffs working in the target areas. The three main topics of the education sessions are preventive health care, nutrition, and maternal and child health.

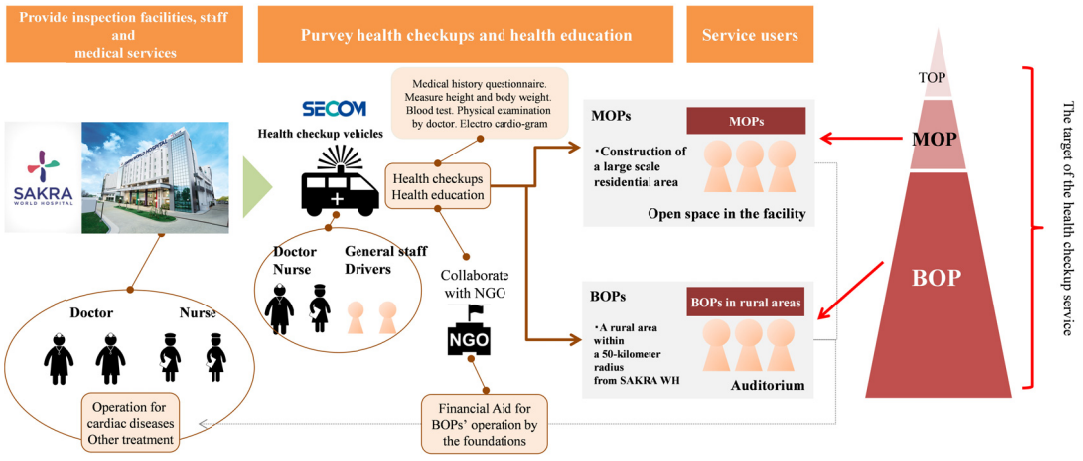

Figure 2.2.1: The Flow of Business Model

Reference: Study Team

(2) Health Check Service

Secom MS's mobile health check service focuses on screening for cardiac diseases and diabetes. If mobile health check services for these 2 diseases are profitable, Secom MS would start planning a program to screen for breast cancer, since it is also one of the major diseases in India. The mobile health check-up service offered by SAKRA WH is free of charge. In the first fiscal year, the mobile health check-up service for MOPs will be conducted from Monday to Saturday, and the mobile health check service for BOPs will operate on Sunday. SAKRA WH assumes that in the case of the mobile health check for BOPs, 80 BOPs per day of operation is appropriate based on the experience of the pilot survey during this feasibility study.

Figure 2.2.2 shows the flow of Secom MS's medical check-up process. First, desk workers of SAKRA WH check a BOP's basic information (name, age, contacts, etc.) to complete medical interview sheets. Then, height, weight, and blood pressure are measured. Following this, a nurse collects blood samples which are analyzed using machines installed in the vehicles in minutes. The results are printed out and given to the BOPs. This is followed by a doctor's consultation with Male BOPs examined by a male doctor, and female BOPs examined by a female doctor. In the case that the doctor considers an ECG necessary, this is performed by a nurse. The nurse in charge of ECG examination also has responsibility for explanation of medicines and supplements, which are given to BOPs based on doctor's consultation. In total, the medical check-up takes 16.25 minutes for male BOPs, and 18.25 minutes for female BOPs.

2.5min	1.75min	2min	5min	6min（male：5min, felame：7min）
Registration・ Interview Sheet・ Height・ Weight・ Blood Pressure	Blood Sampling	Blood Test	Dector's Examination	ECG (Based on doctor's request) Explanation on Medicine and Suppliment
Desk Worker	Nurse	Nurse	Doctor (Male) Doctor (Female)	Nurse

Figure 2.2.2：Flow of Medical Check-up

Reference: Study Team

(3) Overview of the Education Session for BOPs

In the mobile health check process, SAKRA WH and partner NGOs will conduct education session for BOPs during the time they are waiting time for health checks. The education session will focus on preventive healthcare, nutrition, and maternal and child health. SAKRA WH is responsible for education regarding the medical and healthcare aspects with the local NGO responsible for other aspects, such as raising income, efficient agriculture etc. Although SAKRA WH and the local NGO provide education regarding different aspects, SAKRA WH will cooperate with the local NGO in the creation of programs for the education session, since they have expertise in education for BOPs. Therefore, good cooperation with the local NGO is the assessed as being central to successfully conducting the education sessions. Secom MS assumes that the total expense of the education session for BOPs is small, as key requirements are visual materials such as picture books. SAKRA WH will partner with NGOs that share their vision.

(4) Complete Examination and Operation

A BOP whose health check indicates symptoms that may require additional treatment may be either referred to SAKRA WH (A) or a government hospital in Bengaluru area (B).

A. Referral to SAKRA WH

A-1. Complete examination

A BOP showing severe symptoms of cardiac diseases makes a reservation to SAKRA WH, and undergoes a complete examination. At the first step, the BOP takes ①ultrasonic examination, then, if a doctor requires further examination, the BOP takes ②angiogram examination. SAKRA WH assumes that 10% of BOPs participating in the mobile medical check would take ①, and 2% would take ②.

- After the Complete Examination

BOPs are classified into 3 categories: ①BOPs requiring operations, ②BOPs who need only medical treatment and ③BOPs who do not need any medical treatment. ① would stay in SAKRA WH and undergo operations for their cardiac disease. ② would take medical treatment in SAKRA WH if he/she wants, or can be referred to the government hospitals in Bengaluru area.

A-2: Operation

- Cardiac disease operations

Cardiac disease operations can generally be classified in 2 ways: cardiovascular internal medicine or cardio surgery. In cardiovascular internal medicine, there are 2 types of cardiac operations: ①coronary artery bypass and ②catheter. Cardio surgery, involving open chest surgery, includes ③ pacemakers, ④ valve replacement, or ⑤ pediatric cardiac surgery (if a patient is a child). From the data collected by SAKRA WH in 2014, 50% of patients who had an angiogram examination needed surgery. Therefore, SAKRA WH assumes 1% of BOPs who have mobile health check-up need cardiac disease surgery.

Table 2.2.1: Cardiac Disease Operations

Category	Detail of Operation
Cardiovascular Internal Medicine	①Coronary artery bypass
	②Catheter
Cardiosurgery	③Pacemaker
	④Valve replacement
	⑤Pediatric cardiac surgery

Reference: Study Team

- Operation Fees

Secom MS assumes that the 80-90% of the cost of cardiac operations of BOPs will be covered by foundations in India, with the remainder covered by BOPs themselves. In India, the partnership of large private hospitals and foundations for supporting BOPs' medical treatment is quite common. SAKRA WH is now preparing the registration process of partnering with those foundations, because only partnering hospitals are eligible to receive financial support. Currently, SAKRA WH is planning to partner with four foundations, which are *Have a Heart Foundation*, *Needy Heart Foundation*, *Prime Minister's National Relief Fund*, and *Chief Minister's Distress Relied Fund*. There is a mutual agreement on partnering with Heart Care Foundation of India, and SAKRA WH is preparing applications for the other three organizations. Among the three organizations, Needy Heart Foundation

has a good reputation and acceptance by this foundation will support the successful conclusion of agreements with the other Foundations.[1]

B. Referral to the Government Hospitals

BOPs displaying symptoms of mild cardiac disease, diabetes, and other illnesses will be referred to the government hospitals by SAKRA The referral process is expected to function quite smoothly given the wide network of contacts that doctors of SAKRA WH have in the medical sector. For instance, BOPs with mild cardiac diseases are expected to be referred to Jayadeva Hospital, whilst BOPs displaying symptoms of neuronal system diseases would be referred to NIMHANS hospital.

2.2.2 Remaining Tasks for the BOP Scheme

It is considered that 3 tasks remain to be completed in relation to the BOP scheme. Secom MS will follow progress following this feasibility study. If all the remaining tasks are resolved, Secom MS will consider commercialization of this mobile health check business for BOPs again.

Task 1: Planning Education Session of *Preventive Healthcare*, *Nutrition*, and *Maternal and Child Health*

As a part of the business model, the study team plans to conduct education sessions for BOPs during the waiting time for mobile health checks. The objective of the educational session is to make BOPs understand the importance of preventive health care, nutritious dietary habit, and maternal and child health. The contents of the education session need to be discussed and agreed by both SAKRA WH and a local NGO partner, since they will work together for the provision of the education session. An appropriate local NGO partner has not been decided although possible candidates are: Myrada, Swasti, and AIFO India.

Task 2: Partnering with the Foundations

The study team plans to increase the number of partner foundations in India. The partnership with foundations is an essential part of the BOP scheme, since they are responsible for payment of 80-90% of the treatment cost of operations. SAKRA WH is planning to partner with four foundations, which are *Have a Heart Foundation*, *Needy Heart Foundation*, *Prime Minister's National Relief Fund*, and *Chief Minister's Distress Relied Fund*. Among them, SAKRA WH has already agreed to partner with *Have a Heart Foundation*.

Task 3: Procurement of An Affordable Mobile Health Check-up Vehicle and Medical Equipment

Secom MS is planning to create a Japanese-style mobile health check-up vehicle in India, instead of importing it from Japan, since the customs duty on vehicles is quite high in India (equivalent to 225% of the purchase price). Additionally, the feasibility of procuring equipment to provide breast cancer screening services, to be introduced after 6th year of commercialization needs to be researched.

[1] Sunil. (2015 年 1 月 16 日). 支援基金・NGO に関するヒアリング. (セコム医療システム株式会社, インタビュー質問者)

2.3 Social Impact Scenario

2.3.1 Development Impacts and Development Evaluation Index

Table 2.7.1 shows the development impacts and their potentialities of scaling up. By scaling up this business, BOPs will gain benefits of OPD, prescription of medicine, and choices of selecting hospitals more than present.

表 2.3.1：Development Impacts and the Potentialities of Scaling Up After the Study

	Expected Development Impact After the Study	The Potentiality of Scaling Up
Health Education	●There will be education provided upon "preventive medicine", "nutrition improvement" regarding diabtetes and cardiac diseases ,and "maternal and child health" for preventing infants with congenital cardiac diseases. Aims to educate 61,440 BOPs in 5 years.	●If education on nutrition improvement will be provided as well as selling nutritional supplementary food and suplementary tablets at low-costs, nutrients which are apt to be short in the dietary of BOPs will be ingested consistently, where this will be leading to boost the nutritional status of BOPs.
	●Deploy "maternal and child health education" for pregnant women to aim enlightenment for sanitary management. A cumulative total of 30,720 BOP layered women will receive the education in 5 years.	In addition to “maternal and child health education”, the education will comprise different life stages of women such as first menstruate, early detection of breast cancer, and changes in hormone balances due to aging. By having a deeper understanding of distinctive and changing characteristics of women’s physical conditions and diseases, we will be able to cope with physical changes of BOP women properly.
Health Check Service	●A cumulative total of 61,440 BOPs will be able to receive health check service.	●By extending areas of the service, an increasing number of BOP patients who receive services from mobile health check clinics can be expected.
	N/A	N/A
Medical Treatment	● Patients who require operation for cardiac disease or breast cancer will be defraying only 20 percent of the total expense. In 5 years, 614 BOPs will have operation at SAKRA WH. Those who need ambulatory treatment or hospital care will receive treatment at governmental hospitals at close proximity.	●If extend selections of hospitals for ambulatory treatment and hospital care, BOPs will be able to select their hospitals on their own choices. Therefore, SAKRA WH can introduce governmental or private hospitals based on their preferences.
After care	●There will be 4 visits by a mobile health check services annually per village where SAKRA WH doctors and staff will advise on treatment and give direct follow-ups.	●In addition to the support of SAKRA WH and NGOs, BOPs who had experienced the treatment from the clinics will build a structure to encourage other BOP patients who have newly found their diseases to actively continue their medical treatment. Therefore, we can expect to reduce patients who discontinue to have treatment based on their self-judgments.

Reference: Study Team

2.3.2 Project Summary and Development Impact Index of This Business

Based on the current business model, table 2.7.3 shows project summary and development impact index.

Table 2.3.2: Project Summary and Development Impact Index

Project Summary		Index
Overall Goal	Mobile health check service will contribute to the nutrition improvement and decrease the rate of obesity, as well as early detecting cardiac diseases, diabetes and breast cancer will be possible, conducing to the reduction of mortality rate in the target area.	・Rate of diabetes ・Mortality rate of cardiac diseases ・Mortality rate of diabetes ・Mortality rate of breast cancer
Project Purpose	Early detect cardiac diseases, diabetes and breast cancer, thus they may receive medical treatment before the disease aggravates.	・Number of early cardiac disease/ diabetes patients
	BOPs in the target area will be able to receive cardiac operation with advanced medical at low-cost.	・Operation volume of cardiac diseases.
	BOPs in the targer area will be able to receive medical treatment for high blood pressure and cardiac disease without having to go to dispensing pharmacy outside of village.	・Number of high blood pressure patients ・Number of cardiac diseased patients
	BOPs in the target area will understand the significance of preventive medicine.	・Number of mobile health check clinic patients
	Throughout nutrition education, BOPs will have balanced dietary habits.	・Rate of diabetes ・Mortality rate of cardiac diseases/diabetes
	By providing maternal and child health education, the sanitary condition of BOP gravida will be improved, leading to reduce the number of infants with congenital cardiac diseases in the target area.	・Number of cardiac diseased infant patients
	BOP patients who are diagnosed to require medical treatment will actively continue to have treatment under the consistent follow-up by doctor.	・Number of patients who require medical treatment
	Provide mobile health check clinic specialized for cardiac diseases, diabetes, and breast cancer.	・Number of mobile health check clinic patients
Output	Provide cardiac operation that requires advanced medical treatment at SAKRA WH.	・Operation volume of cardiac diseases
	Provide proprietary drugs for high blood pressure and cardiac diseases at mobile health check clinic.	・Number of high blood pressure patients ・Number of cardiac diseased patients
	There will be education on preventive medicine, maternal and child health, and nutrients.	・Number of participants receiving the education
	Doctors and staffs from SAKRA WH will give medical follow-ups and advises for BOP patients who are under medical treatment.	・Number of patients who require medical treatment

Reference: Study Team

3. References

Sunil. (2015 年 1 月 16 日). 支援基金・NGO に関するヒアリング. (セコム医療システム株式会社, インタビュー質問者)