Scaling up Skilled Care for Maternal & Neonatal Health in Rajasthan

Report of a feasibility study undertaken for Action Research and Training for Health (ARTH), Udaipur

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Chapter I
Introduction

1.0 Introduction

Action Research and Training for Health (ARTH) is non profit organization that was set up in 1997 with a mission *"***to help communities access and manage health care according to their needs and capacities, by using research and training initiatives"** To support its research and training initiatives, ARTH has been providing Nurse Midwife based maternal - neonatal services using an institutional model in predominantly tribal belts of rural Rajasthan. This model has been successful in demonstrating the need for similar initiatives if we need to bring down the high Maternal Mortality Rate (MMR) and Infant Mortality Rate (IMR) rates in the state.

ARTH now intends to explore the possibility and feasibility of building on these experiences to develop a model that does not rely completely on grants and that would meet the requirement of quality maternal-neonatal services to the communities in rural Rajasthan and provide adequate financial support to a possible franchisee. This is a report of the feasibility study that was conducted in May to July, 2006.

1.1 Background to the Study

Skilled attendance at childbirth has been recognized to be among the most critical interventions for the reduction of both maternal and neonatal mortality. Consequently, it features as a key indicator for monitoring the Millennium Development Goal on maternal health. Since 1999, ARTH has implemented a field-based intervention where trained, equipped and professionally empowered nurse-midwives provide a package of primary health services centred on maternal and neonatal health care at simple rural health centres. Recently, in collaboration with the government's health department, ARTH has begun an intervention to train, equip and support 20 auxiliary nurse-midwives in 2 interior tribal blocks of Udaipur district . Moreover, three NGOs of Rajasthan, supported by the Population Foundation of India, have started implementing maternal and child health services, including delivery and obstetric first-aid services through NMs.

Thus far, nurse-midwife (NM) based maternal-neonatal services have been provided in rural areas using an institutional model, wherein the NM functions as an employee of the implementing organization, which therefore takes responsibility for achieving the desired outcomes. It would be important to evolve this arrangement and develop a financially sustainable model of rural or town health centres operated by nurse-midwives, providing maternal-neonatal health services. For this, they would require start-up financial and ongoing technical support from an appropriate agency. They would also need a brand identity, marketing of the service and measures for quality control. We propose an arrangement for social franchising of nurse-midwife based delivery services in towns and large villages of rural Rajasthan. Recent policy and programme changes that enable nurse-midwives to stabilize women with maternal complications have made it more feasible for this to be carried out.

It has been often been seen that patients from remote rural areas manage to reach a city hospital only in distressingly advanced stages of illnesses. It is easy to assign unawareness

or poverty for reaching hospital at such a late stage. That would however, be a very simplistic analysis.

Experience and studies, including this one, indicate that patients do not reach health care facilities on time not just because of poverty or unawareness but also because there is an acute shortage or even absence of primary health care facilities in remote rural areas. The situation is far worse when it comes to women's health or with childbirth as they are not even considered as worthy of medical attention. This is despite the government's efforts and schemes to bring health care to rural areas. Studies have also indicated that the distribution of doctors is extremely skewed with 80 per cent of the country's doctors located in urban areas for 25 per cent of the population. Very often, the only health care facility available belongs to a quack who is often not even a Registered Medical Practitioner.

Given these conditions, it seems only natural that additional efforts are required to ensure that quality health care is available in rural areas. Institutional delivery at simple but high quality health facilities that are easily accessible is perhaps the one simple way in which the maternal mortality and the infant mortality can be brought down. More so it is perhaps the one way in which women can access health services when they need them. It is the way of the future.

The health care facility that is visualized is high quality even though it very basic in nature. The primary objective here is treat illnesses before they become serious or chronic, identify situations where a higher level of health care is called for, ensure the presence of a skilled attendant at childbirth and work towards preventive health care.

In real terms this means that infants and children in rural areas need not succumb to pneumonia or diarrhoea. It means that women do not have to constantly suffer reproductive tract problems till they become acute. It means that women's pregnancies and childbirth are handled skilfully and any complications are competently referred to hospitals. It means that malaria need not become a chronic condition. It means that TB patients need not go far to get their medicines and have one less reason to become 'drop-outs'. It means that in case of accidents in the village, there is first aid available while the patient is taken to a hospital.

And if all this can happen in a place which is close to the village, which is clean, hygienic, staffed with skilled personnel and within the economic reach of most of the population, then one would have made a step towards improving health care in rural areas.

1.2 Terms of Reference

The Terms of Reference of the feasibility study were as follows:

The pre requisites were:

a) The Franchisee operation will evolve around the existing institutional model practiced by ARTH with minor modifications, if required.
b) Every Franchisee will function under the administrative control of ARTH for the first two / three years OR until break even, whichever is earlier.
c) Technical & quality control will always remain under ARTH or under a non-profit company as an offshoot of ARTH.

The consultant would undertake a feasibility study which would answer the basic question on whether the idea was feasible – financially, socially, legally and ethically with a clear

justification for saying so. Specifically, the study would also detail the following with respect to the models:

1. The structure of the health facility its form, and numbers
2. The existing situation – competition, and marketing strategies
3. Insurance or other pre-payment systems for financing the service, including safety nets for the poor
4. The human resources that would be required – type, numbers and quality of nurse-midwives; supervision, tele-medicine consultation and referral linkages to doctors and hospitals; recruitment, training and retention strategy
5. Infrastructure support, equipment, supplies, etc that will be required to set up the health facilities
6. Ethical concerns for initiating an initiative of this nature.
7. The Legal Environment of operation
8. Ratio of grant and venture capital in the initial investment
9. Costing of the services and financial sustainability
10. The Institutional structure and management and reporting relationships
11. Quality assurance and accreditation mechanisms

The report would detail out the project implementation plan comprising the financial plan, the marketing and promotion plan, the human resource development plan, the legal framework for operation, the roll out and phasing of the project and the organizational structure within which it would operate.

This draft report will be subjected to peer-review and further refined to finalize the project implementation and operation plan. The final report will be presented in August 2006.

1.3 Objectives

To develop a business model[1] for delivery of maternal-neonatal care through franchised health facilities operated by nurse-midwives in towns or large villages of Rajasthan

1.4 Methodology

The methodology used for this study included the following:

- Desk Review
- Field visits to two districts to understand the situation
- Field Visits to other organisations working in the health sector
- Consultations with experienced people

1.5 Limitations

The major limitation or the advantage of the report, depending upon the readers perspective is that this is an atypical study. We have subjected the entire process to the protocols needed for such a study but it is more of a dream or a vision that the writers have. The financials are based on assumptions and therefore carry the risk associated with it.

[1] Business model here refers to a model that does not rely completely on grants and subsidies to run it.

Chapter II

Health Service Models – Old and New

2.0 Health Service Models – Old and New

The ARTH model is the core model, or the take off point for this study and subsequent discussion. It is also the model that is intended to be examined for upscaling. Through the following analysis we shall try to see if it is indeed 'scalable' in its current form, and also see what other ideas in terms of models can be developed, and then try and compare the different models. Following the comparison of all the models, we shall select one and then work out the next steps.

2.1 The ARTH Model[2]

Skilled attendance[3] at birth is on of the most crucial interventions for promoting safe motherhood. ARTH initiated a field level service programme in 1997, in the interior parts of the tribal areas of South Rajasthan and explored the alternative of positioning professionally trained nurse midwives (NMs) as primary providers of maternal and child health.

The field programme began in a cluster of 10 villages with a population of 11,500 in Kuncholi village of Kumbhalgarh block of Rajsamand district and expanded to 27 villages with a population of 30,000. The programme is now being implemented through a second clinic in Kadiya village (population 19,000). 46 per cent of the population served by the two clinics is of people belonging to the schedule of castes/tribes.

Baseline data collected in the year 2000 showed that less than 25 per cent of the people in the area had electricity or sanitation. Antenatal checkups were rare (16 per cent) and most of the deliveries (95 per cent) took place at home in the presence of a TBA or relatives. Less than 15 per cent of the women had had a post-natal visit by a health worker. The infant mortality rate was 93 per 1000 live births. Almost half of all women surveyed had lost at least one child in the past for a variety of reasons.

The need for a sensitive and affordable service among a large number of women was a necessity. This however was not easily possible within the existing government health set up. ARTH believed that there was scope for professional nurse-midwives to act as free-standing practitioners of maternal and related reproductive health care[4]. This was done with the aim to contribute to the improvement of the maternal-neonatal health and survival. It also aimed to establish the effectiveness of trained nurse-midwives in providing safe motherhood and neonatal health services in a rural community with a view to increase

[2] We are using the term 'ARTH model' here for ease of reference. It really refers to the set of experiences that ARTH has undergone in running two clinics and supporting three others being run by 3 other NGOs in different parts of Rajasthan.

[3] In 1996, WHO shifted its focus from *trained* birth attendants to *skilled* birth attendants. The shift was based on the recognition that someone who has been trained is not necessarily skilled; 'trained' implies but does not guarantee the acquisition of knowledge and ability , while 'skilled' implies the ability to provide competent care during pregnancy, childbirth and the post partum period. A skilled birth attendant can be a midwife, a nurse with additional midwifery education, or a physician with appropriate training and experience, but does not include traditional birth attendants.

[4] This section draws from ARTH's experiences in southern Rajasthan published as an internal report in 2005.

utilisation of such services in a rural block of Rajasthan. In addition, it intended to enhance the contributions made to safe motherhood by panchayats and men in the family.

The ARTH model comprises setting up clinics in rural areas that are supported by doctors. The clinic is staffed by at least one nurse-midwife (preferably two), a field worker/field supervisor (who doubled up as a motorcycle driver) and a clinic attendant. This is to ensure that there was always someone at the clinic to attend to patients or to visit a woman's home, in case of an emergency. A revolving 'clinic fund" is established, to procure drugs and supplies, which are charged on a no profit basis. Arrangements have been made with local 'jeep taxis' for quick transport of women needing referral to the hospital in the city, at a fixed cost.

This model is essentially a provision of maternal and child health services closer to the home with a facility of referral. Here it is useful to list down the key features of the ARTH model in order to understand its functioning.

The key features are:

1. **Provision of service closer home:** The community has recognised that the ARTH clinics provide a certain kind of service close to their house and they have begun to use the service in increasing numbers. They have also recognised the fact that these services are essentially for women and children.

2. **Trained Staff:** Traditionally nurses and NMs have had a limited role in deliveries. ARTH studies in the project area indicated that only 4 per cent of rural deliveries were conducted by NMs or nurses. The NFHS-II, Rajasthan revealed that only 14.3 per cent of rural deliveries in the state had been conducted by a doctor or a health professional.

ARTH decided to train, equip and empower the NM and nurse to conduct deliveries independently. The nurse-midwives received intense, practical induction training on safe motherhood, neonatal and child health and other reproductive health needs. The training curriculum addressed the public health aspects related to maternal mortality; clinical skills related to maternal health, contraception, newborn and child health, laboratory skills, management skills needed to run a health centre and counselling and communication skills.

This intense training has resulted in health centres that are staffed by competent, confident NMs and nurses who can manage a range of cases but know when to refer the case to a hospital.

3. **Medicines:** Provision of medicines at the centre. These are priced differentially depending on the patient's capacity to pay on cost basis. This ensures that the treatment begins almost immediately.

4. **Obstetric services at the home level:** The nurse-NMs have access to a motor cycle. This results in their ability to make house calls in case of an emergency. They travel with an essential drug and equipment kit. The NM provides management for an obstetric emergency. She also looks for signs for maternal complications, manages them according to clinical protocols and refers if required.

5. **Postnatal care visits:** The NM makes a post-natal visit within three days of the delivery to check on the progress of the mother and the baby's progress. During this visit, they address issues of post-natal care. In case, she feels that the woman needs hospital care, she is referred and suitable arrangements made.

6. **Emergency Transport and Referral:** The NM are trained on referral criteria to enable them to decide, based on clinical assessment, when the woman needs a higher level of care. In such situations, she encourages the family to opt for referral care and arranges subsidised transport for which ARTH has made arrangements with local jeep owners. To make the family feel comfortable, she also accompanies the family to the referral hospital. She travels with her medical kit, essential life saving drugs as well as a referral note for the hospital note to facilitate admission.

On arrival the case is handed over to the ARTH social worker. The social worker subsequently maintains daily contact with the patient's family and hospital staff to follow up on urgent matters. He helps the family to get subsidy schemes, free food etc and guides them to the blood bank if necessary.

7. **Village level outreach clinics:** These are field clinics in the villages surrounding the ARTH RCH centres run by the nurse-midwives with support from the field workers and women volunteers. These clinics last for half a day and run on predetermined days in predetermined venues. The services offered include antenatal care, counselling, pregnancy confirmation, contraception, immunization and treatment of minor ailments and childhood illnesses.

These clinics provide the women an opportunity to develop a rapport with the nurse-midwives and plan their delivery. In case, a complication is identified, the woman is advised to visit the RCH centre on the day of the doctor's visit.

8. **Community based education and distribution:** The outreach programme comprises running a community based education and distribution programme covering a range of contraceptives, with an emphasis on reversal methods. Field workers and women volunteers distribute condoms and oral pills. Women who want a copper-T or inject-able (DMPA) are referred to the RCH centre. All the women visiting the RCH centre are counselled on contraceptive devices. Those who wish to opt for sterilization are guided to government facilities.

9. **Free-standing and team roles for nurse-midwives:** The free standing roles of nurse-midwives include detection and treatment of anaemia, pre-eclampsia and eclampsia, bleeding in early/late pregnancy, prolonged and obstructed labour, retained placenta, postpartum haemorrhage and puerperal sepsis. She also does a lot counselling, preparation and follow-up in cases of contraception, abortion, reproductive tract infections, STDs, gynaecological conditions, maternal and child health.

In addition, they also assist the doctors during their visits. With regard to their clinical roles, the nurse-midwives are guided by well-defined management and referral protocols. They are also responsible for a range of non-clinical roles involving maintaining an inventory of medicines, supervision of clinic attendants, and the everyday running of the clinic, record keeping etc.

2.2 Learning from the ARTH Experience

The ARTH experience and its analysis indicate several key issues that would need to be taken into account while developing a NM led model for basic health care in rural areas.

The specific learnings from the analysis of the ARTH model are as follows:

1. It is important to have 24-hour availability when providing RCH services especially if we need to promote institutional delivery over the long term.
2. The services have to be located close to communities and easily accessible.
3. An outreach mechanism helps in building credibility of the service and in making connections with the clinic.
4. An NM led service is possible at the field level as long as it is backed by doctors available on call and accessible at all times.
5. The field service has to be linked with a good referral mechanism that is friendly to the field service.
6. It is unlikely that the poor will be able to pay the entire costs related to the service. This cost will have to be subsidized and a pricing policy built on differential pricing can possibly work better.
7. In the absence of financial backing, it is unlikely that, in normal circumstances, the poor will actually opt for institutional delivery. The ARTH model did not have any such back up plan in the form of health insurance or a suitable product that could facilitate this to happen.
8. The visits to the ARTH clinics were mostly only reproductive and child health cases (55 per cent of all client visits are Reproductive Health, about 26 per cent Child health and 19 per cent are others). However, since a large number of providers try their hands at general and children's illnesses, ARTH's services fulfilled a niche for women's RH services, which became most popular. This was also the intended focus point. This meant that only those people who had developed a trust in the need for institutional delivery – or were likely to face some complications related to delivery, or perhaps had has their child at the centre opted for the ARTH clinics. The other legal and not so legal services thrived on alternate diseases as well whereas people sought the ARTH clinics for only RCH issues.
9. ARTH clinics did not posture aggressively to market their idea of institutional delivery. The current utilization pattern of the ARTH clinics therefore is sub optimal and the demand that can be generated is much higher than what is coming to ARTH.
10. In terms of pricing, it seems that a cashless service would be of greater benefit to women facing reproductive tract and other problems.

When do women get to a hospital?

Unless women are seriously ill or some complications arise during childbirth they rarely visit the doctor or are taken to one. Often when they do go, they are too far-gone, and end up spending huge amounts of money. Minor gynaecological issues are never considered important enough for going to the doctor and so they suffer silently. An insurance plan with good clinical access can be a step towards a cashless service that is available to women so that they can visit the doctor independently. It is ideas like these, which we will have to use to be able to sell an insurance package

2.3 New Models

The Report of the National Commission on Macroeconomics and Health, 2005[5] highlights India's achievements, unfinished agendas as well as provides indicators for future directions. According to the commission, "the principal challenge for India is the building of a sustainable health system." The commission also suggests, "supporting the NGO/charitable or the third sector which has the capability to provide reasonable quality care at affordable rates and the potential to serve the poor in under-served areas if appropriately incentivized and supported."

It is now being recognised that the presence of skilled attendants at every birth, is the single most critical intervention for safe motherhood[6] and that transportation is available in case of an emergency. The National Commission on Macroeconomics and Health has used the following criteria to decide the list of priority health conditions:[7]

- Likelihood of a specific health condition affecting the poor disproportionately more such as airborne and waterborne infectious and vector borne diseases;
- In the absence of interventions, the probability of health conditions continuing to impose a serious health burden in future years; and
- The possibility of a health condition driving a sufficiently large number of people, not necessarily the poor, into financial hardship, including their falling below the poverty line.

These priority conditions accounted for over 80 per cent of the overall disease burden in 1998 and range from maternal and child health conditions, various infectious and vector borne diseases to major non communicable conditions such as cardio vascular disease and cancers.

Table: Disease Burden Estimations, 2005[8]

	Disease/ Health Condition	Current Estimate of cases – 2005/ lakhs	Projected number of cases, 2015/ lakhs
I.	**Communicable Diseases, Maternal and Perinatal Conditions**		
1	Tuberculosis	85 (2000)	NA
2	HIV/AIDS	51 (2004)	190
3	Diarrhoeal diseases episodes/ yr	760	880
4	Malaria and other vector borne conditions	20.37 (2004)	NA
5	Leprosy	3.67 (2004)	Expect to be eliminated
6	IMR/1000 live births	63 (2002)	53.14
7	Otitis Media	3.57	4.18
8	Maternal Mortality/100 000 births	440	NA
II.	**Non- Communicable Conditions**		
1	Cancers	8.07 (2004)	9.99
2	Diabetes	310	460
3	Mental Health	650	800
4	Blindness	141.07 (2000)	129.96

[5] Report of the National Commission on Macroeconomics and Health, Ministry of Health and Family Welfare, Government of India, September 2005

[6] World Health Organisation. "Reduction of maternal mortality: A Joint WHO/UNFPA/UNICEF, World Bank Statement." 1999

[7] Report of the National Commission on Macroeconomics and Health, Ministry of Health and Family Welfare, Government of India, September 2005, pp 28

[8] Source: Report of the National Commission on Macroeconomics and Health, Ministry of Health and Family Welfare, Government of India, September 2005, pp 28

5	Cardio vascular diseases	290 (2000)	640
6	COPD and Asthma	405.20 (2001)	596.36
III.	**Other Non Communicable Diseases**		
1	Injuries- death	9.8	10.96
2	No hospitalisations	170	220

The disease burden estimation seems to indicate that while India hopes to decrease the MMR and IMR and eliminate Leprosy it does project an increased disease burden in other cases. It therefore seems obvious that there is a need to expand the health services available and add to the governments efforts to not just increase access but also improve the quality of health services available.

Our fieldwork for this study and ARTH's field surveys also indicate that private health facilities are concentrated in urban areas with very few in rural areas. The ones that do exist in rural areas are run by people who are definitely not trained in any formal situation and are not registered with any government or non-government body. The fieldwork in Bhilwara district indicates that there are 2 CHCs, 7 PHCs and 41 HSCs in Jahazpur. Apart from the government facilities there are at least 57 health care providers in the town of Jahazpur and 6 surrounding Panchayats. The bulk of these are in the town or Panchayat head quarter.

Findings from Jahazpur, Bhilwara and Surajgarh Jhunjhunu

The situation is not too different in the two blocks.

The majority of birth attendants are government paramedics and most of them are female nurses or midwives. "Bengali doctors" (unlicensed practitioners) are available in almost all the panchayats but do not usually conduct deliveries and people also prefer to go to government paramedics or health facilities for delivery services. TBAs conduct many of the deliveries in rural areas but people also call paramedics or modern providers for injections and a drip.

The Jahazpur CHC has one MS (Gynaecology) and an MS (Surgery) but the post of Anaesthetist is vacant and therefore if women need a caesarean have to be referred to Bhilwara. The Surajgarh CHC has 2 MBBS doctors and 2 posts are vacant and there are 5 nurses. The Surajgarh CHC has 40 beds but does not admit patients at night as there is no paramedic to look after them! People who opt for an institutional delivery prefer going to Bhilwara or Devli instead of Jahazpur or Pilani or Chirawa in Jhunjhunu. This is a usually to a private facility as they are better equipped. For example, the private facility in Devli, which is 20 kms away, has a female Gynaecologist ('Lady Doctor') and a male MBBS doctor. This facility is well equipped with operation theatre, an anaesthetist on call and ultra sound machine. This is also a certified MTP centre. Devli and Bhilwara are well connected with transport facilities available every hour from early morning to late night. Apart from that, private jeep operators can also be found easily. Most of the villages in this block also have access to telephones.

There are two nurses at Jahazpur, CHC who conduct deliveries at homes as well but only in the main town. There is no facility for blood transfusion at Jahazpur CHC so they are referring those patients who need a blood transfusion to Bhilwara as well. A male nurse who is working at CHC Jahazpur from Peeploond village conducts deliveries in the village. All the other providers conduct normal deliveries except the private nursing home in Devli which conducts caesarean sections as well. Paramedics who attend births in the surrounding panchayats of Jahazpur refer patients to the Jahazpur CHC. In Surajgarh, there is a retired LHW and an in-service MBBS doctor who run a private practice for conducting deliveries.

In Bhilwara, all the providers who conduct deliveries at home left the home of the patient within 1-2 hours after birth. The

- transport charges are for the paramedic were between Rs 100 – 1000 which were borne by the patient. The cost of a delivery varies from Rs 200 to Rs 10,000, depending upon the location and the practitioner. Rs 200 is the cost of a delivery by the paramedic at the health facility and Rs 10,000 is the cost of a caesarean section operation at a private hospital.

For details refer to Annex 1

ARTH's study of 2005[9] indicates that there are 649 health facilities in Udaipur district with 288 (44 per cent) government facilities and 361 (56 per cent) private facilities. However, 65 per cent of all private facilities are concentrated in urban areas, mostly in Udaipur city, whereas 84 per cent of government facilities are located in rural areas. Disaggregation of facilities reveal that non-physicians were running 35 per cent of the rural private facilities and 14 per cent of the rural government facilities (excluding CHCs) did not have a regularly posted physician.

Fieldwork and experience also indicate that once a health facility is established and trust built people do use it.

The ARTH Experience[10]

"Our experience shows that even in a community where 90 per cent of the deliveries had been occurring in homes and by unskilled providers, there is a latent demand for institutional deliveries, especially for women considered high risk by their families. Such demands exist even in the most disadvantaged groups as indicated by our findings that 42 per cent of the women who sought care were from the tribal or scheduled caste community. Such demand can be uncovered if reliable services by culturally sensitive, skilled providers were to become locally available. Community demand for the services of trained nurse-midwives is based on their track record and perception of their skills- as our data suggests- this takes two years to develop.

The ANM in Basauli, Bundi

The ANM posted in the Basauli PHC (on the border of Bhilwara-Bundi) has been there for the past 15 years. In this time, she has not only established a name for herself in the surrounding area by performing deliveries but also a small 2 bed private hospital for conducting normal deliveries. The ANM has never believed in conducting deliveries at patient's homes and has not done so. She feels that people come to her because she provides good services and is open 24 hours, either at the PHC or in her private hospital including emergency services. The services offered are antenatal care, delivery and post natal care.

She seems to be a very enterprising person as she lives alone in the village with two of her children (her husband and elder daughter who is studying nursing, live in Haryana); she dispenses medicines and has medical representatives calling on her and she has a private jeep plying on the Shakkargadh-Bundi route. She has also managed to convince another government ANM from the neighbouring village of Kharkheta to assist her. Both the nurses have their own two-wheeler vehicles, which they use for their field visits.

It was difficult to estimate the quantum of her earnings, but she charged Rs 500 per patient for a normal delivery. In case, there was a problem, she would refer to the Bundi Government Hospital. This referral was a informal procedure and there was no paperwork involved. She sees about 14-15 patients privately, every day but all are not charged everyday, it is difficult to estimate her earning. She refused to examine any patients in front of the observers and so we do not have a clear idea of payments made but a rough estimate indicates an earning of at least Rs 15,000 per month apart from her salary. Anything less than that, would not make economic sense for her.

The status and functioning of the government primary health care facility has been studied and documented and that too indicates that it does not provide the health care that is needed at the village level. The Report of the National Commission on Macroeconomics and Health, 2005 states that, "Overall, the principle challenge for the health system continues to be the improvement of the health status of the people in a sustained manner. Despite states attempting several innovations, *the health system continues to be unaccountable, disconnected to public health goals, inadequately equipped to address people's*

[9] Census of health facilities in Udaipur, Rajasthan; Study carried out for National Commission on Macroeconomics and Health, Ministry of Health and Family Welfare, Government of India,, ARTH, 2005

[10] Nurse-Midwives for Maternal Health, Experience in Southern Rajasthan, , ARTH, 2005

expectations and fails to provide financial risk protection to those unable to access care for want of ability to pay. Despite huge investments in expanding access, a villager needs to travel over 2 km to reach the first health post for getting a tablet of paracetamol; over 6 km for a blood test and nearly 20 km for hospital care. Further, even when accessed, there is *no guarantee of sustained care.* Several other deterrents such as bad roads, unreliability of finding the health provider, costs of transport and wages forgone make it cheaper for the villager to get some treatment from the local quack" (italics added).

The shortage of doctors and their reluctance to be posted in rural areas, ARTH's experience of the NM model supported by doctors provides indicators for developing a strong and workable alternative.

Apart from access, the other major problem is the inability to pay for medical services and the impact that an episode of ill health has on the household. Studies in Rajasthan and other parts of India indicate that a major portion of the household income is spent on health related expenses. An unpublished study conducted by the Centre for Microfinance, Jaipur in six blocks in Rajasthan in 2006 indicates that almost 30 per cent of the expenditure is on health. A study conducted by Centre for Population Dynamics, [11]Bangalore in 2002 in 2 Taluks in 4000 BPL households in each, reveals that "in times of sickness most people from this segment resort to loans as the single largest source for meeting costs of illness and hospitalisation followed by sale of livestock and other assets. It also revealed that while the concept of insurance for other purposes e.g. vehicle insurance was familiar to them the practice or even the awareness of insuring against illnesses was non-existent."

The reality is that despite the critical need for community health insurance, evidence actually points to the fact that there are few options available. As per a report in the Economic and Political Weekly[12],

"*According to the World Health Organisation, greater than 80 per cent of total expenditure on health in India is private (figure for 1999-2001[WHO 2004]) and most of this flows directly from households to the private-for-profit health care sector.*

Most studies of health care spending have found that out-of-pocket spending in India is actually progressive, or equity neutral; as a proportion of non-food expenditure, richer Indians spend marginally more than poorer Indians on health care. However, because the poor lack the resources to pay for health care, they are far more likely to avoid going for care, or to become indebted or impoverished trying to pay for it.

On an average, the poorest quintile of Indians is 2.6 times more likely than the richest to forgo medical treatment when ill [Peters, Yazbeck et al 2002]. Aside from cases where people believed their illness was not serious, ***the main reason for not seeking care was cost****. The richest quintile of population is six times more likely than the poorest quintile to be hospitalised in either the public or the private sector[Mahal, Singh et al(2002)]. Peters et al (2002) estimated that at least 24 per cent of all Indians hospitalised fall below the poverty line because they are hospitalised, and* ***that out-of-pocket spending on hospital***

[11] A Healthy Change, Community Health Insurance, Karuna Trust; publication by Communication for Development and Learning, Bangalore, pp 3

[12] Excerpt from 'Community Health Insurance in India – An Overview', by N Devadasan, Kent Ranson, Wim Van Damme, Bart Criel, EPW, July 10, 2004

care might have raised by 2 per cent the proportion of the population in poverty *[Peters, Yazbeck et al 2001] …"*

The situation however, is gradually changing. The EPW report continues:

"*Given this context, health insurance appears to be an equitable alternative to put-of-pocket payments. In recent years,* ***community health insurance has emerged*** *as a possible means of: (1) improving access to health care among the poor; and (2) protecting the poor from indebtedness and impoverishment resulting from medical expenditures. The WHO report 2000, for example, noted that prepayment schemes represent the most effective way to protect people from the costs of health care and called for investigation into mechanisms to bring the poor into such schemes."*

It is therefore obvious that not only is there a need to create a model of providing good quality basic health services in rural areas but there is also a need to combine it with some financial model, possibly community health insurance if we are to be in a position to deal with the increasing disease burden.

Keeping all these in mind, it seems clear that the ARTH model of focussing primarily on RCH services will neither prove adequate in satisfying medical needs nor make the service financially viable and more so if it is going to be part financed by insurance claims. The services will have to have a wider menu and be able to counter the services available at the quacks, which may be difficult to achieve if rational practices are used and not resorting to injections and drips on demand. Having a wider menu of services will put the service squarely in competition with quacks but that can be handled by good treatment and sensitive patient care. Focusing only on RCH will mean that the quacks are providing services for everything else. For safe Abortions ARTH has been a service and both of ARTH's centres are government certified MTP centres. However, for overall health service the clinics are the less favoured option. Getting a larger share of the market would mean being able to provide a good menu of services which people really want.

The community processes put in place by ARTH were secondary to the health delivery process. However, this process can be made more community involved. By involvement here, reference is mainly to making the services more responsive to community needs and creating a mechanism for the community to be closely associated with the clinic. This also means being able to provide the community a significant role and is a major understanding emerging from the ARTH model. In ensuring that public health goals are met communities have to play an important role in health services delivery.

ARTH has not adopted a formal membership model for providing services and caters to all within the target population. These numbers have been increasing over the years. ARTH has been subsidizing charges to patients since inception while recovering some of the expense, based on social criteria.

The ARTH model therefore provides the basic ground upon which to build and think out a future up-scaling strategy.

Basic Health Services

In order to understand the business model being discussed in the models, we are introducing an organisation called Basic Health Services. This organisation is expected to work closely with ARTH in future programmes related to up-scaling.

2.4 Setting up the Alternative

The ARTH experience has proved to be successful on a small scale based on grants. While the need to

increase access to health services is very clear, there is question on what is the level of scaling up that is possible based on the limited experience. A middle path would be to try out a new model on a meso scale before going to scale, say covering an entire block or district. Meso scale here refers to a unit of 20 NM-led clinics supported by 1 team of doctors in a specified area.

Building on the ARTH experiences, the idea that was mooted was the possibility of franchising the service through existing clinics or village level ANM's in different parts of the state (or wherever else applicable)

The Population Foundation of India has picked up the ARTH idea and has tried to finance a process of implementing the model through NGOs is three locations in Rajasthan. These are in Jhunjhunu, Ajmer and Tonk. The experiences have not been very different from the ones in Udaipur. It is taking time for a purely reproductive and child health service to establish itself in the absence of a strong promotional package, wider menu of services and financial backing from health insurance.

In order to arrive at a considered decision, we are introducing two other options; the first comprises running field clinics called Amrit Clinics supported by Amrit Plus doctor led centres and the second model is a franchisee model. In the following sections, we discuss the new models being proposed. This is followed by a comparison of all the three models – the ARTH model, the self managed Amrit Clinic model and the franchisee model before selecting one model and moving forward.

The following two models are being proposed in addition to the ARTH model.

2.4.1 Model I - Self Managed – Amrit and Amrit Plus Clinics

The self-managed model consists of a Clinical Support Node with doctor(s) (Amrit Plus) at the district level. This node is surrounded by rural clinics called Amrit Clinics.

Amrit Clinic

To understand the models being discussed, the concept of a rural clinic is being introduced which we are calling the Amrit Clinic.

The Amrit Clinic is a rural clinic located in a central village or kasba or any other place that is frequented by large numbers of people. It is expected that these clinics would provide basic health services.

The Amrit Clinic will be located in a central village or *kasba*. Each clinic will be staffed with a 4-member team comprising 2 GNM's and 3 Support Staff (2 clinic attendants, since even they do night duties + 1 motorcycle driver-field worker). Each clinic will provide ARTH-Basic Health services. This package will include all RCH services that existing ARTH clinics provide plus treatment of local communicable and non-communicable diseases, injuries and wounds, vaccinations, HIV and TB (DOT follow-up). It will also provide specialised packages for pregnant women that will include neonatal care. In situations, where the case is beyond the scope of the clinic staff they will be referred to the Amrit Plus clinic at the district centre.

The Amrit Clinic will have all necessary infrastructures to handle primary health care and institutional delivery. It will have

- A well equipped labour room
- 24 hours back up power
- 24 hours running water supply

- Facilities for three patients to be admitted
- A minimum stock of necessary medicines
- A neonatal warmer
- Facilities for minimal blood tests
- A computer with internet connectivity
- Telephones
- Furniture
- Necessary medical equipment

The Amrit Plus Clinic at the district HQ will be staffed initially by two doctors, one of who will be a gynaecologist and the other a paediatrician or a physician. Depending on the patient load at the Amrit clinics and referrals, this number could be increased to three.

The doctors at the Amrit Plus clinic either will handle the referred case themselves or refer it further to the nearest Government Hospital that can handle the case or a Private Nursing Home with which there will be a pre arranged understanding.

The Amrit Plus Clinic will be self managed to begin with but can be franchised to a Private Nursing Home once the idea has been established

Amrit Plus Clinic

To understand the models being discussed the concept of a nodal health facility staffed by doctors that supports the work of the rural field clinics.

The Amrit Plus clinics are full fledged health centres and doctors from these will also consult in the field clinics. In addition, they are expected to provide referral service and assistance in diagnosis through network medicine. They are expected to be located in district headquarters.

The clinic could also implement government programmes like vaccinations, TB treatment (DOTS) or distribution of vitamins. The clinic will also try to get accredited as a delivery centre for Janani Suraksha Yojana scheme of NRHM, and as a VTCT site for HIV testing.

There will be four kinds of patients:

- User fees only – the patient pays a user fees for treatment
- Insurance claims – patient receives cashless services
- Member of service – patients who have taken a special package like a pregnancy package
- Government Service Beneficiary – people availing of an existing government scheme being implemented by the clinic.

The Clinical Support Node is a doctor led central facility that plays a support and monitoring role for the Amrit Clinics. Amrit Clinics and the Node have a 'hotline or computer messenger' link between each other for referral and diagnostic advice. Each Node will cater to 6-8 Amrit Clinics. This will staffed by 1 to 3 doctors. A diagrammatic representation of the structure is provided in Diagram 2

The doctors at the Amrit Plus clinics will alternate between playing two roles. They will be available for consultation by the Amrit clinic teams at all times and also make clinic visits at lease three times a week. This will be done on a rotation basis with each doctor taking the responsibility of 5-8 clinics as the case may be. The Amrit Plus clinic will run like a full fledged clinic and cater to requirements from the city where it is based. In addition, it will also be the first point to receive referral cases from the Amrit clinics. In case they can be

handled at the Amrit Plus clinic they will be – or else they will be further referred to the government hospital (first option) or any other specialists in the town.

This model will be effective in districts where medical services are poor – and solely dependent on the government systems.

Amrit clinics are essentially going to be run by Nurse midwives (GNMs or ANMs) who will together form as team. Though it does not seem possible immediately in a few years (maybe 3 or 4) either of the two (or both together) maybe in a position to take over the clinic as a franchisee of Basic Health Services. Clinics once they begin to make a profit can be spun-off as separate identities.

A diagrammatic representation of the model is available in Annex 2

2.4.2 Model II – Franchised Operations through existing Clinics and Nursing Homes

This is a franchisee model wherein Basic Health Services (BHS) is set up as the main franchiser and private clinics take up the franchise for the ARTH RCH model. ARTH facilitates the formation of Basic Health Services as a separate organisation (perhaps a not-for- profit company or trust any other suitable form of organisation) BHS then sets up minimum conditions for nursing homes and small hospitals to become eligible and to be known as Amrit clinics. In this model, several private nursing homes and clinics become franchisees of BHS for a franchisee fee (to be worked out). These clinics have to fulfil the minimum conditions before they can qualify to be Amrit clinics. They will provide the same kind of services as the Amrit clinics in the earlier model.

ARTH-Basic Health would provide the technical support. ARTH-Basic Health in turn provides the following support to the franchisees:

- Medical Support for difficult cases and which require specialists. BHS will have set up a district node wherein it will have specialist doctors at its disposal. These doctors will be available on call and also be available for telephonic consultation.
- Training – of medical and non medical staff – ARTH-Basic Health will have established training modules it will be able to use for such training. ARTH-Basic Health would also run specific tailor made programmes for the staff of the clinics that choose to become franchisees.
- Monitoring of Standards – in order to continue to be able to use the brand an Amrit Clinic will have to constantly monitor a minimum set of parameters and keep them up to set standards. An Amrit clinic certification would be able to bring it greater business and higher patient load especially on the areas where ARTH-Basic Health has a specialization – i.e. RCH.
- Brand Support – promotion and brand building – For the franchisee to actually be willing to pay a franchisee fees and benefit from the brand, the brand by itself will have to become a popular one in the eyes of the community and the consumers. This will require a large scale promotional campaign to popularize the brand "Amrit". Amrit must become a household name for health services delivery. It will become popular only when there is a large scale movement to Amrit centres and people are satisfied about the service that they were given there and then begin to associate the services and a quality health experience with the Amrit brand name.
- Insurance Promotion – An important service ARTH-Basic Health will provide franchisees will be the popularize health insurance in the area. This will enable the

franchisees to be able to access a higher degree of patient load, and whom they can treat well and within the precincts of the clinic and by making sure that the right protocols are followed. This if done systematically, has the potential to become a larger effective micro Insurance programme.

Most of these private franchisees will be based in semi urban areas – and not so much in rural areas. Where a private existing health service provider does not exist, BHS could set up an Amrit clinic there as well. Services from an Amrit clinic will be provided as per mode1 described above.

These clinics can also refer complex cases to the relevant franchisee.

A diagrammatic representation of the structure in available in Annex 2

This model will be more appropriate in districts where there are a significant number of private clinics which can be brought into the system. And in that district if there are some blocks which do not have private services, an Amrit clinic could be set up there.

An assessment of health services in Rajasthan undertaken as part of this study[13] puts the number of private health services at a very low level. The main health service providers in most of rural Rajasthan in terms of availability of infrastructure are actually the government network. These services are unfortunately just not available in real terms.

In the absence of a significant private clinics network, franchising operations to the private sector is not likely to work. The other option is to franchise operations to private ANMs who would not mind setting up business in rural areas. These ANMs could be trained and provided with the wherewithal to set up a facility in a rural area of their choice, then provided the necessary training and back up support to take up the role of an institutional delivery mechanism which communities can easily access.

This idea is largely dependent on the ability of NMs to be able to take up a risk and a challenge. The services that an ANM is in a position to provide have been expanded a bit in the past few years but they are still limited to safe delivery. Yet at the same time there are other major causes of poor health of women, children and the community that the ANM cannot legally handle. Malaria, common infections, reproductive tract infections in women, coughs and colds, wounds and injuries and a variety of other minor ailments which can be very easily treated if done so on time but tend to become major problems if left unattended. Such cases in rural areas are mostly left unattended and eventually end up as major expenditures for the family.

The study has gone a little beyond this and looked at the possibility of institutionalizing this arrangement in a more formal setting as described in model on The Self Managed Amrit Clinics model.

2.5 The Three Models

The ARTH model described above was set up in 1999 the late 1990's and has developed significantly over the past 7 years. The changes in the original model reflect the experiences of running a health service as well as developing an understanding of the sector from experiences elsewhere.

[13] Please see Annex 4

In the following section, the ARTH model has been compared with the other two new models with to select a model that is appropriate for up-scaling.

Table: Comparison of the models

Parameter	Models		
	ARTH	**Self Managed**	**Franchisee**
Location	Selection of locations for the clinics were made keeping in mind that they were field laboratories and easily accessible from Udaipur city. Located in as remote an area as possible and servicing the poorest people in the area.	The locations will be small towns/large villages which are located on cross-roads which have a high transitory population and where women usually travel without male assistance. Village haats or bus junctions are ideal. This will provide greater accessibility as it will be lesser distance to travel. The surrounding villages have a high concentration of SHGs, milk cooperatives or some other community based organisations.	Private clinics usually exist in block/district headquarters. Can only choose clinics at suitable locations but cannot decide where they should be. Distance benefits will not be possible if the services are available only at block / district HQ
Infrastructure	Infrastructure was developed from a very basic clinic in the beginning to a functional one now. Hygiene and cleanliness are critical components. Clinic operates from a rented accommodation which also provides for residential space for the ANMs and the assistants Not ideal but within the funding constraints very functional.	Small towns/large villages could have places to rent which could be converted into suitable clinics. In a situation where nothing is available a small clinic can also be constructed. This will mean greater control on the facility but the costs will be higher. As part of the infrastructure one critical component will be communication and the use if IT for maintaining a constant link up between the Amrit clinics and the Amrit Plus nodes at the district level. Mobile phone communication will be a minimum.	Will have to make do with what is available at the selected franchisee and try to modify to suit arrangements However there will be little contro on possible modifications unless investments are made by us.

Quality control of clinic – hygiene, medical practices/approaches, referrals	Quality Control mechanisms have been inbuilt into the systems of operation at the ARTH clinic. Standard guidelines and protocols for treatment developed for the Rajasthan context Cleanliness was made an important part of the process Patients stabilized to the extent possible before referral	Greater control on quality. Appropriate protocols could be set up and since the operations will be within the purview of the organisation, there will be greater monitoring and quality control and thereby better accountability. Referrals and follow-up can be managed with more efficient systems of record keeping	Will need special efforts to monitor. Will have lesser accountability and quality control. Referrals may not be required in case the clinic can provide other services as well. Patient interaction will be limited and may not be able to ensure low-cost services or the following of the appropriate protocol.
Pricing control of clinic	Was donor led in terms of establishment. Prices were not fixed initially but subsequently a schedule of prices was developed and process fixed. Differential pricing systems were followed for the very poor and poor patients Subsidies were provided to poor women and children for city referrals	Will be limited by feasibility. Pricing of services will reflect the incomes structure in the area and the spread of insurance in the area Pricing can be differential based on economic capacities but will have to be registered in advance Pricing can be standardized at the Private Referral clinics identified by Amrit. Referrals to government hospitals will not be affected.	Limited by existing pricing policies, difficult to standardise costs. Pricing norms will have to be set up. Franchise agreement will have to reflect the pricing norms.
Loyalty/commitment of staff to the initiative	ANMs were in leadership roles at the clinic which gave them a sense of importance Received a lot of training Were involved with higher levels of responsibility Yet affected by the larger social issues which affect women working in rural areas-schooling of children, husbands not having suitable employment Salary packages also affected retention despite being higher than the salary offered by the government.	GNMs will be in leadership roles in these clinics. The levels of responsibility will be the same as in the ARTH clinics. Organisational commitment is a value that will have to be built by creating a good working environment. It will have to be ensured with suitable and well designed salary packages. Perhaps higher than the current ARTH package – but which is a balanced one. Will have sensitively developed facilities for residence and work at the clinics. Doctors it is said are a difficult group to manage but critical to the initiative – a suitable system will be necessary for both travel, facilities and salary scales.	Will take greater time and effort to build and doubtful Staff will be strongly influenced by the culture and working environment of the franchisee clinic The culture at the franchisee could also get transferred to Basic Health Services.

Marketing of Services	There was no active marketing of apart form the discussions held with communities during the field visits. Apart from these, some communication material in the form of tin plates, pamphlets was also distributed in the area. Word of Mouth played an important role in popularizing services.	Will have to promote a brand image and popularize services Amrit will have to be promoted as a brand and all services will have to be backed up with a strong promotional campaign which will bring people to the clinics. Direct to home communication will be critical as has been seen in the ARTH model and outreach services will lay that role. Seasonal, age-group packages and other combination of services as packages will have to be designed All this will have to be linked up with the insurance plan Introductory offers, free medical check-ups, moratorium periods for payment of services etc.	Can promote a brand but will be limited by the services that the clinic offers The brand will actually have to be more popular than the clinic itself – especially to be able to get clinics into our fold Promotion will be more of health insurance rather than the service itself Franchisees may demand high promotional costs to popularize their clinics.
Insurance Systems	No health insurance was associated with the ARTH model	Health insurance must eventually be the largest contributor to the revenue of the clinics. Insurance will have to be promoted outside of the purview of the clinic and be undertaken as a separate activity. Cannot have insurance as part of operations as this leads to adverse selection of policy holders and may make the insurance system unviable by having a higher than average claim ratios Packages bought pre-illness can be part of the Amrit Clinic based insurance plan. But will have to have large numbers if the service is to be financially viable. Will aim for cashless service at all Amrit clinics Insurance is perhaps the only way Amrit Clinics can provide quality services, keep their services lo-cost and also actually reach out to the poorest of the poor. Preparing a list of treatments to be negotiated with insurance co OPD? Communicating insurance packages	In a Franchise scenario, the major task will be promoting the Amrit brand and promoting health insurance services. An important element of the Franchising Organisation will be the promotion of health insurance services in the areas of operation This will be undertaken as a service to the franchisees and it will be a service that the they will demand in return for the franchise fees paid by them.

Ethics	The ANMs and nurses follow a pre-decided set of protocols. All procedures followed are according to the Standard Guidelines. No attempt to thrust any values on patients. A lot of counselling done to enable patients to take an informed decision.	The ANMs and nurses will follow a pre decided set of protocols. All procedures followed will be according to Standard Guidelines. No attempt will be made to thrust any values on patients. A lot of counselling will be done to enable patients to take an informed decision. Possibility of building a dedicated team is higher. All laws and treatment protocols will be adhered to.	One can develop parameters for the selection of the clinics that wil be franchisees. Though such clinics may not always be available. Not very easy to monitor processe in this case.
Staffing and Staff Costs	The ARTH clinics were staffed with 2 qualified NMs who were intensively trained before and during their work at the clinics. They were assisted by 2 clinic attendants and a Field Worker cum motorcycle driver for outreach Doctor support was provided two times a week with doctors visiting from Udaipur	Each Amrit clinic will have - One ANM, One GNM (male) one clinic attendant (woman) and one multipurpose worker cum motorcycle driver (male) Amrit Plus clinics will have two/three doctors for providing referrals and for weekly field visits to the clinics. Doctors will move in specially created Field Trucks which have primary pathological testing facilities At the Amrit Plus clinic which is an Urban clinic the doctors will check patients all day and also take care of referrals that come from the field clinics. Further referrals to the government hospital or to other private hospitals will be done here. A referral facilitator will be based at this facility.	Clinics will have existing staff and existing doctors. The doctors would perhaps be the decision makers here. ARTH-Basic Health may appoint some staff to assist the patients who are referred to this facility.
Legal Environment	The ARTH model had doctors on call and doctors consulting twice a week at the clinics and therefore did not face any legal problems. Further, the ANMs operating at the clinics were doing only that bit of work that the legal framework allowed them to do	Amrit Clinics will also operate like the ARTH model and will have doctors on call and available for access on telephone and through the computer to all the clinics The doctors will also consult with patients three times a week at the Amrit Clinics and will be available at the Amrit Plus Clinics 24 hours a day. Thus prescribing medicines and dispensing them at the Amrit Clinics will be within the legal framework.	Franchisee clinics will be doctor managed and will be established nursing homes. We expect them to be operating within the legal framework without which they will not get the franchise.

ARTH has been able to provide a basic model for ensuring that there is a better system available for the presence of skilled attendance at delivery. The model also includes presence of skilled health care personnel for the larger maternal health and neo natal health; if the model is followed it can bring about a major improvement in the MMR and the IMR in Rajasthan.

The Self Managed Amrit Clinic model is proposing to build upon the basic ARTH model and widen its base of operations so that a larger number of health problems of village communities can be addressed, thereby ensuring that good health services are available to poor people in villages easily. The self managed model begins as an organisation led mechanism but has the potential to develop into a more privatized and franchised model.

The Franchise model is currently limited by the availability of suitable private clinics in some of the poorer districts. In the absence of the private providers and also the absence of NMs who can take up a challenge and a risk in setting up a franchise of their own, it seems to have limited possibilities at the moment. It is a possibility that can be explored at a more opportune time and perhaps see the metamorphosis of the Self Managed Amrit clinic model into a franchised model over time.

A larger more comprehensive service delivery mechanism for health may actually be more effective and useful in achieving the objectives of safer institutional delivery and also perhaps would also be able to address many other health issues as well.

Chapter III

Basic Health Services

In this section, we follow our earlier argument and select the Self Managed Health Service Delivery model discussed in Section I as a possible mechanism to scale up skilled care for maternal and neonatal health. The idea of Amrit Clinics and the Amrit Plus Clinics was initiated during the process of conducting this study. For the purposes of this discussion, we shall be using Basic Health Services as the organisation, which will take the responsibility of up scaling up the health services. Amrit and Amrit Plus clinics will be the health service delivery points.

3.0 Basic Health Services

Basic Health Services (BHS) will be set up as an independent entity to implement the self managed model described in Section I. BHS will be a registered 'not for profit company' set up under Section 25 C of the Companies Act.

The Amrit Plus and Amrit clinics will be set up under the aegis of BHS.

3.1 Institutional Relationship between ARTH and BHS

BHS will be an independent entity. ARTH will be invited to be one of the members of the board of BHS. BHS will also be invited to be on the board of ARTH. This will ensure that both organisations have a stake in the success of the other.

In functional terms however, the relationship will be more complementary.

BHS will provide ARTH the organisational base to be able to take health services especially maternal and neo natal health to scale and become part of an expansion and scale up plan. For BHS, ARTH provides the necessary technical linkage to take up the agenda. In addition ARTH will also train BHS staff. BHS will set up an advisory committee, which will be converted into the board.

BHS will be available to ARTH as a field research unit for research that it may want to carry out. BHS will also provide ARTH with data and information to further its research and training objectives.

BHS and ARTH will work out a memorandum of understanding detailing the various aspects of the relationship and as a guide to the relationships between the two organisations. This MoU will be approved by both the boards of both organisations. The MoU will however not be a static document but will be open to modification depending on the changing circumstances.

3.2 The Amrit Clinic

The Amrit Clinic is the core idea of the BHS. It is a health service delivery facility located in one of the larger villages in a selected area. There will be one such facility for approximately 30 villages covering a population of approximately 20,000 or so. In effect, the clinic will directly benefit the 30 odd villages that will be in its immediate neighbourhood and other villages from which transportation facilities are easily available to that village (or that pass through the village)

An Amrit Clinic will be located in a rented accommodation but will eventually have its own building and space. The Amrit Clinic will be located in a village or *kasba* where there tends to be a lot of movement of people from the surrounding areas. It will be as close to the bus stop in the *kasba* so that the clinic has high visibility and accessibility. It will have enough space for, patients to wait, for consultations and clinical examination; it will have a labour room for delivery and storage space for equipment and drugs. A separate part of the clinic will have enough space for at least 2 staff members to live comfortably. One of these staff would have to be the NM so that the clinic can be a 24-hour facility and provide emergency services at odd hours. It will have at least one toilet and bathroom with running water.

The clinic would need to maintain certain minimum standards of hygiene. This necessitates a supply of running water. In places, where it does not exist, the clinic will have to make arrangements to construct overhead tanks with facilities to pump it. Electricity would also be required. Where and when there is no or irregular electricity supply, there will be a generator/invertors. The clinic could also be powered through solar electricity to reduce operational costs.

The clinic will have facilities for three inpatients (beds) as part of the recovery process post partum and also to be able to keep at least one very seriously ill patient under observation in case for some reason s/he cannot be immediately referred to the Amrit Plus/District hospital. One room of the clinic will be the store, the dispensary and the administrative section. Dispensing of drugs would be handled separately on a separate counter.

The clinic would be linked via a computer/ phone/ web camera to the Amrit Plus Centre that is staffed by medical doctors. In addition, it will be in a position to conduct basic and necessary pathological tests. The computer would also be used to keep meticulous medical records of patients.

The services that the clinic would provide would include first aid for injuries, treatment and/or referral of common communicable and non-communicable diseases of women, children and men, complete care of pregnant women, safe delivery, immunisation, counselling among others. Any one with a medical condition would be able to walk into the clinic with the trust that their medical problem will attended to.

The action taken in the clinic on the arrival of patients will depend on their medical condition and the plan that they have taken up with the clinic.

In case, their problem is a simple one or a routine check-up, immunisation, follow-up care or dispensing of medicine that can be handled by the NM/Nurse, it would be done so. In case, the nurse feels the need to consult with the doctor s/he will do so before beginning treatment. In case, the case is more complex than that, then the patient will be referred to a hospital.

The pregnant women who need an ante-natal check up would be dealt with the NM except in cases where she diagnoses a problem in which case, she can either consult the doctor, refer her to one or fix an appointment for her during the next visit of the doctor.

In case, a woman arrives for delivering a baby, she would be admitted and her case monitored until the process is complete. Here too, the NM will facilitate the process either independently, with tele-consultation with the doctor or refer to the hospital if a higher level of care is needed.

Cash transactions and all the paper work associated with insurance, would be handled by the support staff. Allocation of responsibilities is not being developed yet but it will be one of the three support staff.

Ethos at the Amrit Clinic

More important than the easily verifiable indicators of quality, would be the manner in which the patients are treated once they enter the clinic. The ethos and the value systems will be carefully built so that the patients do not have the feeling they get when they enter a government hospital. They should feel confident that they will get a patient hearing and that they are on the road to recovery.

The main element here would be counselling NOT scolding. Patients need to understand their problem and what is being done to solve it, and more so if the patient 'wants' to know. Here, it is also important to note that the clinic will not try to thrust any of its own value systems on the patients like birth control, sterilisation, hygiene etc unless they impact the health of the patient.

At the end of the visit, the patient should feel cared for and more importantly confident that s/he can be treated or referred to a good facility at the BHC.

One must remember that the 'competition' is the quack with his quick and impressive cures of drips, high dosage antibiotics and often steroids as well! The job of the clinic will be to cure ethically, economically and judiciously.

The team at the clinic would handle the issues of accounts, inventory and record keeping etc at the centre together.

The staffing at the Amrit clinic will comprise the following:

- Nurse Midwives/GNM 2
- Clinical Assistants 2

3.3 The Amrit Plus Clinic

The Amrit Plus Clinics are the coordination node at the district level. They are the point of focus for all activities at the district level. Amrit Plus clinics are doctor led consultation centres with facilities for maternal and neo natal care. They will be equipped with a labour room and a few beds for recovery and convalescence. Amrit Plus clinics will also be the management and finance coordination centres for Basic Health Services in the district.

Amrit Plus Clinics are staffed by doctors. There will be a minimum of two doctors at every Amrit Plus clinic. The number of doctors will vary; for a unit of 5 Amrit Clinics, there will be 1 doctor and a maximum of 3 doctors for a unit of 20 clinics with a heavy case load or covering a very large geographical area)sThese doctors will have dual responsibilities. While one of them is at the clinic, the other moves into the field. S/he visits each and every Amrit Clinic on the specified route and provides the team with all necessary support and guidance. S/he does a day clinic in two clinics for each day of travel in the field.

The doctor based at the Amrit Plus clinic is available for telephonic consultation from the Amrit clinics and also will have access to a computerized link up with the clinics. S/he can provide all the necessary guidance to the NM at the Amrit clinic. The Amrit Plus

clinic will also operate as a consultation centre during the day from 8 in the morning to 5 in the evening. Referrals from Amrit clinics will come first to the Amrit Plus clinic and then in case they cannot be handled will be forwarded to other clinics in the area.

The staffing at the Amrit Plus clinic will include:

- Doctors 2 (depending on the number of Amrit Clinics)
- Admn/Accounts Officer 1
- Drivers 1
- Clinic/Office Assistants 2

Table: Comparison of Amrit and Amrit Plus Clinics

	Amrit Clinic	Amrit Plus Clinic
1	Located in rural areas of a district	Located in a district HQ
2	Run by nurse-midwives	Run by doctors
3	Covers a population of 30,000 people	Covers the entire population of the district
4	Focus on primary health care and referrals	Focus on referrals from Amrit clinics, secondary care and further referrals
5	Up to 20 per district	Only one per district
6	Will have consultation and treatment	Only consultation – no inpatient services

3.4 The Service Package

The following services will be provided at a health centre managed by a team of nurse-midwives available 24 hours and a doctor visiting weekly/ biweekly:

Services offered by different providers at Amrit Clinic		
	Nurse-midwives	**Doctors**
A. Reproductive Health Needs – Maternal Health		
1	Antenatal, comprising an essential package with haemoglobin, urine albumin, blood pressure, etc	Antenatal & postnatal care
2	Postnatal care at health centre and at home for those delivering at Amrit health centre	Management of complicated antenatal & postnatal cases & those referred by NMs.
3	24 hours delivery services at home and health centre	
4	Management of maternal complications	
	Referral services (arrangement of transport, accompanying negotiating treatment at referral hospital)	
B. Contraception		

1	Counselling on contraceptive methods	Same as NM + those with a medical problem + initiation of DMPA
2	Condoms, oral pills and continuing doses of DMPA	
3	Copper-T insertion and removal	
4	Counselling on sterilization operation	
5	Emergency contraception	
6	Counselling on natural methods	
C. Abortion		
1	Confirmation of pregnancy	Same as services by NMs +
2	Counselling of women with unwanted pregnancy	Menstrual regulation and first trimester MTP (if a certified MTP doctor or gynaecologist is available)
3	Follow up of women undergoing abortion	Management of complications of abortion
4	Detection & initial management for abortion complications including illegal abortion	
D. RTIs, STDs, gynaecological conditions		
1	Provisional diagnosis and treatment of RTI/ STDs, referral as relevant	Simple management of gynaecological conditions including: • Infertility • Menstrual disorders, • Reproductive tract infections/STDs,
E. Child health		
1	Immunization	Same as services by NMs +
2	Counselling	Treatment of chronic / serious childhood illnesses e.g. asthma, TB, malnutrition, epilepsy
3	Care of newborn, including early management of neonatal emergencies	
4	Treatment of childhood illnesses using IMCI approach	
5	Acute diarrhoea, dysentery, dehydration	Same as NM + children referred by NM
6	Pneumonia and wheezy bronchitis	
7	Fever and malaria	
8	Skin infections – boils, abscesses, impetigo	
9	Care for malnourished children	
10	Recognizing underweight children	
11	Anaemia	
12	Vitamin A deficiency	
F. Other General Conditions		
1	Continuing treatment for TB	Tuberculosis diagnosis and treatment
2	Wounds and injuries	Hypertension

3	Ascariasis and hookworms	Diabetes
4	Scabies	Respiratory infections and asthma
5	Iron deficiency anaemia	Fever
6	Conjunctivitis	HIV counseling and testing
7	Toothache, caries and pyorrhoea	
8	Gastritis, heartburn & indigestion	
9	Arthritis, backache, headache	
10	Cough	
11	Sprains, bruise, cut, minor burns	
12	Fever	
13	Refraction	
G. Laboratory Tests		
1	To be done at Amrit clinic itself	Lab tests with links to a lab in the city/ another higher level lab
2	Haemoglobin	Blood test (slide/ QBC) for malaria
3	Urine pregnancy test	Sputum for AFB
4	Urine albumin and sugar	VDRL
5	Blood group	Semen test
6	HIV testing	Widal test
7		ESR
8		Blood sugar

3.5 Financing Basic Health Services

In the context of health financing, ideas such as "Risk Pooling for Hospital Care" are currently being thought of within the context of the National Rural Health Mission. Mechanisms such as cash-less services are going beyond the middle class and upper classes to poor people as well.

The health standards at Basic Health Services would be in line with the standards set up by the National Expert Group on Public Health[14]. BHS will standardize costs at minimum quality standards. BHS will essentially look at four key revenue streams, these are:

1. Membership to Amrit clinics

Amrit clinics will register people as members. Amrit Clinics will design appropriate packages keeping in mind the health characteristics of the area, common illnesses and essential services that may be required in particular seasons. Amrit will also have a pregnancy package – spanning the entire duration of the pregnancy and the first three weeks of neo-natal care. Amrit Clinics will aim to generate 20 % of the revenue from

[14] Task group to be set up under the NHRM to look at monitoring standards, guide protocols and cost comparisons.

such packages. Amrit Clinics will aim to provide members a cashless service as far as possible.

2. Insurance serviced clients (cashless services and Company reimbursements)

Insurance will be an important component of the revenue inflows. The aim will to have a significant number of families in the service area to buy health insurance policies. However, this is going to be influenced by the sale of insurance policies in the area. Amrit Clinics will not insure people as this would lead to adverse selection. Basic Health will associate with a local NGO to sell the insurance policies in association with the insurance companies. By the end of the first year it is expected that almost 30-40 % cent of the population in the target will have been sold insurance to. Of these around 10% will have accessed health care from an Amrit clinic. However, it would still take about a year for the first revenues from insurance to actually flow in. In association with the NGO Amrit clinics will aim to reach an insurance cover to about 70 % of the target population.

3. Private Walk-in clients on payment of consultancy/service fees

Amrit clinics will be always open to anyone who needs health services. Though we would prefer that patients are insured, or are members, the service will also be open to walk in patients. The walk in patients will be charged a fee for consultation and will have to pay the cost of medicines dispensed. This will be based on a schedule of rates of services. Around 40 per cent of the patients of the clinics in the first year of operation are expected to be walk in patients.

4. Services Offered to Government

The government usually undertakes services delivery in rural areas for a variety of diseases and conditions. This includes distribution of folic acid pills, condoms and other spacing methods for birth control, TB treatment as part of the DOT protocol, Pulse Polio and other services. In association with the government, a voucher system could also be developed wherein BHS provides the services and are reimbursed by the government on a pre-decided cost basis.

With greater experience BHS will also be in a position to take over operations of Primary Health Centres / Sub Centres of the Government and can make a formal offer to do so.

Around 10-20 per cent of the revenue is expected to come from such services provided to the government.

The experiences of the LV Prasad Eye Institute in Hyderabad give valuable indications in financing a health service. The LV Prasad Eye Institute(LVPEI) is a very large and specialised eye care institute. It is a tertiary health care facility has a network of 'feeder' or 'filter' institutes around the main facility. The objective is to ensure that cases that can be treated at other facilities should be treated there, thereby reducing the load on the main Institute. They had also initiated an urban slum programme that focussed mainly on eye care. The infrastructure is very impressive – all of which is due to donations. LVPEI however recovers the running cost of their eye care programme.

LVPEI has categorised the patients into 3 groups – the free patients (80 per cent), supporters and the site substitutes. The last two categories form about 20 per cent of the patient load. The site substitutes are the patients who fall in the highest paying category. There is however, no difference in the quality of care/services provided to the patients.

The only difference is in the frills offered in the waiting rooms and wards/ rooms. The two paying categories compensate for the cost of free patients. LVPEI also caters to the very rich in order to subsidise the poor patients.

The most significant learnings from the LVPEI experience for us, were that recovering running costs rather than making the entire operation financially viable is perhaps a more achievable objective. The LVPEI experience indicates that some patients can subsidise others and 1 or 2 key services can cross subsidise the other activities and make the operation financially viable. In the case of eye-care it is cataract surgery and selling spectacles (that can have a profit margin of upto 300 per cent) that tilt the balance. LVPEI, for example have permitted Zeiss to sell spectacles on their premises. (Refer Annex 3 for a more detailed visit report to LVPEI)

This model, where the start up costs come as a grant and the running costs are to be recovered after some amount of stability in terms of functioning is reached, is one that BHS hopes to emulate.

3.5.1 Start up Costs

Amrit Clinics have been costed for different units. The minimum size that we have used is a unit of 5 clinics. There are two other options – a unit of 10 and 20 clinics. The start up costs for each different unit of Amrit Clinic are listed below:

	Item	Description	For 20 clinics	For 5 clinics	For 10 clinics
	Fixed Assets				
1	Real Estate	no purchase in first phase	-	-	-
2	Buildings	no construction in first phase	-	-	-
3	Leasehold Improvements	45K per improvement for 20/20	900,000	225,000	550,000
4	Equipment - medical and others	250K per clinic for 20/20	5,000,000	1,250,000	2,500,000
5	Furniture and Fixtures	50 K per clinic	1,000,000	250,000	500,000
6	Vehicles	1@ Rs 900000 for one 4 wheeler and 20 two wheelers @40 K	1,700,000	1,100,000	1,300,000
7	Other Fixed		200,000	50,000	100,000
	Total		8,800,000	2,875,000	4,950,000

3.6 Setting up Amrit Plus and Amrit clinics

Amrit Plus and Amrit clinics will be set up by BHS beginning with one Amrit Plus clinic at the district level and a unit of up to 20 Amrit clinics being supported by Amrit Plus.

A unit of operations can be anywhere between 5 to 20 clinics. These would be set up over a three year period. Setting up the project will follow the following timeline:

Table: Timeline for setting up Amrit Clinics

Month	Development
Pre Launch Phase	
Minus Four	Community Interaction, Discussion on health insurance
Minus Three	Community Interaction, Discussion on health insurance, District Profiling and Linkages with NGOs
Minus Two	Recruitment of Doctors and NMs , Identification of districts , Identification of locations , Selling micro health insurance
Minus One	Identification of locations for the clinics, Repair of the clinics , Placement of Staff Purchase/Placement of orders for equipment and material and Selling micro health insurance
Zero	Setting up of the Amrit Plus clinic , Positioning the Team of doctors, Repair and finalisation of the first 3 Amrit clinics, Selling micro health insurance
One - *Launch*	Launch of the first Amrit Clinic
Two	Systematization of operations, Systems establishment
Three	Second Amrit Clinic , Systems improvement
Four	Normal Operations , Systems Improvement , Linkages with referrals, Planning for future clinics
Five	Third Amrit clinic launched
Six	Consolidation
Seven	Consolidation
Eight	New clinics based on stage of consolidation.

3.6.1 Expansion

The first three clinics will be set up in three different areas of the district. Expansion will happen in contiguous areas around these three locations and will follow a cell model with each clinic having a notional catchment area from where patients will find it easy to come to the clinic. The catchment areas could overlap on boundaries but that would happen because the idea would be to slowly saturate the area with services. Expansion would not happen in areas where there are functional PHC's and sub centres or where there is a well functioning private service. The idea will be to establish a service that works and only then take on the competition with a greater strength of service and performance.

3.6.2 Sources of Funds

BHS attempts to provide low cost and quality access to the poorer people in the villages. Our initial assessment of costs shows that building an initiative on loan capital is unlikely to be able to facilitate the setting up of a low cost service. For setting up the initiative, BHS will look for start up grants. Among the agencies BHS will make presentations to are the McArthur Foundation, the Global Development Marketplace, the Bill and Melinda Gates Foundation, GE Fund, ICICI-SIG and other financing organisations in the development sector and even corporate bodies.

BHS however would like to make the service financially viable. To that effect, BHS proposes to set the project us as a combination of social and commercial approaches. With the fixed costs accounted for as a grant, BHS will attempt to build sustainability on the operational costs. The operational costs per clinic and a unit of 20 clinics are estimated are as follows (Please refer to Annex 8 for a break up of budget tables):

Table: Cost of Operations per month

	Item	Description	For 20 clinics	For 5 clinics	For 10 clinics
	Operating Capital	**Per month**			
1	Salaries and Wages (per month)	refer separate sheet	518,400	129,600	259,200
2	Insurance/Staff Welfare/Training	10% of salary	51,840	12,960	25,920
3	Beginning Inventory	25Kper clinic	500,000	125,000	250,000
4	Legal and Accounting Fees		60,000	15,000	30,000
5	Rent Deposits	3K per clinics+10K for dist	70,000	25,000	40,000
6	Utility Deposits	3K per clinics + 10K for district clinic	70,000	25,000	40,000
7	Supplies	10K per clinic pm for one month	200,000	50,000	100,000
8	Advertising and Promotions	5 K per clinic + 5L overall (3L for 5 clinics)	600,000	325,000	550,000
9	Training and Capacity Bldg of Staff	10 K per clinic	200,000	50,000	100,000
10	Other Initial Costs	15K per clinic	300,000	75,000	150,000

The financial plan considers the incremental growth in the number of clinics over the three year period.

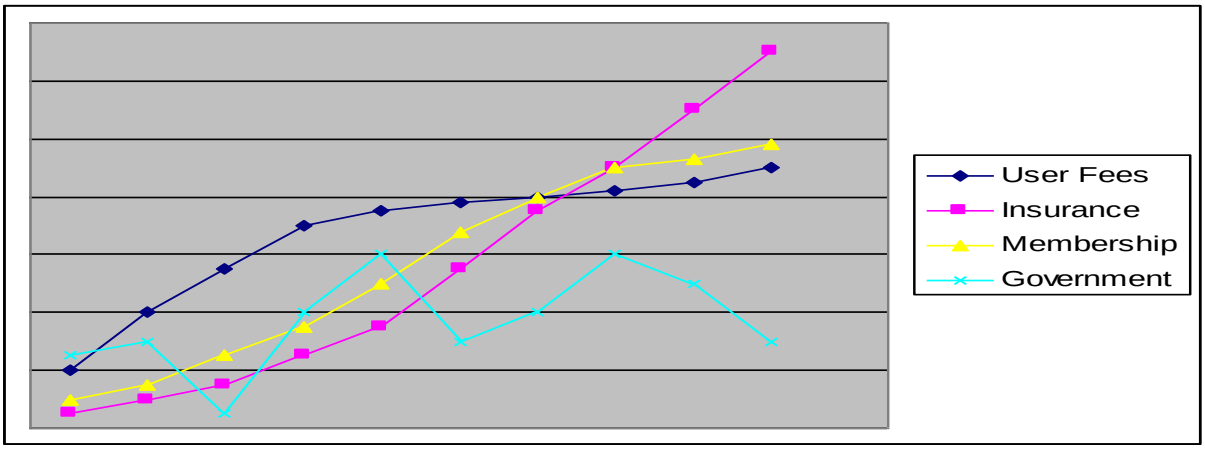
As mentioned above, BHS will have four main product options that it will work on. Each of these four revenue streams will build as time passes. The greatest earnings will flow not from user fees but eventually through reimbursement of insurance claims. This will take time in coming and therefore will affect the profitability and delay it will the time it becomes a significant part of the revenue stream.

Sales are also unlikely to increase at a very fast pace. They will be directly proportional to the credibility that the Amrit clinics are able to build for themselves and the people's perception that develops around these clinics. Sales will also be proportional to the investment that is made on advertising and building the confidence in peoples mind about the effectiveness of the services that emanate from the Amrit clinics. Together there will be an impact on the sales from the clinics.

Different Streams are expected to behave differently. User fees which will be the initial mode of payment for services will gradually begin to increase and then stabilise as more and more people in the area take on health insurance. Health insurance will begin very slowly but once established could increase fairly dramatically. Memberships will increase slowly and the rate of growth will also be slow but will continue to rise – especially for cases which are not covered by health insurance. Finally, the government demand for services will be variable – in some months/years it could be very high and in others could be very low – there are too many factors on which revenues from the government depend

and are not directly in our control. The following is a pictographic illustration of what may happen.

Figure - Estimated Contribution from Different Streams



3.7 Locating the Clinics

Setting up a health service delivery programme especially when there already exists a government network of health services is a difficult issue. Our studies in two blocks in two districts of the state show that health services are usually available only at the district head quarters. At the block level and sub block level there are primary health centres (at XXXX population) and sub centres (at XXXX population) run by the government. Their functioning and its quality is highly variable covering the entire range from fully functional to dysfunctional. There are almost no qualified private sector services available at the block/sub block level. Private services are usually provided by quacks that are quite widespread in the rural areas of the state. This is not however the case in all the places as experiences from elsewhere tell us.

Janani is a social marketing project for population management and control. It is not a health services delivery project. The indicators they use include things like number of sterilisation operations conducted and birth control devices distributed. All observations must, therefore, be seen within this light. The DKT International/Janani, Patna[15] experience indicated that the franchisee model they follow is easier to set up and manage and moreso if there is a specific package that is on offer. Also if there is a high degree of advertising and promotion to promote the brand being franchised. The DKT approach of franchising does not seem to be particularly useful in the current context. The DKT approach of using unregistered medical practitioners as franchisees seems to work with their focus of population control and with the facility of referrals to their Surya clinics. This does not seem to be a very suitable option for us as we plan to focus on providing a good quality health service for rural areas. The major learning from the DKT/Janani approach is that franchising is a good viable option once the service package and processes are standardised. (Refer Annex 4 for a more detailed visit report to DKT)

The programme would be first initiated in districts, which have a low ranking on the critical indicators as per the Human Development Index.

[15] DKT International is an NGO in Bihar and Madhya Pradesh working on a social franchise initiative for population control operating under the project name Janani

An important element of where the clinics will be located relates to understanding where the existing competition[16] is located. The study undertaken was to understand this aspect and came out with the following findings.

Competition 1 – Private clinics. These clinics were mostly located only at the district head quarters and a few at the block head quarters. There were almost none located at the sub block level except for large hospitals or other charitable facilities located in the Shekhavati area. These in any case were more tertiary health care facilities and not primary. This is perhaps the only real health service available to rural communities. But located as it is at a distance it caters only to the more serious cases. It is expensive and does not always follow standard protocols. It is guided by the doctors own assessment of the patients ability to pay and therefore does not have any standardized prices. Most of these doctors are specialists and therefore a patient tends to have to go to at least a couple of them to be able to get a complete diagnosis. Doctors thus have a symbiotic relationship with each other. Chemists and Pathological laboratories are usually an extension of the clinic all contributing towards the incomes of the doctors.

Competition 2 – Government Doctors doing Private consultations. Almost all doctors living in the two towns we studied – Jahazpur and Surajgarh were practicing after normal duty hours. Though the government does provide them the facility for such practice and they may not be doing anything against the law, the overpowering nature of private practice means that government services are pushed to very poor levels.

Competition 3 – Bengali Doctors. These are spread all over. They have a very high degree of recognition in the rural areas. People know they are not authorized but they still accept them as they are perhaps the only source for treatment available in rural areas. These facilities have all the quick fix remedies that provide instant relief and it will be challenging to deal with them as competitors.

Competition 4 – Government Health Facilities. The network of services is very wide. Each block as per plan has almost 2-3 Community Health Centres, almost 7-8 Primary Health Centres and over 30-40 Health Sub Centres. Ideally these facilities should be providing all the services necessary. However, sad as it may sound, almost 90 per cent of these facilities do not provide 24 hour delivery services in the rural areas. A CHC or a PHC close to a city/town may work but confidence levels are extremely low.

Competition 5 – Private Clinics at Urban centres.

The Amrit Clinics will have to be located so as to be able to manage all this competition in the best possible manner.

Locating clinics will thus be effective in areas where the following conditions are met:

1. primary health centres and sub centres are dysfunctional.
2. distances from the village to the nearest facility where there is assured medical help available is large
3. there is a lot of floating population in the village *kasba*
4. the *kasba* has a *haat* which is frequented by women

[16] The use of the word 'competition' may be distasteful to some readers. Here it simply refers to other facilities that exist in the area and not in the sense of an Amrit clinic actively competing for patients. In any case, it is well documented that remote rural areas need an increased number of health services.

5. the means of communication to the *kasba* are poor

Clinics would be set up in a phased manner. Expansions will take place around existing clinics.

3.8 The Legal and Policy Environment

Although health technology has been presumed to be innately equitable in its application, the manner in which it is made available to the community can affect equity and patient rights.

Inequitable deployment of technology and restrictions on the acquisition of clinical skills by primary health workers often results in denial of services to those most in need of them. Such denial of services occurs because of unnecessary and 'over-medicalised' restrictions on who can use technology and whether or not they can be trained to use it. Poor access in interior rural areas could however be enhanced, if the health personnel that were more readily available locally, were to be given the skills and support to deliver clinical services as and when needed.

Currently, most services are concentrated at tertiary and secondary levels, and within these levels, in the hands of doctors rather than nursing or midwifery personnel. Where specialists or doctors are either not available or visit infrequently, essential services remain inaccessible, especially to poorer women in northern states like Rajasthan.

As per the tradition within most formal health systems, only medical practitioners are allowed to take decisions on the administration of drugs and to carry out medical procedures. However, over the years the public health imperative has triggered a liberalization of this approach in law and policy. Hence, for example paramedical workers implementing public health programmes can prescribe chloroquine for malaria, co-trimoxazole for childhood pneumonia and low-dose hormonal oral contraceptives.

The Drugs and Cosmetics Act provides for schedules under which different drugs can be used. Most drugs fall under schedule H which allows for prescription by a registered medical practitioner. A nurse-midwife could however use such drugs under medical supervision or prescription. Certain drugs such as analgesics, contraceptives, ORS, etc are legally available without prescription (schedule K) while others under schedule M can be used by non-physicians.

Procedures such as attending a delivery have traditionally been performed by indigenous midwives and experienced women. Over time, the management of delivery and the associated immediate newborn care came to be performed by traditional birth attendants (dais), by trained nurse-midwives and by doctors, including obstetricians. As delivery procedures became more medicalized, the role of doctors and obstetricians increased, to the exclusion of traditional and professionally trained midwives. In 2005, recognizing the need for large scale increase in access to skilled delivery attendants who can also perform life-saving procedures, Government of India issued guidelines for auxiliary nurse-midwives to give intra-venous drips and drugs for saving the lives of women during delivery, before referring them to hospitals. Earlier in the nineties, the government had received permission from the drug controller to allow ANMs to use the antibiotic cotrimoxazole. On a broader scale, nurse-midwives are authorized to perform a range of clinical procedures such as giving immunization, inserting intra-uterine devices and giving intramuscular and intravenous injections under medical supervision, provided they

are suitably trained for the purpose. In India's public health system, the supervision of a field based ANM is by the medical officer of the PHC or CHC, through training and field visits, review meetings and examination of records.

The current legal and policy environment in India thus favours the use of a range of drugs and procedures by non-doctors in life-saving and public health settings. To an extent, this has become possible consequent to India's commitment to achieving the Millennium Development Goals, especially the ones pertaining to maternal and child mortality and HIV/AIDS. A health system could have persons other than physicians using drugs and performing medical procedures, provided the following conditions are met:

1. They are trained specifically into the role, and have the requisite practical skills
2. They have clear service guidelines and standard operating procedures about dealing with patients and clinical situations expected during routine practice
3. They are supervised and retrained as required (including by doctors), through on the job visits, consultation (including tele or video consultation), review of records and performance
4. There are clearly defined referral protocols that lean on the side of safety, and a transport system and hospital(s) to handle referrals from the primary to secondary or tertiary level
5. A feedback system guides service quality improvement

The government primary health system of primary and sub-health centres staffed by doctors and ANMs follows the above conditions, at least in principle. A non-governmental system following the same rigorous conditions would be subjected to similar legal considerations.

Only if the above conditions can be seriously pursued, can access to formal services be greatly increased in interior rural areas. Otherwise, the current situation in which large numbers of unqualified or semi-trained village practitioners and paramedics provide irrational care outside the pale of law will persist.

To ensure that this can be possible, BHS will operate within this framework two methods. Each of the Amrit Clinics will be supervised by a doctor from the Amrit Plus clinic. This doctor will be in direct touch with the clinic through a computer link up and also through telephones. These technologies will ensure that the GNM and the ANM are not operating clinics on their own but are doing it under the indirect supervision of a qualified Medical Practitioner.

BHS clinics will not attempt to take on serious cases, which cannot be handled at Amrit Clinics, these will be referred to the government hospital at either the block level or the district level; or to pre identified private nursing homes.

Amrit clinics will keep very carefully documented records of all patients who visit the clinic. This will be through the patient tracking system. This information will be always available in the event it is required for medico-legal cases.

Amrit clinics will always play on the right side of the law. Amrit clinics will also be bound by an ethics committee, which will frame its operational guidelines keeping the law in mind.

3.9 Community Mobilisation and Micro Insurance Services for Health

Micro health insurance is not just a market driven affair[17] – it is largely dependent on community involvement and on numbers. Only large numbers can actually make a business-based model and only large numbers can ensure that the best interests of the communities can be taken into account. Successful micro-health insurance projects have leveraged on existing membership base. Existing SHGs in an area and other organised memberships could be harnessed and built upon to canvass entire villages into a health insurance plan.

Thus, an insurance plan will work when there is a large risk pool. Covering entire communities for maternal, pre-natal and paediatric conditions requiring in-patient care may not interest an insurer. Insurers therefore prefer more comprehensive coverage and a large risk pools by expanding the range of health services offered in their clinics to handle other common medical and surgical conditions, which is one of the main feature of BHS operations. As the number of people insured increases, the risk pool expands stabilizing the pool and increasing utilization of clinics by the insured resulting in revenue to the clinics.

The tipping point however could be the outpatient coverage. There is an instant buy in by the community who normally consider the premium paid as an all-in-one payment for their health care needs. This however increases the premium payable, which in turn requires building knowledge and creation of demand through solidarity among the community.

The appropriate health insurance product shall include insuring both in-patient hospitalization and out-patient treatment coverage. This will have to be negotiated with insurance companies Premiums worked out could be done on the basis of whether a client would like to cover all possibilities or only a few. The options would be a certain premium for only inpatient services, a higher premium for out patient services as well. Depending on premiums, the cash limits for the insurance could be worked out. Premium will be dependent on the expenses incurred for insurance promotion, enrolment and servicing. Although BHS will benefit from large-scale insurance in the area, it is unlikely that BHS will be able to play a major role in setting the premiums. BHS will however aim to influence the insurer to set up simple and easy to follow systems for health insurance.

Health Insurance

Provider led models have suffered high loss ratios due to adverse selection. Health insurance companies use the term "adverse selection" to describe the tendency for sick people to be more likely to sign up for health insurance. If enrolment into the plan is canvassed only while patients visit its clinics, insurers will not be keen to underwrite such provider based plans.

BHS will therefore have to focus on creating demand from the community they target to serve, which is possible if Panchayats or federations or cooperatives operating in this area are sensitized and motivated. Persistent efforts over every quarter in the first year is required and more importantly proof of concept in the form of claims will greatly help understanding of the concept. Typically, the costs involved are high, a large part of which can be accommodated into the premium

[17] This section draws from learnings from a w workshop attended on Microinsurance for Health attended as part of the study. Please refer to Annex 6 for details.

3.9.1 Enrolment

Enrolment into insurance will be supported by BHS but BHS will not be directly involved with enrolling clients. The field level strategies for implementing a micro-insurance plan are either Community-led, NGO-led or Provider-led models. A hybrid model where demand is generated initially from the community and facilitated by a NGO will be used by BHS.

Generating demand for micro-insurance is the most challenging and daunting task. Building insurance awareness in a consistent manner, follow up for enrolment and help during service delivery are critical for effective implementation and act as drivers for generating demand. However, insurance awareness within the community is very poor and therefore the process of sensitizing/education will begin before launching the micro-insurance plan. The sale of health insurance will be simultaneous with the setting up of the clinics. Absence of services will limit the spread of insurance sales.

Different strategies would be used to reach out to people. For example, it could be possible to blanket cover entire community groups in a particular area. The SARAS (RCDF) milk federations, other such federations, NGOs, SHG federations, Micro-finance organizations, Panchayats and Municipalities can be convinced to enrol their members in the plan (blanket enrolment, if possible). Amrit Clinics could be set up initially in special areas to cater to such specific membership. (example – if all Jaipur Milk Union members in Chomu are covered under health insurance it would be possible to open an Amrit clinic in that area.)

Similarly, dialogue could be initiated with milk cooperatives, other NGOs and federations to pursue the partnership approach. Districts like Alwar where there is now a large number of SHGs due to the NGO work there and there is also a good presence of RCDF may be a good first district to start off from.

A comprehensive survey to understand demand, willingness to pay by members, affordability bands, disease profiles, current health expenditure, health care incidence, and utilization patterns will have to be undertaken. Analyzed data will help in designing an appropriate benefit package, insurance product, and promotional strategy and provide a roadmap. A series of focus group discussions along with PRA exercises could be used to validate subjective data, also helping in sensitizing the community automatically in the process.

Thus implementing health insurance in areas where there has been little in terms of community action will be a difficult exercise unless a partnership can be developed with a local NGO who would be willing to put in time and effort in doing the mobilisation and also promoting micro insurance. This could alternatively be done by an insurance entrepreneur (could initially be supported by BHS) who works on behalf of the insurance company on a commission basis. During the first year, cost of enrolment is expected to be very high as efforts to convince members might require multiple visits. The first renewal effort (after one year from initial enrolment) requires multiple strategies and considerable resources. However, the cost of enrolment will come down from the end of second/third year. This expense can be subsidized by grants or bundled into the premium depending upon affordability levels and therefore BHS may start looking for potential grants to subsidize these costs.

3.9.2 Claims

The claims process in the Amrit clinics will be managed by the BHS staff at the clinic. BHS will incorporate/absorb the cost of such facilitation depending on the scale of claims. When they are few and manageable by the existing staff, BHS can absorb it. Once they go beyond the capacity of the clinic staff to handle, the costs will be incorporated into the claims being made to the insurer. With appropriate loading of expenses for such facilitation into the premium, the health insurance services may break even from the second year itself. However, this loading has to be computed based on a survey of the community by understanding their affordability.

Since health insurance will be one of the crucial sources of revenue for Amrit Clinics and BHS, and even if it is not the main business that BHS is in, BHS will have to take more than a peripheral view of the sale of insurance The BHS health insurance promotion initiative should be managed by an independent entrepreneur supported by BHS and the insurance company and unconnected to the main business, who will be responsible for insurance promotion, enrolment and claims services. The Insurance entrepreneur shall manage the insurance promotion in areas around the Amrit Clinics. As operations increase in scale, multiple people can be added by the entrepreneur to handle these services. The independent entrepreneur could be a sales agent of the insurance company or sub agents appointed by him/her.

Micro insurance for health cannot be the only cost recovery mechanism – it can best be one of several options. However even though the system may not become viable at the initiation but eventually it is an important way to ensure financial viability.

Most importantly, micro insurance is perhaps the only way that the poorest can actually be in a position to access quality health care. As the benefits of a cashless service become more and more obvious a health service provision mechanism that can take are of these aspects (like an Amrit Clinic) will be a preferred option. With easy and better access, this will ensure that overall health of the populations would benefit.

Clinics will be constantly upgraded to handle conditions, which are covered by an appropriate health plan. A referral arrangement with a secondary/tertiary hospital in a district headquarter will support these upgraded clinics.

There are other creative ways of insurance as well – for example, a 'health provider package' offering coverage for specific conditions (like critical interventions during pregnancy in this case) can be implemented. For instance, a pregnancy package can be sold for a specific amount which covers most normal cases but leaves a surplus to cover the small percentage of complicated cases. However, such schemes require scale to break even. This will usually be taken up by people who are faced with an eventuality and have not bought insurance to cover their family.

It is in this context that the experiences of the Healing Fields Foundation[18] (HFF) provide insights into one way of implementing the health care financing model.

[18] Healing Fields Foundation is a Hyderabad based NGO that aims to make healthcare accessible and affordable.

BHS will have to evolve a health financing model that is most suitable to the areas it

The Healing Fields Foundation Model

This model is run by the HFF and they find it has increased usage of the existing health care facilities, especially in cases where the patient needs to be hospitalised. As mentioned earlier, the HFF model is essentially a health care financing model. The HFF works with other NGOs who work with communities. The standard process seems to be that the NGOs approach the HFF and seek help in devising an insurance model. HFF then conducts a baseline survey in the area. The survey focuses on prevalent diseases in the area, nutrition status, existing health facilities, usage of health facilities among other things. HFF then devises a health package and negotiates with the insurance company. On arriving at an insurance package, they consult with the partner NGO and then negotiate with a private medical facility to empanel them. The empanelment depends on the medical facility fulfilling pre-decided norms. HFF then places a Facilitator within the empanelled facility where s/he has a prominent desk in the reception area. The Facilitator has the responsibility of ensuring that the patient has a positive experience in hospital. The facilitator takes the patient to the doctor and in case the doctor advises hospitalisation, seeks permission (on the phone) from the HFF Hyderabad Office and advises the doctor and patient accordingly. S/he also handles all the paperwork so that the patient does not have to deal with the insurance company. During the hospitalisation, the Facilitator helps the patient and the family with everything including buying medicines, pathological tests required as well the discharge process. The insurance plan that was seen during the field visit was not a cashless service; in this case the policy holder had to pay 25 per cent of the cost of treatment at the time of the discharge. The insurance package does not cover OPD but the HFF have been able to negotiate with nursing home to give a 25 per cent discount on the consultation to policy holders. The insurance policy has fixed costs for each of the medical conditions covered and the hospital receives that fixed amount irrespective of the actual cost. HFF's experience is that while deciding costs, they have fixed them at rates higher than what the cost is likely to be and they have not received any complaints so far.HFF's experience has been that while it is difficult to convince people for the first time to buy insurance, it is even more difficult to get them to buy insurance for the second time, especially if it hasn't been used and therefore considered a waste of money by the policy holder.

Here, it is important to understand the insurance business. Insurance is a profitable business only if the claims ratio is low – the accepted percentage is between 60-70 per cent. It is also a business where numbers matter a lot. The amount of the annual premium is inversely proportional to the number of policy holders. This is the reason why insurance policies are not sold to people who are already ill as the claims ratio would then be very high. OPD is not covered as it is very difficult to track those cases. The packages that HFF has negotiated is very clear on the medical conditions covered and the cost for the treatment of each. HFF and the doctor of the medical facility both feel that it is a good package as it covers most of the common medical conditions prevalent in the area at a low cost.

HFF finds their model to be very successful as they feel that they have managed to eliminate areas of confusion between the hospital, NGO partner, patients and insurance company. They also feel that they have managed to prove the success of the Diagnosis Related Group Model of insurance that they follow.

In the Rajasthan context, the HFF experience is perhaps an indicator of what can be in the future. It also raises issues related to the financing of health services through insurance. The need to cover OPD and evolving a cashless service are two such areas. The financing is discussed in sections on financing and insurance. (Refer Annex 5 for a more detailed visit report to HFF)

chooses to work in.

3.10 Human Resource Plan

There are five broad categories of personnel that will be needed to run Amrit Clinics and Amrit Plus Clinics. The following sections profile the team as well as identifying possible sources of obtaining such people, the salary and facilities/incentives that would be needed, the training/ orientation that would be needed and the a possible plan for the retention of the team once it is place or at least retention for a significant length of time.

It also gives a possible organisation structure in Annex 7.

3.10.1 Doctors

The programme will recruit graduate doctors for positioning at the unit level. A unit will usually be based at a district HQ from where doctors will be expected to visit Amrit Clinics and facilitate the treatment processes there.

Doctors will be recruited fresh from medical colleges as a Medical Officer and be given the responsibility of overseeing 50% of the clinics in a unit. They will be provided with an interesting financial package to excite them to undertake a minimum of two years of pre post graduation practice in the clinics. It would be possible for a MO to become the coordinator of a unit after putting in 2 years of work experience. The coordinator of the unit will be a doctor with at least 2-5 years of working experience. It is unlikely that a graduate doctor will work with BHS for more than a 5 year period especially since we will prefer to recruit fresh graduate doctors. After this experience, it is likely that graduate doctors will like to take on post graduation and specialisation, which will in fact be supported and promoted by BHS.

It is expected that availability of doctors and retention may be a major constraint to the BHS plan. Fresh graduate doctors are being currently recruited by the government on a contract of Rs 12,000 (all inclusive per month). BHS will aim to do much better than that in terms of the monthly package and also provide some additional incentives in the form of bonus on the completion of the contract / furnished accommodation / guest house facilities. Travel to field centres will be part of the job description; travel arrangements will be comfortable.

Apart from the package that is offered to the doctors, BHS would invest a considerable amount of time to build into the doctors a passion for the job that they are going to be undertaking. BHS believes that the right environment, appropriate motivation and encouragement will instil a work spirit and culture into the organisation that will improve the quality of the initiative. BHS will spend good quality time to ensure this happens.

The essential approach of BHS is one that combines the advanced skills of a qualified doctor with that of nurse midwives. Doctors by training are generally less amenable to such an approach. Orientation initiatives will be especially needed to help the teams understand the approach being followed by BHS and especially the values of lo cost, accessible quality health care especially in the context of the roles that the GNM and NMs are expected to play in the model. They would also need to be oriented to look at issues through a public health perspective.

Despite the best packages, this may come up as an important challenge.

3.10.2 **Nurse Midwife (NM) and General Nurse Midwife (GNM)**

The NM and the GNM along with the field worker are key members of the team on which the functioning of the Amrit Clinic rests. The NM and the GNM are expected to run the Amrit Clinic. This includes the core medical work of diagnosis of a health condition, dispensing of the medicines after consultation with the doctor, ante natal care, conducting deliveries, post natal care, neo natal care, immunization as well as managing the Amrit Clinic. The NM/GNM are also expected to make home visits in case of emergencies.

While the NM/GNM has already undergone a professional education, the standards and quality are still not up to standards that BHS will require. They unfortunately go through very meagre field training. Teams will have to be trained to handle cases independently. They would also need to be trained to follow pre decided protocols for different cases, counselling patients, and importantly in the management of a health centre. All training would be phased.

Accommodation for NMs and GNMs would have to be at the Amrit Clinic. This could be either free or subsidized. This is essential to make the Amrit Clinic a 24- hour facility.

Incentives could be in the form of bonus on the completion of the contract or field operational allowances.

3.10.3 Support Staff/ Field Worker

Field workers are the critical link that not only inform and motivate the community to use the services of the Amrit Clinic. They are also visualised as facilitators to the work going on in the Amrit Clinic. They are essentially multi purpose workers. They will be recruited locally. They will need to be also need to be oriented to the approach that Amrit Clinics aim to follow. This should help them to answer questions that the community will have about the Amrit Clinics. They will also have to be oriented about medical issues to make them team members. In addition, they will have to be made aware of do and don'ts with regard to standard medical practices carried out in the Amrit Clinic.

3.10.4 Coordination Staff

These are the other category of non-medical workers. They could from a variety of backgrounds like management, health, social work or any other. This team works towards ensuring that the Amrit Clinics and the Amrit Plus Clinics are able to work smoothly. This group also ensures that the quality of the services provided is of the decided quality. They will also procure drugs and supplies, coordinate with government for its schemes.

They will also need to be oriented to the approach that Amrit Clinics aim to follow. This should help them to answer questions that the team members and others will have about the Amrit Clinics. They will also have to be oriented about medical issues and the role that they play in helping heal India.

An important part of HR will be will be training and capacity building of the team. Most content related training will be out sourced to ARTH, which is the technical support partner. The essentials of training of the team will however be on the values on which BHS will be built. These will be important training programmes, which will contribute not just to the capacities of the staff but also build allegiance of the team to the health challenge without which the idea may not succeed.

3.11 Marketing the Service

The Product design incorporates a better understanding of the community needs and expands services beyond maternal and child health and thereby being able to provide a more comprehensive set of services to the consumer.

The Pricing of the products have been kept at the bare minimum even though it will take a much longer time for the service to break even but the service will nonetheless become sustainable over a period of time. The services are essentially low cost and combine the access element to make them affordable vis-à-vis a city level service. The introduction of insurance and cash-less services are a crucial elements of the pricing mechanism.

The Placement or the third P is in effect the USP of the service. Access to such a service "at arms length" to use the famous Coco-Cola distribution strategy is perhaps the essential characteristic of the service that is being provided; especially for women who

will be able to go to the clinics on their own without escort and thereby have better health.

The Promotion will have to be designed carefully to make the service popular. The promotion processes will begin with introducing the service and popularizing the concept of micro insurance. Until the time the product does not begin to speak for itself there will have to be a constant reminding of the existence of the Amrit clinic. Advertising will also provide the necessary confidence to the patients as they use a facility. There is provision for a dedicated amount of funding for this promotional exercise. Apart from the advertising there will be other forms of promotion as well – trial offers, free offers in association with other services and package deals, all carefully and sensitively worked out to not appear as hard-sell and yet be able to attract people to better health services. The by-line Helping Heal India will be the basis for the promotional campaign. A suitable agency will be identified to undertake the promotional campaign.