

TREAT AND TRACK ANEMIA

A systematic approach to controlling anemia in vulnerable groups -The Myrada Experience (October 2012)

1. Background

Iron deficiency anemia is a major health problem in Karnataka State, especially among women and children and adolescents. The findings of the NFHS – 3 (2006)¹ and the Myrada baseline survey done in this regard could be summarised as below:

Target group	NFHS – 3 Karnataka	Myrada baseline survey (2010)	Myrada screening of target group (2011)
Pregnant women	63%	72.6%	57.1%
Women in reproductive age group	52%	66.1%	NA
Adolescent girls	51%	47%	38.3%
Children below 5 years	70.4%	NA	63.4%
Deworming in pregnant women	7%	10.6%	
IFA distribution for pregnant women/ consumption of IFA	74% given; 39% consumed	47.2% given; 27.86% consumed	
IFA distribution for children	13%	na	

Summing up the baseline:

1. Knowledge of anemia very poor in all three target groups (average 13%)
2. Inadequate facilities for screening and follow up of anemia cases in the health centres (only 55% have Hb. testing equipment)
3. There is no specific implementation plan for detection, treatment and prevention of anemia in adolescent girls and children below 5 years.
4. There is a significant gap in tracking of anemia cases as per maternal health records.

Iron supplementation for anemia includes three major steps in the operational process:

1. Adequate and regular supply of high quality oral iron medicines to all pregnant women; with individual tracking of pregnant women with diagnosed anemia. (**Coverage**)
2. Regular intake of these medicines to ensure that at least 60 mg of elemental iron is taken every day and ensuring that this oral iron is absorbed into the body by minimizing inhibiting factors and increasing facilitating factors. This also includes the component of food sources of iron. (**Compliance and Absorption**)

¹ NFHS- 3 Karnataka Report - 2006

3. Eliminating blood loss through infestation by intestinal helminths (worms) in pregnant women and other vulnerable groups by administering 6 monthly doses of Albendazole. **(Deworming)**

2. GENESIS OF THE PILOT STUDY

In view of the concern from the NFHS – 3 data regarding anemia, Myrada was approached to discuss the possibility of involving women in SHGs in improving diets of pregnant women and their families, given the organisation's well established experience of working with community based organisations (CBOs). Myrada evolved the strategy of involving community based institutions (SHGs, GPs, and VHSCs) to play an active “community watch dog” role in the community through a dual role of influencing their peers to access services as well as put pressure on the health care system to provide regular services to vulnerable groups.

1. Some of the **key reasons** for this high prevalence despite a nation-wide National program in place for Anemia control were **gaps in coverage and compliance of IFA supplementation and minimal follow up** regarding other inputs for anemia management.
2. The **prevalence of anemia was not limited to pregnant women** alone. Other vulnerable groups included **adolescent girls and children** below 5 years.
3. Community centred approaches tried out in Maharashtra, AP and UP had shown significant positive outcomes.²

This pilot was planned as a three year partnership between Myrada, St. John's National Academy of Health Sciences and the Health & Family Welfare Department (HFWD), Government of Karnataka, with financial support from the NRHM program. The pilot was titled to highlight the need to identify sustainable mechanisms to address anemia in vulnerable groups.

Goal & Strategies

Goal: *To institute a set of sustainable protocols and approaches that will assist the existing health system to address anemia in vulnerable groups effectively*

² Reducing Iron-Deficiency Anemia and Changing Dietary Behaviors among Adolescent Girls in Maharashtra, India: downloaded from <http://www.icrw.org/docs/2004indiareprohealth8.pdf>

Target group: Pregnant women, adolescent girls, children < 5 yrs

Strategies

- ▶ Strengthen and develop a reliable tracking mechanism for effective coverage and follow up of anemia in pregnant women, children below 5 years, and young girls
- ▶ Involve the community institutions – (VHSCs & SHGs) in the tracking and nutrition education/ supplementation.
- ▶ Conduct operational research with the H & FW dept. to study dosages/ formulations/ facilitating and inhibiting factors to improve compliance

3.2 Policy and program implications from baseline survey

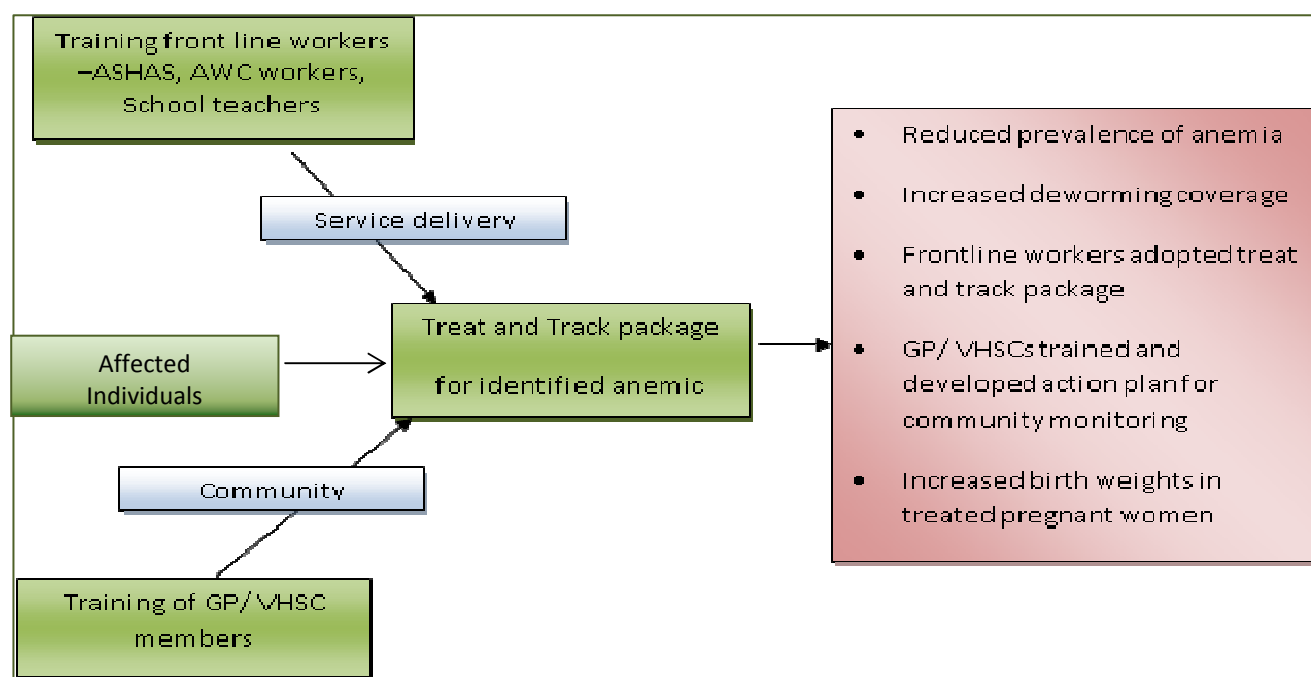
The baseline survey was an eye opener for all stakeholders. Not only did it reiterate the fact that anemia was a major public health problem in Karnataka, other issues such as very poor knowledge; significant gaps between service delivery and record keeping in respect of service rendered; updating; poor knowledge within the delivery systems; lack of convergence between departments; poor screening facilities etc, came to light.

Specific components for the project that emerged from the baseline assessment included

1. Systematic **tracking** of all three target groups was necessary. This included Hb. Screening, regular follow up of anemia cases, and nutrition education with regular and timely documentation.
2. **Engaging the local community institutions** to assist the grass root level workers in systematic tracking and follow up of all screening, mass deworming and nutrition supplementation related interventions would facilitate sustainability.
3. **Convergence of health, women and child, PRI and education** departments for effective programs to address anemia. This would help to ensure that the impact of the anemia program is sustained.
4. **Advocacy for operational research** on alternate formulations and dosages for those intolerant to current medication. These included areas of varying formulations, use of non – allopathic herbal and other tested products, capsules; as well as varying doses and timing of administration.

The original proposal had envisaged implementing the pilot in a total of 6 taluks in 6 Districts. Following the baseline study report dissemination, a common consensus was reached by Myrada and the health department to implement the pilot in 3 initial taluks only.

3.3 STRATEGY ADOPTED FOR PROJECT



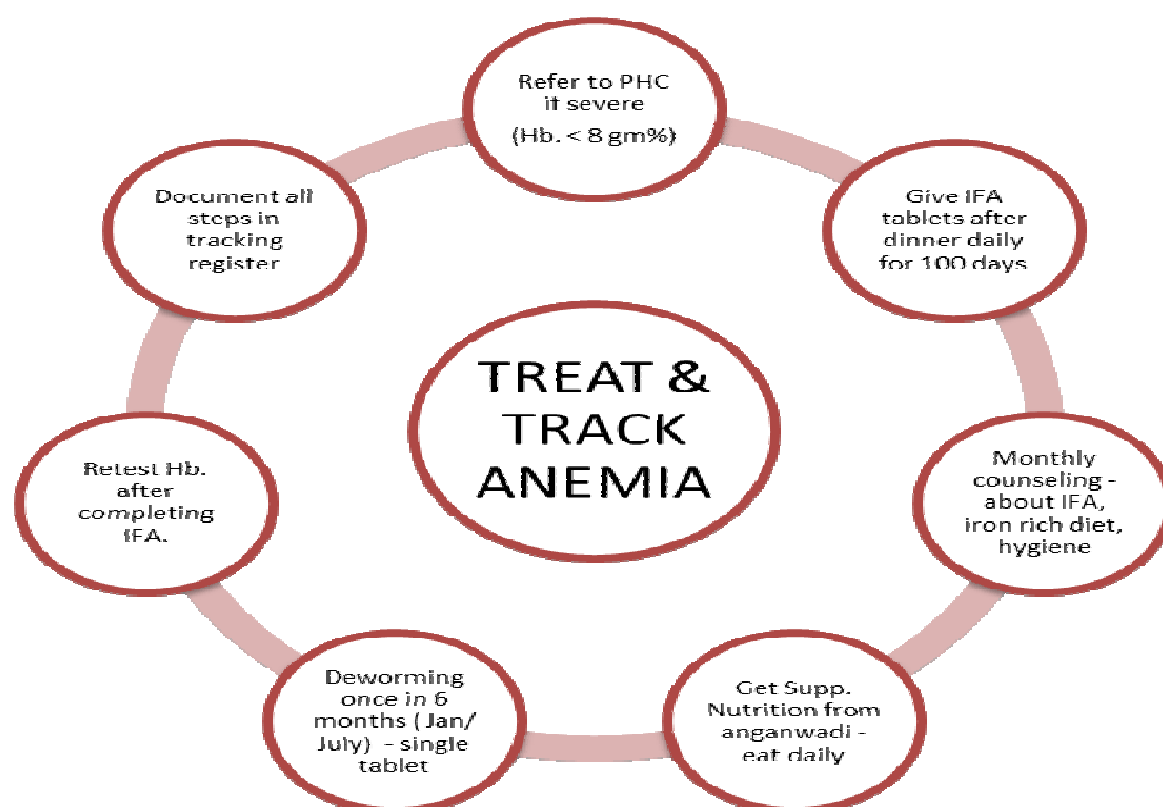
A. TREAT AND TRACK PACKAGE

Over a period of 15 months, the project was able to design a comprehensive “treat and track” package. The first and preparatory step prior to using the package is to screen all the pregnant women, adolescent girls and children below 5 years to determine exactly who has anemia. Once the person is detected with anemia, then they are “given” the appropriate treatment and then tracked regarding their anemic situation on the basis of compliance to treatment and follow up tests.

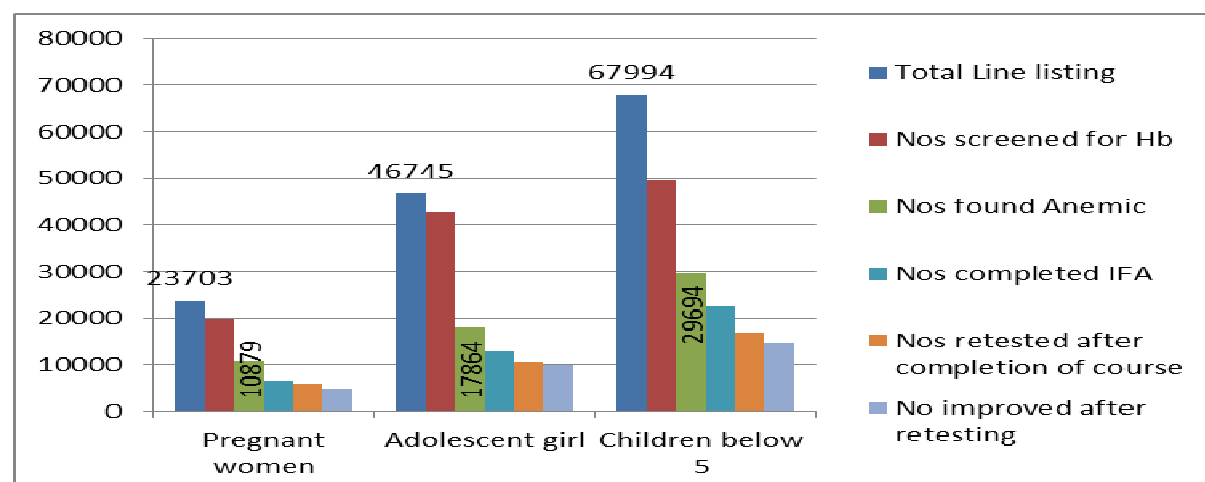
The components of the package are:

a)	<u>Classification</u> into anemia and severe anemia groups.	All those with severe anemia are immediately referred to the Primary Health Centre for a complete medical examination. The cut off levels for severe anemia is 7gm/ dl and below for pregnant women and 8m/dl for the other two groups.
b)	<u>Iron and folic acid</u> (IFA) supplementation – 100 days minimum for all groups with anemia.	• Pregnant anemic women – 2 tablets (100 mg each) per day for 100 days • Adolescent anemia girls – 1 tablet per day (100 mg) daily for 100 days • Children below 5 years – 1 Pediatric IFA tablet (20 mg) – daily for 100 days.

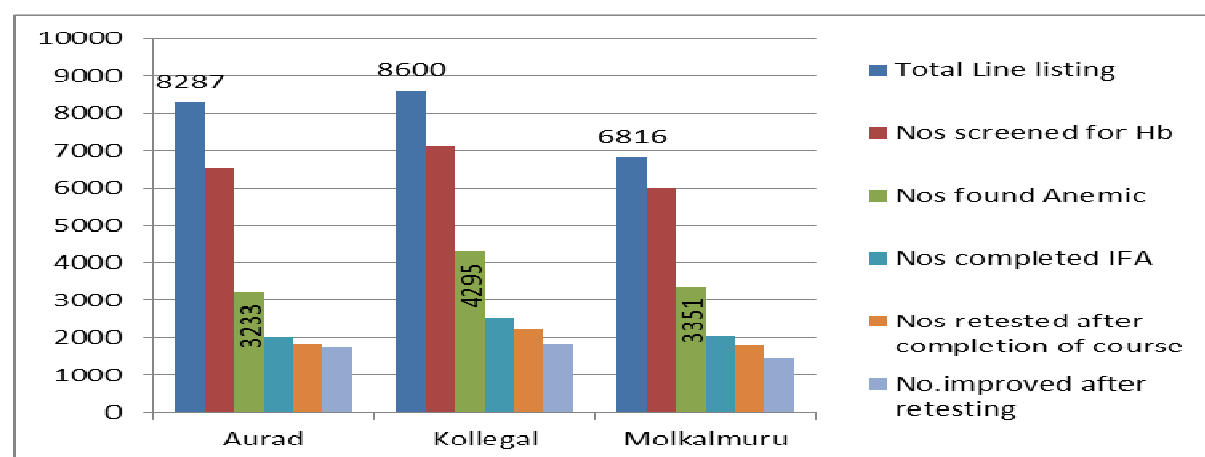
c)	<u>Deworming</u> once in 6 months – Albendazole	a. Children 1- 2 years – 200 mg Albendazole syrup or tablet single dose b. Children > 2 years to all adults – 400 mg tablet single dose
d)	<u>Monthly counselling</u> – on iron rich diet, personal hygiene and IFA compliance.	Each anemic individual should get a sample diet chart which will help them plan their daily diet to ensure that it has iron rich foods cooked in the right manner.
e)	<u>Supplementary nutrition</u> from anganwadi or mid-day meal program	For all pregnant women and children below three, this comes in a take home ration. All school children get a mid-day meal in the school. All anemic girls must get this benefit.
f)	<u>Retesting Hb</u> after completion of 100 days of IFA	Once all anemic persons have completed 100 days of IFA, and other components, they need to have a retest done to see if they have improved or not
g)	<u>Reporting</u> and Documentation	All inputs are recorded in a timely manner. Each person is tracked as an individual and a line list maintained for all anemic cases in a tracking register, or maintained electronically.



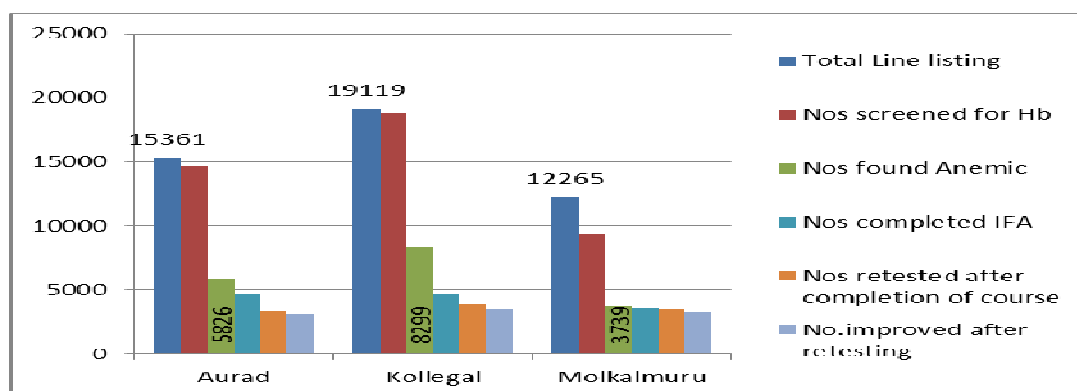
Myrada started the project implementation phase with enrolling all the target groups into a master line list. By September 2012, a total of **38,442 individuals** were listed cumulatively. The team identified a total of **58437 (52.13%) anemic** individuals in the three taluks. All of them have been introduced to the treat and track package. The table below depicts the total numbers tracked and treated in the year. The prevalence of anemia in the tracked group is **55.27% for pregnant women, 41.8% for adolescent girls and 59.8% for children below 5** years.



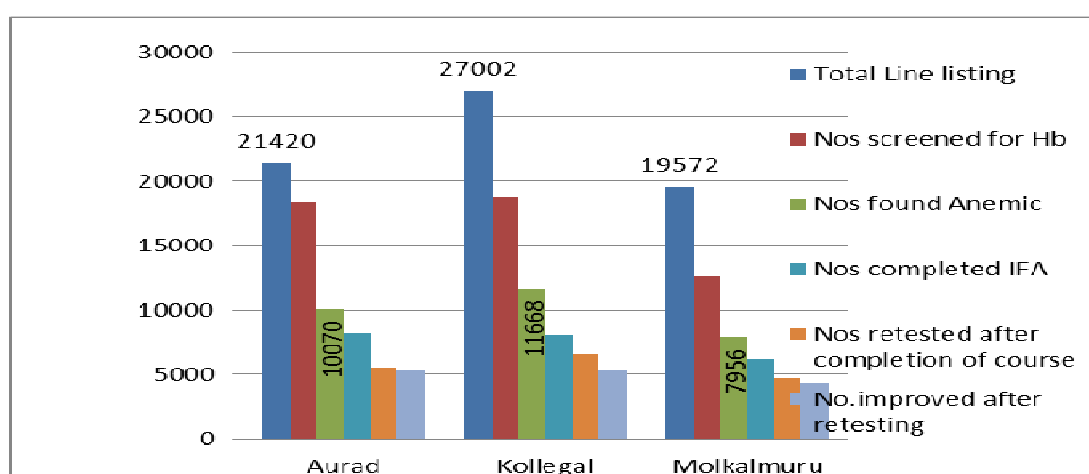
As of September 2012, the total number who completed all components of the package and got retested are summarised below for each target group



Pregnant Women



Adolescent girls



Children below 5 years

B. COMMUNITY STRENGTHENING AND SUSTAINABILITY PROCESSES

Myrada initiated the treat and track package first to ensure that anemic individuals received appropriate care soon after being diagnosed. Alongside, it worked on the inputs that were required to strengthen the community based institutions – Gram Panchayat (GP), Village Health and Sanitation Committees (VHSCs), and SDMCs (School Development & Management Committees). Specific training modules were developed for the different community based institutions and delivered to the stakeholders as per the matrix below.

Group	Content/Methodology	Objective
SHG – self-help groups	Conducted by Community Resource Person trained under the pilot Materials: Flip book	- To learn the basic facts of anemia. - To describe the treat and

Village Health & Sanitation Committees	Conducted by Out Reach trained under the pilot Worker/ Materials: Flip book	track package • To understand their roles and responsibilities in anemia prevention & control.
Gram Panchayat	Conducted by Out Reach trained under the pilot Worker/ Materials: Flip book	
SDMC – school development management committee	Conducted by Out Reach Worker/ Materials: Flip book	

As of September 2012, **80 of the 92 GPs and 400 VHSCs have undergone the initial training. Around 70% of the 3855 SHGs have been trained.** After the initial training, the plan is to follow up these institutions to see that they develop specific action plans and act on them. The team had developed a wish list of options from which the CBOs could select a few. The wish list is annexed.

This is the most critical component of the pilot in terms of ensuring a sustained response from the community.