RCH-HIV Integration to Prevent HIV Transmission from Mother to Child in Karnataka, India

A Good Practice Documentation

JUNE 2010
This publication was produced for review by the U.S. Agency for International Development (USAID). It was prepared by staff of the Health Policy Initiative, Task Order 1.
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FOREWORD

The Department of Health and Family Welfare in Karnataka State adopted the Integrated Health Policy in 2004 with the mission of providing high-quality healthcare with equity. The policy views healthcare as a reasonable expectation of every citizen and works within a framework of social justice. Karnataka is one of the pioneers in the country in providing comprehensive, people-oriented health services.

The department recognises the need for horizontal integration to facilitate easy access to services at the point of service delivery, where the patient and provider come in contact. The effort towards reproductive and child health (RCH)/HIV integration is one more step towards providing one-stop comprehensive services, in this case to pregnant women, with a focus on HIV-positive (HIV+) pregnant women to minimise mother-to-child transmission of the virus.

Soon after the first cases of HIV were detected in Karnataka, the state government responded by facilitating the rollout of a vertical programme managed by the Karnataka State AIDS Prevention Society (KSAPS). Despite significant gains, Karnataka continues to have a high disease burden.

As the epidemic matured in the state, so did the health systems response. In 2008, the Department of Health and Family Welfare (DoHFW) took ownership of HIV as primarily a health issue and recognised that the transmission of HIV from mother to child during pregnancy, childbirth, and breastfeeding is entirely preventable if suitable and timely measures are taken to provide safe institutional delivery, counselling, and necessary antiretrovirals. The active partnership among KSAPS, the National Rural Health Mission, and RCH Programme Phase II, under the leadership of the DoHFW, contributed to fast tracking the conceptualization and rollout of the RCH-HIV integration model. Timely support from development partners, especially the United States Agency for International Development (USAID) and Karnataka Health Promotion Trust, contributed significant value added, especially in providing the services of a team leader, coordination, and support staff to facilitate the preparation of operational guidelines, training modules, and reporting formats; and in rigorous monitoring.

The results of the first and second years were encouraging and inspiring. The state has witnessed a two- to tenfold increase in most indicators, most significantly, the number of antenatal care registrations; numbers tested for HIV, pre-test, and post-test counselling; and number of spouses tested. Now, when the USAID-funded Health Policy Initiative, managed by Futures Group, has approached us to document this initiative for wider dissemination, we feel confident of its replicability and are ready to share our success story with a wider audience.

I applaud the efforts of all the government partners, especially the dedicated teams from the National Rural Health Mission, RCH-II, KSAPS, and DoHFW, who worked with the singular objective of improving the HIV situation in the state by placing HIV+ pregnant women and their babies at the centre of the response. I also thank USAID, Karnataka Health Promotion Trust, and Futures Group for their support and initiative in sharing our experience with those who share with us common health concerns and commitments.

Dr. E. A. V. Ramanna Reddy IAS
Secretary to Government
Department of Health and Family Welfare
ACKNOWLEDGEMENTS

This report documents the collective initiative of the Department of Health and Family Welfare, National Rural Health Mission (NRHM), and Karnataka State AIDS Prevention Society (KSAPS), Government of Karnataka, towards the integration of reproductive and child health (RCH) and HIV services for prevention of HIV transmission from mother to child in the state of Karnataka.

This model of integration was conceived and rolled out under the leadership of Shri Nilay Mitash, who in 2008, held the triple charge as mission director NRHM, Project Director of KSAPS, and Project Director of the Karnataka Health Systems Development and Reforms Project; and has subsequently been led by Shri. Nilay Mitash’s successor, Shri Selva Kumar, IAS, Mission Director, NRHM.

The whole-hearted support and leadership of Health Secretaries Shri C. Madan Gopal, IAS, and Dr. E. V. Ramana Reddy, IAS; Commissioners of Health, Family Welfare, and Ayush Services Shri P. V. Srinivasachary, IAS, and Shri D. N. Naik, IAS; and RCH-II Project Director Dr. M. R. Mohan Raj were instrumental in successfully implementing the programme. Their commitment and shared vision facilitated institutionalisation of the model into the health systems of the state. In the field, the staff of NRHM and RCH-II and the District AIDS Prevention and Control Unit (DAPCU) officers led a coordinated response that contributed to its success. Without the leadership and initiative of the DAPCU officers, district supervisors, counsellors, and lab technicians in integrated counselling and testing centres, this programme could not have achieved such remarkable results.

The KSAPS team and India Health Action Trust-Technical Support Unit of the Karnataka State AIDS Prevention Society especially John Anthony Team Leader-Technical Support Unit for all the necessary support towards effectively designing and implementing the initiative, I acknowledge their hard work and contribution.

Dr. M. Naina Rani, the team leader for mainstreaming in the Technical Support Unit, deserves special mention for her continued and tireless efforts towards the successful operationalisation of the initiative and its ongoing monitoring and quality assurance.

The programme owes its achievements to timely support and inputs from Ms. Lalita Shankar, senior HIV/AIDS advisor, USAID; Smt. Vandana Gurnani, IAS, executive director, Karnataka Health Promotion Trust; Dr. Reynolds Washington, Chief of party, SAMASTHA; Dr. Mohan Raj, Project Director, RCH, Dr. Dhanya Kumar, Deputy Director (maternal and child health), NRHM, Karnataka; Dr. Amruteshwari, Deputy Director (intrauterine device), NRHM, Karnataka; Dr. Neena Nanda, Consultant (maternal and child health), NRHM, Karnataka; and Dr. M. Manjula, Deputy Director, State Institute of Health and Family Welfare.

My appreciation and gratitude to USAID, Bill and Melinda Gates Foundation and PHFI for the necessary funding support and Futures Group - Health Policy Initiative, for their support in documenting this initiative. Specifically, I would like to thank Ms. Meera Mishra, Ms. Kaveri Gurav, and Ms. Himani Sethi of Futures Group for preparing this document after a detailed review of existing data and information, field visits, and interviews with key informants.

I expect this document to be a useful source of information and insight to a range of stakeholders who share an interest in integration as a sustainable and cost-effective approach for addressing health concerns.

Shri R. R. Jannu, KAS
Project Director
Karnataka State AIDS Prevention Society
EXECUTIVE SUMMARY

Mother-to-child transmission accounts for more than 10 percent of all new HIV infections globally. There is a 20–45 percent chance that an HIV-positive (HIV+) pregnant woman can transmit the virus to her baby during pregnancy, labour and delivery, or breastfeeding. With appropriate interventions, this risk of transmission can be significantly reduced to less than 2 percent. Several key strategies can help mitigate the spread of parent-to-child transmission of HIV: (1) prevent HIV infection of prospective parents, (2) avoid unintended pregnancies, and (3) prevent transmission from HIV+ mothers to their babies through use of antiretroviral drugs, safer infant feeding practices, and other interventions.

The prevention of mother-to-child transmission of HIV is an important public health issue in India. The Reproductive and Child Health Division of the Health Department, which provides services to HIV+ pregnant women, teamed up with the National AIDS Control Organisation and the Ministry of Health and Family Welfare to develop a National HIV and Reproductive Child Health Convergence Strategy to address the prevention of parent-to-child transmission (PPTCT) of HIV. Subsequently, in March 2008, the state of Karnataka designed and rolled out a reproductive and child health (RCH)-HIV integration model to prevent HIV transmission from mother to child through the following objectives:

- Ensure universal HIV counselling and testing among all pregnant women
- Strengthen systems for institutional deliveries for all HIV+ pregnant women
- Track and address HIV infection in children (up to 18 months old)

The programme strategy emphasises effective collaboration and coordination between the Karnataka Department of Health and Family Welfare and the Karnataka State AIDS Prevention Society to work towards a common goal of improving the well-being of mother and child by preventing vertical transmission of HIV. Key strategies include the following:

- Ensuring that all HIV+ pregnant women deliver in institutions so that mothers and babies receive antiretrovirals and counselling.
- Expanding the base of healthcare providers through public-private partnerships to increase institutional deliveries.
- Ensuring universal coverage of HIV+ pregnant women by optimally using existing resources, such as the Yeshaswini Scheme\(^1\) (see section 4.2.B for a description) to facilitate cashless transactions.
- Engaging different departments to provide holistic services to pregnant women.
- Institutionalizing robust tracking systems for monitoring timely provision of high-quality PPTCT services.

This report captures the process of planning and rolling out Karnataka’s RCH-HIV integration model and analyzing the factors that have led to the remarkable increase in uptake of HIV services among pregnant women, their spouses, and mother-baby pairs during the first year of implementation.

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\(^1\) A health insurance scheme for rural farmers and peasants.
This report first briefly introduces Karnataka’s overall development and health situation and then describes in detail the RCH-HIV integration strategy. The document includes an examination of the processes and outcomes of the integration strategy, which have made Karnataka such a successful example of RCH-HIV integration.
# ABBREVIATIONS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIDS</td>
<td>acquired immune deficiency syndrome</td>
</tr>
<tr>
<td>ANC</td>
<td>antenatal care</td>
</tr>
<tr>
<td>ANM</td>
<td>auxiliary nursing midwife</td>
</tr>
<tr>
<td>ART</td>
<td>antiretroviral therapy</td>
</tr>
<tr>
<td>ARV</td>
<td>antiretroviral</td>
</tr>
<tr>
<td>ASHA</td>
<td>accredited social health activist</td>
</tr>
<tr>
<td>AWW</td>
<td>Anganwadi worker</td>
</tr>
<tr>
<td>DAPCU</td>
<td>District AIDS Prevention and Care Unit</td>
</tr>
<tr>
<td>DH&amp;FWO</td>
<td>district health and family welfare officer</td>
</tr>
<tr>
<td>DoHFW</td>
<td>Department of Health and Family Welfare</td>
</tr>
<tr>
<td>EDD</td>
<td>expected date of delivery</td>
</tr>
<tr>
<td>FHPL</td>
<td>Family Health Plan, Limited</td>
</tr>
<tr>
<td>FP</td>
<td>family planning</td>
</tr>
<tr>
<td>HIV</td>
<td>human immunodeficiency virus</td>
</tr>
<tr>
<td>HIV+</td>
<td>HIV-positive</td>
</tr>
<tr>
<td>ICTC</td>
<td>integrated counseling and testing centre</td>
</tr>
<tr>
<td>KSAPS</td>
<td>Karnataka State AIDS Prevention Society</td>
</tr>
<tr>
<td>MO</td>
<td>medical officer</td>
</tr>
<tr>
<td>NACO</td>
<td>National AIDS Control Organisation</td>
</tr>
<tr>
<td>NACP</td>
<td>National AIDS Control Programme</td>
</tr>
<tr>
<td>NFHS</td>
<td>National Family Health Survey</td>
</tr>
<tr>
<td>NRHM</td>
<td>National Rural Health Mission</td>
</tr>
<tr>
<td>OG</td>
<td>operational guidelines</td>
</tr>
<tr>
<td>PHC</td>
<td>primary health centre</td>
</tr>
<tr>
<td>PID</td>
<td>patient identification digit</td>
</tr>
<tr>
<td>PLHIV</td>
<td>people living with HIV</td>
</tr>
<tr>
<td>PPTCT</td>
<td>prevention of parent-to-child transmission</td>
</tr>
<tr>
<td>RCH</td>
<td>reproductive and child health</td>
</tr>
<tr>
<td>RCHO</td>
<td>district reproductive and child health officer</td>
</tr>
<tr>
<td>RH</td>
<td>reproductive health</td>
</tr>
<tr>
<td>TB</td>
<td>tuberculosis</td>
</tr>
<tr>
<td>TDA</td>
<td>travel and daily allowance</td>
</tr>
<tr>
<td>TSU</td>
<td>Technical Support Unit</td>
</tr>
<tr>
<td>USAID</td>
<td>United States Agency for International Development</td>
</tr>
</tbody>
</table>
I. INTRODUCTION

India has the third highest number of people living with HIV in the world. With high fertility rates in some states, India is on pace to become the most populous country by 2035. According to the government of India, about 2.45 million Indians were living with HIV in 2006 (National Institute of Health and Family Welfare and NACO, 2007). Several studies have documented the potential benefits of and demand for the integration of family planning/reproductive health (FP/RH) and HIV services to reach more clients. The target populations for both services (women and men of reproductive age and young, sexually active people) overlap in some circumstances; for example, gender-based violence, lack of women’s empowerment, lack of constructive male engagement, and poverty contribute to both unintended pregnancies and vulnerability to HIV. The lessons learned from implementing Phase I and II of the National AIDS Control Programme (NACP) suggest that the convergence of HIV programmes with other health programmes (e.g., for sexually transmitted infections, tuberculosis [TB], and RH) could increase the effectiveness of all programmes. The integration of FP/RH and HIV services could limit missed opportunities for reaching clients; help avoid duplication of effort in terms of staffing, logistics, facilities, and funding; and promote holistic care—leading to improved FP/RH and HIV outcomes. For example, women and men who seek services through voluntary counselling and testing or prevention of parent-to-child transmission (PPTCT) programmes could benefit from greater access to FP/RH information and services.

Although India’s central government has tried to break down the walls between vertical health programmes (e.g., emphasising convergence of the Reproductive and Child Health (RCH)–II programme, National Rural Health Mission [NRHM], and NACP Phase III), many services have yet to be integrated. However, the policy environment for integration is favourable and a core strategy of NACP-III is to link its services with the NRHM, especially with the RCH-II programme and the Revised National TB Control Programme.

The purpose of this report is to document the processes and lessons learned from the design and rollout of Karnataka’s RCH-HIV integration strategy for programme expansion, scale-up, and replication in other contexts. The United States Agency for International Development (USAID) | Health Policy Initiative, Task Order 1, documented the administrative, political, and programmatic steps taken during the design and early implementation phases of the RCH-HIV integration model in Karnataka. The methodology for assessing Karnataka’s experience with RCH-HIV integration included (1) a literature review of national policy guidelines, global best practices, and other key documents; and (2) primary data collection through interviews with policymakers, programme managers, and service providers at the national, state, and district levels. Through this process, the Health Policy Initiative was able to help identify the barriers to effective implementation of integration policies and offer recommendations to other states that will soon embark on rolling out an RCH-HIV convergence strategy. This report is expected to be of interest to civil society, development partners, and government officials working in RCH or HIV/AIDS programmes.
2. CONTEXT

HIV prevalence in India is 0.36 percent, with significant variations among states. Although HIV prevalence is less than 1 percent, it equates to about 2.5 million HIV-positive (HIV+) persons—of which 38 percent (or about 1 million) are women of reproductive age. Yet, fewer than 25 percent of pregnant women who are HIV+ receive antiretroviral therapy (ART) to prevent mother-to-child transmission of the virus (National Institute of Health and Family Welfare and NACO, 2007).

About 27 million births take place annually in India, which includes more than 19,000 HIV+ babies born to the 65,000 HIV+ women who become pregnant and give birth. Mother-to-child transmission, which occurs during pregnancy, childbirth, or breastfeeding, accounts for 4.3 percent of overall HIV transmission in the country; it is the most significant route of HIV transmission in children younger than age 15 in India. In the absence of treatment and key interventions, the risk of mother-to-child transmission is 20–45 percent; the highest transmission rates occur for women who breastfeed for a prolonged period. Fortunately, the risk of mother-to-child transmission can be reduced to less than 2 percent with a package of services that includes ART initiation, antiretroviral (ARV) prophylaxis and treatment, and safer infant feeding.

To address the growing concern about mother-to-child transmission, the NACP committed to providing PPTCT services to 7.5 million pregnant mothers annually and ARV prophylaxis to more than 75,000 HIV+ mothers by 2012. However, in 2008, PPTCT coverage was relatively low, largely because almost 60 percent of deliveries occur at home. In addition, about 50 percent of all institutional deliveries in India occur in the private medical sector, which has not been fully engaged in providing PPTCT services. To help address these issues, the National AIDS Control Organisation (NACO) and the Ministry of Health and Family Welfare developed a joint HIV and Reproductive Child Health Convergence Strategy to establish a cost-effective, strategic approach to preventing HIV transmission from mother to child. The strategy outlines steps to integrate HIV prevention and care with the existing health sector infrastructure, so that every village and community can be reached. Karnataka is the first Indian state to initiate an RCH-HIV convergence programme successfully and demonstrate its effectiveness.

In March 2008, Karnataka began rolling out its integration strategy. By the end of 2009, the programme had achieved remarkable and measurable results with dramatic improvement in service delivery performance—notably increases in antenatal visits, pre- and post-test counselling, and number of clients coming forward for HIV testing.
3. KARNATAKA AT A GLANCE

Karnataka is the eighth largest state in India—both in terms of its geographic area and population (2001 Census). It has an area of 191,791 square kilometres and a population of 52.73 million people (table 1). The population density of 275 per square kilometre is significantly lower than the national average of 312. The decadal growth rate of the state is 17.5 percent (compared with 21.5 percent for the country), indicating a slower rate of population growth in the state (India, 2010c). About 34 percent of its population lives in urban areas, including more than 5 million people living in Bangalore City alone. The state has four administrative divisions: Gulbarga, Belgaum, Mysore, and Bangalore, divided into 29 districts, including Bangalore urban and rural districts.

Table 1: Key Demographic Variables

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population, 2001</td>
<td>52,733,958</td>
</tr>
<tr>
<td>Projected population, 2007</td>
<td>56,137,000</td>
</tr>
<tr>
<td>Percentage of adult population (15–49)</td>
<td>59.78 (as of October 2006)</td>
</tr>
<tr>
<td>Percentage urban</td>
<td>34 (2001)</td>
</tr>
<tr>
<td>Percentage literate (total)</td>
<td>67.04 (2001)</td>
</tr>
<tr>
<td>Percentage literate (male)</td>
<td>76 (2001)</td>
</tr>
<tr>
<td>Percentage literate (female)</td>
<td>57 (2001)</td>
</tr>
<tr>
<td>Percentage of population below poverty line</td>
<td>20.4</td>
</tr>
</tbody>
</table>

Karnataka is one of the leading states in terms of economic development. The service sector accounts for half of the state's gross domestic product; the agriculture and industry sectors contribute nearly 25 percent each. Major manufacturing industries in the state include sugar, paper, and cement. Bangalore, considered the Silicon Valley of India, serves as the hub for information technology. These industries attract many young migrants from within and outside the State.

3.1 Health

The overall health situation in Karnataka can be best understood when viewed in the context of health and development indicators of all four southern states in India: Andhra Pradesh, Karnataka, Kerala, and Tamil Nadu, which fare significantly better than the rest of the country. The health situation in Karnataka appears higher than the national average (table 2). However, when compared with its neighbouring states, Karnataka appears to be lagging in most areas. The proportions of institutional childbirth deliveries (67 percent) and immunization coverage (55 percent) for children are much lower in Karnataka, compared with Kerala and Tamil Nadu. These indicators are particularly relevant when trying to reach HIV+ women with PPTCT programmes. Table 2 summarises Karnataka’s major health indicators, compared with the best performing states and the national average.
Table 2: Comparative Health-Related Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Karnataka</th>
<th>India Average</th>
<th>Best Performing State</th>
<th>Data Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Life expectancy at birth (male)</td>
<td>63.6</td>
<td>62.6</td>
<td>71.4 (Kerala)</td>
<td>SRS-based life tables (2002–06)^a</td>
</tr>
<tr>
<td>Life expectancy at birth (female)</td>
<td>67.1</td>
<td>64.2</td>
<td>76.3 (Kerala)</td>
<td>SRS-based life tables (2002–06)^a</td>
</tr>
<tr>
<td>Crude death rate per 1,000 population</td>
<td>7.4</td>
<td>7.4</td>
<td>4.8 (Delhi)</td>
<td>SRS Bulletin 2008^b</td>
</tr>
<tr>
<td>Crude birth rate</td>
<td>19.8</td>
<td>23.1</td>
<td>14.7 (Kerala)</td>
<td>SRS Bulletin 2008^a</td>
</tr>
<tr>
<td>Infant mortality rate</td>
<td>45</td>
<td>55</td>
<td>13 (Kerala)</td>
<td>SRS Bulletin 2008^a</td>
</tr>
<tr>
<td>Maternal mortality ratio</td>
<td>213</td>
<td>254</td>
<td>79 (Tamil Nadu)</td>
<td>SRS special bulletin 2004–06^c</td>
</tr>
<tr>
<td>Institutional deliveries (percentage of births in past 5 years)</td>
<td>67</td>
<td>39</td>
<td>99 (Kerala)</td>
<td>National Family Health Survey (NFHS)–3 (2005–06)^d</td>
</tr>
<tr>
<td>Full immunization coverage of children (12–23 months)</td>
<td>55</td>
<td>44</td>
<td>81 (Tamil Nadu)</td>
<td>NFHS-3 (2005–06)^d</td>
</tr>
<tr>
<td>Total fertility rate</td>
<td>2.1</td>
<td>2.7</td>
<td>1.8 (Andhra Pradesh)</td>
<td>NFHS 3 (2005–06)^d</td>
</tr>
<tr>
<td>Estimated adult HIV prevalence</td>
<td>0.81</td>
<td>0.36</td>
<td>0.03 (Assam)</td>
<td>India Council for Medical Research</td>
</tr>
</tbody>
</table>

Sources:

a. India, 2010a. SRS stands for “Sample Registration System.”
b. India, 2008b.
c. India, 2009.

In terms of health infrastructure, Karnataka has an adequate number of hospitals at the primary, secondary, and tertiary levels, compared with other states. However, a shortage of specialist doctors exists at various levels—most notably at community health centres. A more than 50 percent shortfall exists in the number of nurses, midwives, and lab technicians needed in the state. Human resource capacity is an important consideration for service integration, and the implications for programme implementation in other contexts should be carefully examined.

3.2 HIV/AIDS

Karnataka is one of six states in India with a high HIV prevalence and shares a border with three of the other high-prevalence states: Andhra Pradesh, Maharashtra, and Tamil Nadu.² This cluster of four states together accounts for 63 percent of all HIV infections in India. Compared with the national HIV prevalence average of 0.36 percent, Karnataka has a prevalence of 0.81 percent. Per the National Family Health Survey (NFHS), this positions Karnataka just

² The map is available at: www.atriptoindia.com/images/map-ind.jpg.
below Manipur (1.67 percent), Nagaland (1.26 percent), and Andhra Pradesh (1.05 percent)\(^3\) in terms of states with the highest HIV prevalence.

In Karnataka, HIV prevalence among sexually transmitted disease clinic attendees, female sex workers, and men who have sex with men is about tenfold higher than in the general population. This indicates that HIV transmission is localised among sexual networks of highly vulnerable populations, including female sex workers, their clients, men who have sex with men, and transgender groups (Karnataka State, 2008).

Districts—such as Bagalkot, Bangalore Urban, Belgaum, Bellary, Bidar, Bijapur, Chamarajnagar, Chikmagalur, Gulbarga, Hassan, Koppal, Mandya, and Udupi—have shown a substantial decline in the percentage of HIV+ antenatal care (ANC) attendees; for example, in Bagalkot, HIV prevalence decreased from 2.1 percent to 0.6 percent and in Bellary from 1.5 percent to 0.4 percent between 2003 and 2007. HIV prevalence among ANC attendees in Karnataka has shown a consistent decline from 1.5 percent in 2003 to 0.9 percent in 2007. The number of districts with 1 percent or more of ANC attendees testing positive has declined from 20 in 2003 to 11 in 2007.

Despite the overall decline among ANC clients, HIV prevalence has increased in some districts, such as Gulbarga, Chikkamagalur, and Bidar (annex 1). Specific analysis from surveillance sites shows that HIV prevalence among rural women exceeds that of urban women in 11 districts (United States, 2009). In comparison with the rest of the state, HIV prevalence is relatively higher in the northern districts: Bagalkot, Belgaum, Bellary, Bidar, Bijapur, Dharwad, Gadag, Gulbarga, Kannada, Koppal, Raichur, and Uttara Kannada.

The Karnataka Annual Action Plan for 2007–08 indicated that of 1.2 million annual pregnancies in 2007, 2.85 lakhs\(^4\) (23.33%) women were counselled and tested; this means that 77 percent of pregnant women did not receive counselling and testing. Nationwide, fewer than 25 percent of HIV+ pregnant women received ART to prevent mother-to-child transmission. NFHS-3 data also suggested that 60 percent of women and 70 percent of men in Karnataka knew that HIV can be transmitted from mother to child, yet less than half knew that the risk of transmission could be significantly reduced through use of appropriate medications (IIPS and Macro International, 2007). This lack of knowledge is especially unfortunate, since 60 percent of deliveries in Karnataka are institutional and equally distributed between the public and private sectors.

These data informed the Karnataka State AIDS Prevention Society’s (KSAPS’s) decision to expand access to PPTCT services by creating greater linkages with the NRHM, expanding integrated counselling and testing centre (ICTC) services in the private sector, and generating demand for HIV counselling and testing services.

### 3.3 Factors of Vulnerability

Differential economic growth, geographic proximity to states with high prevalence, and sociocultural traditions contribute to HIV vulnerability in Karnataka. The 2004 female sex worker survey (KSAPS, 2008) indicated that about 50 percent of all female sex workers live and work in

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\(^3\) Improved estimates of India’s HIV burden in 2006 (Pandey et al., 2009).

\(^4\) One lakh equals 100,000 in the Indian numbering system.
rural areas. In some districts, particularly in northern Karnataka, the Devadasi system paves the way for forcing young girls into sex work in rural areas. Low levels of literacy among sex workers create challenges to raising awareness about HIV, as well as empowering them to negotiate safe sex.

It is widely known that migration and mobility are major determinants for HIV transmission. Karnataka shares borders with other high HIV-prevalent states, namely Andhra Pradesh, Maharashtra, and Tamil Nadu; and regional migratory patterns and behaviours make Karnataka more vulnerable to the spread of HIV. Urban areas boast large-scale infrastructure projects, and major industries, such as the information technology sector, promote migration of skilled and unskilled labourers into and within the state. Various reasons—socioeconomic conditions, extended absence from home, etc.—explain why these migrant workers are likely to engage in high-risk sexual behaviour. A 2008 study revealed that nearly one-third of long-distance truckers had paid for sex in the past 12 months (Pandey et al., 2008). This is cause for major concern in Karnataka, where national highways and a highly developed statewide road network help facilitate the movement of workers and truckers. Rural areas of Karnataka, which are economically depressed because of delayed development and frequent drought, serve as thorough ways bringing in migrant workers and an increased demand for sex workers.

The potential for HIV to move from high-risk populations to the general population is great in Karnataka. Women, particularly wives of migrant workers, become more vulnerable to HIV, given their inability to negotiate safer sex at home. A study showed that 2.2 percent of women whose husbands were in the transport industry tested positive for HIV (Karnataka State, 2008).

The high mobility of sex workers and labourers leads to extensive overlapping and mixing of sexual networks between urban and rural areas, as well as between the high-risk and general populations. These concurrent high-risk sexual linkages can potentially help fuel the HIV epidemic in Karnataka.

3.4 The HIV and AIDS Response in Karnataka

KSAPS is responsible for coordinating and implementing HIV prevention and care programmes in the state. Technical assistance from external resources has helped Karnataka respond successfully to the epidemic. A stable government, committed leadership, and strong budgetary support, backed by well-planned technical assistance has enabled Karnataka to scale up HIV/AIDS prevention, care, and treatment programmes to reach at-risk populations. Service integration and community-based outreach have been instrumental to programme success.

The state has set up district AIDS prevention and control units (DAPCUs) in all “Category A” districts to decentralise the state HIV programme in line with the NRHM. The DAPCUs are the main hub for mainstreaming and convergence of HIV/AIDS activities and other preventive and curative services of the Department of Health and Family Welfare (DoHFW) in the district. The expectation is that DAPCUs will effectively implement, supervise, monitor, and evaluate activities planned by KSAPS at the district and subdistrict levels.

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5 The Devadasi system is a religious practice in parts of southern India, including Andhra Pradesh, in which parents marry a daughter to a deity or a temple. The marriage usually occurs before the girl reaches puberty and requires the girl to become a sex worker for upper-caste community members. They are forbidden to enter into a real marriage.

6 The NACP III classifies all districts into one of four categories based on HIV prevalence among specific groups over three years. Category A districts have more than 1 percent prevalence in any surveillance site in the past three years.
A NACO-supported Technical Support Unit (TSU) has also been set up under the NACP III to provide technical assistance to KSAPS in the following key areas: strategic planning, scale-up of targeted interventions, capacity building, and mainstreaming of HIV with other departments and programmes.

Specifically, the response in Karnataka entailed the following strategies:

- **Scaling up of targeted intervention projects to reach high-risk groups**, such as female sex workers, men who have sex with men, transgenders, and injecting drug users. This was carried out in partnership with civil society organisations.

- **Expanding integrated counselling and testing centres with special attention to preventing parent-to-child transmission** through greater linkages with NRHM and private sector service expansion. There are:
  - 565 counselling and testing centres in medical colleges, district hospitals, and *taluk* hospitals;
  - Facilities for testing provided by community health centres and an additional 600 centres at the primary health centre (PHC) level to be active during 2009–10; and
  - 100 testing centres in private hospitals, which were created through public-private partnerships.

- **Scaling up of a cadre of special community outreach workers called link workers**, who are tasked with connecting specific high-risk target populations (e.g., pregnant women) with prevention, care, and support programmes in rural areas.

- **Preventing sexually transmitted infections** by expanding counselling and testing services to 41 NACO-assisted, sexually transmitted infection clinics located in medical colleges and district and sub-district hospitals.

- **Promoting blood safety to reduce seropositivity among blood donors** to less than 0.1 percent through:
  - 171 blood banks—of which 64 are in government hospitals assisted by NACO and 107 in private facilities; and
  - 31 blood component separation units—of which 8 are in the government sector and 23 in the private sector.

- **Integrating HIV-TB services** through the 643 Designated Microscopic Centres (DMCs) across the state.

- **Expanding comprehensive ART treatment centres** from 13 to 33 across the state. By March 2010, 44,312 patients received treatment—of these, 42 percent were women living with HIV.

- **Decentralizing ART services through 30 Link ART Centres** at district and subdistrict levels.
• Providing comprehensive care and support services through 48 community care centres in partnership with civil society organisations. The Global Fund for AIDS, Tuberculosis, and Malaria and USAID have largely funded this initiative. The focus has been on mainstreaming HIV care into existing private sector institutions run by nongovernmental, community-based, or faith-based organisations rather than on creating independent facilities that cater only to people living with HIV (PLHIV).

• Strengthening the capacity of 10 drop-in centres for PLHIV and their networks to promote positive prevention.
4. THE RCH-HIV INTEGRATION MODEL

RCH-HIV integration was conceptualized at the national level in keeping with the goal of the national PPTCT programme to reduce prevalence of HIV infection among children by 25 percent by 2005 and 50 percent by 2010.

In Karnataka, several key elements came together at about the same time. First, in a rather unusual turn of events, the project director for KSAPS and the state mission director for NRHM were the same, making coordination much easier. The Project Director, RCH took the lead in moving this strategy into practice. Second, the newly setup NACO-supported TSU was tasked with providing technical assistance to the KSAPS. Third, the TSU team leader for mainstreaming in the health sector provided necessary support for the initiatives. The scope of work encompassed development of operational and systemic guidelines to integrate relevant and specific activities under the domains of the three health systems operational in Karnataka: NRHM, the Karnataka Health Systems Development and Reform Project, and NACP III as implemented by the KSAPS. Thus, a vertical HIV/AIDS programme implemented through two nodal officers (nodal officer from ICTC and the district tuberculosis officers) was strategically positioned under the umbrella of the district RCH programme of the NRHM. Because of these well-coordinated efforts, integration has been achieved at all levels from the conceptual to the practical at the state, district, and taluk levels and has shown significant and measurable results. This is a good practice model with the potential for replication elsewhere in the country and similar settings.

4.1 Triggering Factors for RCH-HIV Integration in Karnataka

Several enabling conditions provided a solid foundation for successful RCH-HIV convergence in Karnataka:

- A joint strategy of the NACO and Ministry of Health and Family Welfare (India, 2010b) at the national level, which recognised that convergence between the NACP—with more than a decade of experience and technical competence in HIV/AIDS prevention and care interventions—and the ministry’s programmes—with its infrastructure, human resources, and capacity to reach every village and community—was critical to ensure scale-up and effective service delivery.

- Launched in 2005, the NRHM provided the framework for partnership among various government departments (especially, the Departments of Health, Women and Child Development, and Panchayati Raj), as well as nongovernmental organisations and the private sector.

- Wide recognition that HIV is a public health priority and has natural overlaps with RCH programmes, particularly for prevention, was essential. The four main strategies for PPTCT all serve as key opportunities for RCH integration:
  - Primary prevention of infection among young people, especially women of childbearing age
  - Prevention of unintended pregnancies (among HIV+ women) by providing FP/RH services

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7 A taluk is an Indian administrative division.
In six weeks, the technical team prepared the framework for integration, identified the points of collaboration, developed terms of reference for the various players, and drafted operational guidelines, as well as the instruments for data collection and documentation of the activities.

- Prevention of transmission from a HIV+ mother to her child through ARVs and safe delivery practices
- Care and support to HIV+ women and their children and families, including HIV testing of the infant and counselling on infant feeding

- Systemic support from the administration within the public sector health portfolio through the leadership of the mission and project director and efficient use of existing platforms (NRHM-RCH, KSAPS, and TSU) and personnel (mainstreaming team leader, RCH-II project manager, and district-level RCH-II, TB, and DAPCU management).

Although the conditions for integration existed in the state, the trigger could be attributed to two factors. First, a critical evaluation report urged the KSAPS to discontinue the strategy of engaging with civil society organisations in mobilising communities to access HIV services under the GFATM-funded PPTCT programme. Second, the project director for KSAPS and the state mission director for NRHM were the same, which created a unique opportunity. As a result, this person had access to and understanding of both programmes, which allowed him to optimise synergies. His leadership and motivation paved the way for the successful integration of RCH-HIV.

4.2 The Integration Process

In March 2008, KSAPS committed to integrating RCH-HIV programmes and services. Operational guidelines were formed in joint consultation with RCH-II and KSAPS, and the programme was rolled out by May 2008. The first three months were critical and entailed planning, forging strategic partnerships, developing operational guidelines, issuing circulars, and defining roles and responsibilities of key players. A detailed description of the key steps for planning and implementing the RCH-HIV integration strategy follow.

A. Form a technical team to review the HIV programme and identify strategies for integration

KSAPS identified and pulled together a technical team to review Karnataka’s HIV and PPTCT programme, as well as develop a framework for RCH-HIV integration. The technical team included key staff from KSAPS, NRHM, the Reproductive Child Health Department, and the Technical Support Unit.

In six weeks, the technical team prepared the framework for integration, identified the points of collaboration, developed terms of reference for the various players, and drafted operational guidelines, as well as the instruments for data collection and documentation of the activities.

The programme review highlighted that only 20–40 percent of HIV+ mothers were receiving nevirapine through the state PPTCT programme. The technical team was able to identify the following programmatic gaps and missed opportunities for reaching a larger proportion of HIV+ pregnant women. These challenges included (1) limited access to information on PPTCT services, (2) negative attitudes of healthcare providers towards PLHIV, (3) lack of disposable delivery kits and protective gear to practice universal precautions, and (4) lack of available drugs, namely nevirapine...
The scheme offers its members access to needed treatment and medical procedures. Plan administration is through the government of Karnataka. The Karnataka State Department of Cooperation is responsible for communication of the plan, cooperative societies enrol the members, cooperative banks assist in premium collection, Family Health Plan, Limited (FHPL) administers the claims, and a network of hospitals delivers the benefits. For HIV+ women, the preauthorisation of a minimum of six months is waived.

KSAPS facilitated discussions with key collaborators to solicit buy-in for integration (table 3). Through dialogue, KSAPS identified opportunities for RCH-HIV integration, including specific resources that could be leveraged to strengthen the PPTCT programme.

Table 3: Roles and Responsibilities of Key Collaborators (Based on Joint Dialogue)

<table>
<thead>
<tr>
<th>Organization</th>
<th>Key Role and Responsibilities</th>
</tr>
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<tbody>
<tr>
<td>NRHM</td>
<td>Lead and take full responsibility for the programme. The type of support includes (1) mobilising all pregnant women for counselling and testing, (2) providing village and sanitation committee funds for refreshments for ANC attendees, (3) providing a travel and daily allowance to counselors and lab technicians for outreach HIV counselling and testing, (4) transporting ANC attendees for delivery in a private vehicle whenever ambulances are unavailable, (5) registering HIV+ women under the Yeshaswini Scheme, (6) ensuring safe institutional delivery of HIV-positive pregnant women, (7) administering nevirapine to mother and baby, and (8) tracking and testing the baby for 18 months.</td>
</tr>
<tr>
<td>KSAPS</td>
<td>Provide high-quality counselling and testing facilities to cover all pregnant women through ICTCs, conduct special camps for outreach and expanding coverage, and make HIV test kits and commodities available.</td>
</tr>
<tr>
<td>Department of Cooperation</td>
<td>Enable cashless service delivery and provision of nevirapine through the Yeshaswini Scheme. This enables an HIV+ pregnant woman to access high-quality obstetric services through the hospital of her choice.</td>
</tr>
</tbody>
</table>
C. Develop operational guidelines
First, the technical team developed terms of reference for each agency based on roles and responsibilities identified during the joint dialogue. The technical team then drafted operational guidelines (OGs) for implementing the RCH-HIV convergence strategy. Given the planned simultaneous launch of the strategy across Karnataka, development of the OGs was essential to ensure that all stakeholders take a standardised approach. Of note, through collaboration and internal discussions, the team was able to draft the terms of reference within 20 days.

The guidelines include a systematic process for voluntary counselling and testing of pregnant women. For women testing positive for HIV, the OGs outline follow-up processes for institutional deliveries, administration of nevirapine for mothers and newborns, and tracking of children up to 18 months of age.

The OGs also provide clear roles and responsibilities for each service provider, including auxiliary nursing midwives (ANMs), accredited social health activists (ASHAs), counsellor, laboratory technicians, medical officers (MOs) in charge, and the district RCH officers (RCHOs). Training and orientation protocols for registering and treating HIV+ mothers are also included in the guidelines (annex 5).

D. Build consensus among implementers
To date, only senior decisionmakers from KSAPS/TSU and the Health Department have been involved in the strategy design. However, it was evident that the success of the programme rested on the commitment and involvement of the RCHOs, the chief implementers of the RCH strategy at the district level.

Early on, the leadership and technical team recognised that the convergence strategy could face resistance from the RCHOs; a chief concern was provider workload. To help inform and address any possible unease, the technical team analysed the potential for workload increase and forecasted about 300 HIV+ pregnant women in a year. Each ANM, who is the primary interface with the HIV+ client, would have an average of only one HIV case to follow up. The team hoped this would minimise any concerns about greater provider workload.

In March 2008, the leadership team held a consultative meeting to facilitate dialogue and gain the commitment of the RCHOs to the design and process of implementing an RCH-HIV strategy (table
4). The leadership team briefed RCHOs on the issue of mother-to-child transmission and solicited their input on ways to increase access to PPTCT services. The RCHOs suggested various strategies that were useful and consistent with the OGs. The meeting was chaired by the mission director of NRHM, who explained the role of the DoHFW and provided guidance on how to operationalise the integration strategy. This exercise succeeded in gaining buy-in from RCHOs and validated the OGs through a participatory process. The meeting ended on a positive note with the support of all 29 participating RCHOs. This paved the way for official rollout of the initiative. Soon thereafter, the DoHFW and KSAPS jointly issued two important circulars to formalise the process.

Joint Circular No. NRHM/15/07/08 dated 31-03-08 by Mission Director of NRHM and Principal Secretary of the Department of Cooperation formalising linkage with the Yeshaswini Scheme to provide cashless deliveries to HIV+ pregnant women.

Joint Circular No. RCH/FC/30/07-08 dated 19-05-08 by Mission Director of NRHM and Commissioner of Health to RCHOs and other health officials to extend support to the initiative at the district and subdistrict levels.

Table 4: Key Steps Taken in March 2008–March 2009

| Step 1 | The World Bank shares and provides feedback to the detailed implementation review. |
| Step 2 | KSAPS decides to strengthen the HIV programme through integration and forms a technical team to draft the plan. |
| Step 3 | The mission director of NRHM convenes RCHO meeting to share and create ownership of the integration plan. Draft operational guidelines for RCH-HIV integration are developed (annex 5). |
| Step 4 | NRHM and the Department of Cooperation develop a joint circular with instructions to NRHM staff on how to integrate HIV into RCH programmes. |
| Step 5 | An integration strategy is rolled out with daily follow-up and updates. Technical staff train RCH staff in PPTCT with site visits to Tamil Nadu. Cascade training is implemented through DAPCUs, RCHOs, and district supervisors. |
| Step 6 | Staff conduct community outreach through camps and outreach services to reach women in their last trimester of pregnancy (annex 2). |
| Step 7 | KSAPS organises a two-day workshop at the state level for DAPCUs, district programme managers, and RCHOs for coordination, review, and training. |
| Step 8 | Staff review programmatic gaps in poor performing districts and identify areas for improvement (annex 3). |
| Step 9 | NRHM issues circular to include community health centres and taluk hospitals in the programme (annex 4). |
4.3 Goal, Objectives, and Strategies of the RCH-HIV Model

The overall goal of the Karnataka RCH-HIV integration system is to prevent HIV transmission from mother to child across the state. Progress towards achieving this goal will be met through the following objectives:

- Ensure universal coverage of HIV counselling and testing among all pregnant women
- Strengthen systems for institutional deliveries for all HIV+ pregnant women
- Track and address HIV infection in children (up to 18 months)

The key strategies for achieving the desired outcomes include the following:

- Ensure effective collaboration and coordination between the DoHFW and KSAPS on PPTCT.
- Expand coverage of institutional deliveries for all HIV+ women so they may deliver safely and receive necessary drugs and counselling.
- Expand the base of healthcare providers through public-private partnerships to increase institutional deliveries.
- Ensure universal coverage of HIV+ pregnant women by optimally using existing resources, such as the Yeshaswini Scheme to facilitate cashless transactions.
- Engage different departments in programme implementation to provide holistic services to all pregnant women.
- Institutionalise robust systems for programme monitoring to help ensure timely provision of high-quality services and to document results.

4.4 Activities

The focus of the convergence programme is to provide (1) timely screening and testing of all pregnant women and (2) obstetric care to HIV+ pregnant women to ensure safer delivery and minimise the risk of HIV transmission. In May 2008, the following activities were initiated to jumpstart the implementation phase of the RCH-HIV integration strategy:

1. **Sensitise counsellors** to increase collaboration and understanding between health department professionals (medical officers in charge of primary health centres) and ICTC counsellors. The DAPCU officers conducted the initial rapport building and sensitisation through one-to-one interaction with the counsellors. The objective was to motivate counsellors to coordinate and develop rapport with the health professionals in order to serve the community effectively. Coordination with MOs and other health workers, such as ANMs, was mandated.

2. **Sensitise MOs and ANMs at PHCs** to minimise concerns and secure further buy-in for programme integration. DAPCU officers made frequent visits to PHCs and communicated regularly with concerned MOs, which helped lead to greater acceptance of the programme. The DAPCU officers oriented ANMs on ways to disseminate messages within the community on the availability of HIV counselling and testing services at their PHCs. They also explained how to mobilise women in their second trimester of pregnancy for HIV testing. Because there was insufficient time to organise formal training, ANMs were sensitised during their weekly meeting at the PHC by the PHC MO and the DAPCU staff.
3. Organise sector meetings to orient service providers on their roles and responsibilities, clarify doubts on the integration activities, and address any potential issues that may arise during implementation. The PHC MO organises monthly sector meetings attended by all the Anganwadi workers (AWWs) and ANMs.

4. Organise district AIDS prevention and control committee meetings to strengthen the relationships among all staff working under RCH, TB, and HIV programmes within a district. These meetings provide a forum to review all programmes, identify gaps, and propose strategies to fill the gaps. The meetings were initially used as a forum to orient and train all those who came under the purview of integration. An important agenda item is to discuss the issues related to coordination in the integration process.

5. Raise awareness among the community on accessing HIV services. At gram sabhas (village meetings), which are held once every three months, MOs gave talks on HIV services, focusing on the importance of pregnant women getting tested for HIV. In this way, mobilisation activities were undertaken at various levels and helped change attitudes about HIV among community members.

6. Mobilise the community to reach pregnant women with information and provide a forum for exchange. The ANMs are at the heart of the programme and serve as a bridge between the women and the healthcare providers. ANMs play a very important role in mobilising communities. Some examples of how ANMs are expanding their reach to women in the community follow:

- **Village health day programmes** are held to talk about HIV/AIDS and the prevention, treatment, and care services available. The ANMs emphasise the need for HIV testing to prevent mother-to-child transmission of HIV. These meetings are organised once every two months and attended by gram panchayat leaders, youth club members, AWWs, and members from the community/village.

- **Tayeendra sabhes (meetings for mothers)** are organised by AWWs to provide pregnant women with nutritious food and discuss the importance of iron and folic acid tablets, breastfeeding, and immunisations. As part of the RCH-HIV integration efforts, ANMs were invited to these meetings to talk about the importance of HIV testing for pregnant women. These meetings were effective in communicating with and reaching this target population. Protection of the newborn from HIV infection served as a motivating factor for pregnant women to seek testing.

- **Kishori groups (adolescent girls group)** are another platform for reaching out to future mothers on HIV/AIDS-related issues.

- **Self-help group meetings** are used as a forum to provide women with information on HIV/AIDS. Participation in these meetings is high among women and therefore allows ANMs to sensitise and reach large groups of women more easily.

- **Seemantha Karyakrama** are used as a platform to provide HIV counselling and testing. “Seemanthas” are a social function where pregnant women are blessed by other women.
The RCH programme has been successful in using this platform to disseminate information on reproductive health.

7. **Monitor and report** on clients who were tested, followed up, and referred to determine programmatic reach and effectiveness. At first, these records were monitored intensely by the DAPCU officer to ensure that the documentation was done correctly. The reporting was gradually institutionalised and now needs less intense supervision.

8. **Develop a workplan** to guide programme implementation and define roles/responsibilities. The ICTC counsellors were advised to develop and share a quarterly plan with the MOs and ANMs. This plan has helped ANMs mobilise women for HIV testing on the day specified for ICTC staff to visit their PHC, further reinforcing integration efforts.

9. **Implement a “camp” approach** to expand HIV counselling and testing services to pregnant women. At the initiative’s launch, pregnant women who were already in their third trimester were not covered for HIV counselling and testing. To reach women at the appropriate time in their pregnancy, special camps were organised at the PHCs. After screening pregnant women in this group, HIV testing for pregnant women was regularised. Now, as a rule, all pregnant women are screened for HIV during their second trimester.

10. **Train stakeholders** about the DAPCU mandate to coordinate programme efforts and help them understand the roles and responsibilities of all departments and staff in the rollout of integration. KSAPS organised training for the DAPCU staff to orient various stakeholders (nongovernmental organisations, community-based organisations, district authorities, health professionals, etc.) at the district level. These interactions and discussions helped build greater understanding and trust. This was a useful step in creating a supportive environment and commitment to the programme.

11. **Develop innovative strategies specific to the context.** Although the OGs provided straightforward guidance on a standardised approach, they did not limit innovative action by district authorities. A few districts initiated innovative strategies that included the following:

   - In Bagalkot, the district health officer issued a letter to all the *taluka* health officers to implement the integration activities in their respective *taluks*. This was an effective measure to decentralise the implementation efforts.

   - Kolar District officials involved nongovernmental organisations/outreach workers from PLHIV networks to work alongside ICTC and ART counsellors. The PLHIV outreach workers play a vital role in mobilising HIV+ people to access services (ART, nevirapine, etc.) and are instrumental in expanding programmatic coverage.

   - In Udipi District, ANMs reached out to clients who access ANC services at private hospitals. ANMs contacted pregnant women in the villages/urban blocks, regardless of where they were accessing ANC services, and the ANMs reviewed all test reports. If a woman was found to be HIV+, she was encouraged to access HIV services through the government clinics, because ARVs, including nevirapine, are provided free of charge. In addition, the DAPCU has developed linkages with private institutions to conduct HIV testing and counselling for all the women who go for ANC checkups.
4.5 Roles and Responsibilities

For any programme to be successful, roles and responsibilities for each stakeholder involved in implementation must be clearly defined (table 5). At the macro level, the technical team identified broad areas of responsibilities for the three departments directly involved in RCH-HIV integration—the DoHFW, KSAPS, and the Department of Cooperation. However, given that districts and subdistricts are primarily responsible for service integration, the OGs clearly defined the roles of all key implementers at the decentralised level.

<table>
<thead>
<tr>
<th>Implementer</th>
<th>Roles and Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>District health and family welfare officer</td>
<td>The district and family welfare officer (DH&amp;FWO) is the administrative head of all the health programmes in the district. All medical officers and programme officers report to the DH&amp;FWO, who plays an important role in issuing orders and circulars to all health staff in programme implementation. The DH&amp;FWO’s role is vital in supporting and integrating staff from both the HIV and health departments, which function independently from one another.</td>
</tr>
</tbody>
</table>
| Reproductive child health officer               | The RCHO is in charge of the RCH programme in the district, as well as the PPTCT programme at the district level. As a member of the district AIDS control committee, she/he reviews the integration activities during the committee’s monthly meeting. Specifically, she/he is responsible for the following:  
  - Maintaining a list of HIV+ pregnant women in the district.  
  - Maintaining and periodically updating the master register to ensure details are regularly filled in.  
  - Coordinating with FHPL and sharing the registration forms with it.  
  - Birth planning for HIV+ pregnant women to identify the hospital and transportation arrangements for delivery.  
  - Coordinating with the identified hospital and ensuring availability of delivery kits and nevirapine in the hospital. |

Any change in these guidelines is brought to the notice of all concerned.
- Approving the Yeshaswini cards for the HIV+ pregnant women.
- Stocking additional doses of nevirapine to respond to emergency requirements.
- Coordinating and transferring the case to the respective RCHO if an HIV+ woman plans to deliver in another district.
- Updating the master register and informing KSAPS and project director for RCH about progress.

**DAPCU officer**
The DAPCU officer serves as the nodal person for all HIV/AIDS activities in the district and is responsible for implementing the HIV prevention and control strategy at the district level. Her/his main responsibility is to implement HIV and NRHM convergence activities. Specifically, she/he
- Plans and implements the integration activities;
- Trains and orients staff involved in implementation;
- Supervises programme activities;
- Monitors documents and records maintained by the health facilities that relate to clients lost to follow-up, cluster of differentiation 4 (CD4) estimation and initiation of ART, testing of spouse/partners/children, etc.;
- Provides updates at monthly DH&FWO meetings; and
- Sensitizes various stakeholders on the importance of integration.

**Medical officers in charge of PHCs**
MOs serve as the administrative heads at the PHC level. They are primarily responsible for the following activities under integration:
- Signs HIV test results of pregnant women.
- Registers HIV+ women into the Yeshaswini Scheme and provides detailed information about hospitals (Yeshaswini network and government hospitals).
- Shares information with RCHOs on the registration of HIV+ women under the Yeshaswini Scheme.
- Ensures all HIV+ pregnant women are also registered at the ART centre.
- Ensures their staff (ANMs) follow up with every HIV+ ANC case with necessary services and accompanies the ANC attendee for delivery.
- Administers nevirapine to mother and baby and ensures follow-up of mother-baby pairs until 18 months.
- Sensitises the community on the PPTCT services/schemes at the PHC during village meetings.
- Facilitates training of ANCs who have not undergone pre-ART registration/CD4 counts through ANMs.

**ICTC counsellor**
- Provides pre- and post-test counselling services to women who come for ANC checkups.
- Conducts camps in every PHC on Thursdays (ANC) per a rotational calendar.
- Counsels and encourages pregnant women in their second trimester to get tested for HIV.
- Registers pregnant women into the Yeshaswini Scheme.
- Issues Yeshaswini cards and provides guidance on safe delivery.
- Encourages the woman to bring her partner/children for HIV counselling and testing using a “family-centric approach” rather than a “ANC-centric approach” to ensure wellness of the family.
- Ensures sputum testing at District Microscopy Centres–Revised National Tuberculosis Control Programme units for suspected TB patients.
- Refers HIV+ couple/woman to ART for a CD4 test.
- Develops quarterly action plan and shares with the MOs and ANMs.
- Coordinates with the MOs, ANMs, and outreach workers for follow-up activities.
- Trains hospital nurses in pre- and post-test counselling to undertake.

**Auxiliary nurse midwives**

ANMs play a major role in mobilising ANC attendees to access HIV prevention and care services. An ANM undertakes the following:

- Registers all antenatal cases in the first trimester.
- Counsels all ANC clients/spouses on the importance of knowing one’s HIV status.
- In cases in which the pregnant women tests positive, maintains shared confidentiality with RCHO.
- Mobilises all pregnant women in their second trimester to come to the ICTC camp at the PHC.
- Accompanies the HIV+ pregnant woman to the hospital for delivery and ensures administration of nevirapine.
- Follows up with mother-baby pair at the PHC at six weeks, six months, 12 months, and 18 months.
- Provides periodic updates to the district RCHO through the PHC MO.
- Counsels women at six months on family planning methods.

**Laboratory technician**

- Draws blood samples of women who have opted for testing and tests the sample for HIV infection.
- Gives the HIV test report to the Counsellor and directs clients for post-test counselling.
- Ensures that the blood is drawn and tested at the PHC itself, so results are available the same day.
- Coordinates and draws blood of HIV+ women who do not have access to CD4 testing, transports blood sample to the ART centre, collects a CD4 report, and provides results to the client after documentation is complete.
- Trains staff nurses of the hospital especially of the labour room to test cases coming directly in labour cases.
- Ensures Quality Assurance (EQAs) samples are transported to Standard Reference Laboratories (SRLs) every quarter.

**Accredited Social Health Activist (ASHA)**

ASHAs support the ANMs in mobilising women for ANC and for HIV testing. They are presently more involved in routine maternal and child healthcare and less with HIV-related activities. They are more actively engaged in PPTCT activities where the ANM posts are vacant.
**Link workers**

KSAPS; Global Fund for AIDS, Tuberculosis, and Malaria; USAID; and United Nations Children’s Emergency Fund link workers across Karnataka, who are tasked with providing HIV prevention and care services to at-risk populations, including pregnant women in rural areas. They are involved in RCH-HIV integration activities and, specifically, the following:

- Instrumental in getting ANC attendees registered with the Anganwadi worker.
- Attends all the meetings called by AWWs (meetings for pregnant women, self-help group meetings, etc.) where the workers provide information on HIV services.
- Undertakes ART follow-up.
- Mobilises spouses of HIV+ ANC attendees for counselling and testing.

**Peer outreach workers/peer district-level networkers**

Peer outreach workers/educators and district networkers of PLHIV networks help the HIV+ ANC attendee to

- Disclose her status to her spouse (whenever the ANC attendee seeks help);
- Gently encourage the spouse/children for HIV counselling and testing;
- Follow up on pre-ART registration, CD4 estimation, ART initiation, compliance with ART, mother-baby pairs, and family planning and psychosocial counselling; and
- Provide support on social entitlement and resolving legal issues.

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**Shared Confidentiality**

Since ANMs are involved in mobilising pregnant women for HIV screening and MOs have responsibility for issuing Yeshaswini cards and making delivery plans for HIV+ pregnant women, it is essential for health professionals other than ICTC counselors to be aware of the HIV status of these individuals. The HIV+ status of a woman is shared with the MOs and ANMs concerned. The woman is also informed about the importance of sharing her HIV status with a specified group of healthcare workers. The confidentiality of the information not going beyond the specified group is assured.

The purpose of shared confidentiality is to serve women better. For example, if the ANM is aware of a woman’s positive status, she can follow up at regular intervals to ensure that the woman is getting the treatment needed. In some districts, such as Kolar, where the Positive People’s Network is strong, the outreach workers from the network play a major role in mobilising pregnant women. The link workers programme, implemented by USAID-supported Karnataka Health Promotion Trust and KSAPS, also plays a supportive role in mobilising pregnant women to seek HIV services.
4.6 Monitoring and Reporting Systems

A rigorous monitoring system was developed during the programme initiation phase, which included mechanisms for daily reporting by the RCHO to the nodal officer at NRHM. A master register is kept at district/taluk levels. The RCHO is responsible for entering ANC data of the HIV+ pregnant women into the master register, including the monthly expected date of delivery (EDD). The tool contains an exhaustive list of questions from the time a pregnant woman is contacted until her baby reaches 18 months of age (table 6). Several data collection tools and templates were created for regular monitoring and feedback.

<table>
<thead>
<tr>
<th>Table 6: Type of Information Collected in Master Register</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Expected date of delivery</td>
</tr>
<tr>
<td>• Name of the pregnant woman</td>
</tr>
<tr>
<td>• Age</td>
</tr>
<tr>
<td>• Patient identification digit (PID) number</td>
</tr>
<tr>
<td>• ICTC code</td>
</tr>
<tr>
<td>• Complete address</td>
</tr>
<tr>
<td>• Contact number</td>
</tr>
<tr>
<td>• Month of pregnancy when registered</td>
</tr>
<tr>
<td>• Name of ANM/ASHA and contact numbers</td>
</tr>
<tr>
<td>• Name of the MO PHC/MO ICTC and contact number</td>
</tr>
<tr>
<td>• Date when tested for HIV status</td>
</tr>
<tr>
<td>• ANC card number</td>
</tr>
<tr>
<td>• Yeshaswini card number</td>
</tr>
<tr>
<td>• Pre-ART/ART registration number</td>
</tr>
<tr>
<td>• CD4 count/ART initiated (yes/no)</td>
</tr>
<tr>
<td>• Whether transferred to another district (name the district to which transferred)</td>
</tr>
<tr>
<td>• Confirmation slip from the delivery district RCHO received? (yes/no)</td>
</tr>
<tr>
<td>• Transferred-in case? (yes/no) If yes, from which district?</td>
</tr>
<tr>
<td>• Date of dispatch of acknowledgement to ANC registration district RCHO?</td>
</tr>
<tr>
<td>• Date of dispatch of Yeshaswini coverage form to FHPL?</td>
</tr>
<tr>
<td>• Names and location of preferred hospital?</td>
</tr>
<tr>
<td>• Availability of disposable safe delivery kits?</td>
</tr>
<tr>
<td>• Availability of nevirapine Tablets and Syrup in planned hospital?</td>
</tr>
<tr>
<td>• Date of actual delivery</td>
</tr>
<tr>
<td>• Conducted at which hospital?</td>
</tr>
<tr>
<td>• Nevirapine tablet administered to mother at onset of labour pains? (yes/no)</td>
</tr>
<tr>
<td>• Syrup NVP administered to child within 72 hours? (yes/no)</td>
</tr>
<tr>
<td>• Mother-baby pairs followed up at 6 weeks? (yes/no) If yes, EID done for baby? (yes/no)</td>
</tr>
<tr>
<td>• Mother-baby pairs followed up at 6 months? (yes/no) If yes, whether (TUD) a temporary / permanent FP method followed?</td>
</tr>
<tr>
<td>• Mother-baby pairs followed up at 12 months? (yes/no)</td>
</tr>
<tr>
<td>• Mother-baby pairs followed up at 18 months? (yes/no)</td>
</tr>
<tr>
<td>• Whether HIV Rapid tests (3 tests) for confirmation of the baby’s HIV done at 18 months at ICTC? Yes/No</td>
</tr>
<tr>
<td>• What is the HIV status of the baby at 18 months? (whether HIV+ or HIV–)</td>
</tr>
<tr>
<td>• What is the CD4 percentage and pre-ART registration number of baby?</td>
</tr>
</tbody>
</table>

As the number of cases per RCHO and ANM are limited, it has been possible for the RCHO to keep an updated sheet on each HIV+ ANC client on, for example:

- Daily reporting on the cases detected and action taken by the RCHO, KSAPS, mission director, and NRHM.
- State-level coordination.
Attending monthly/quarterly review meetings organised at the state and district levels for programme review, identifying and addressing challenges, and ensuring coordination among key departments at the state level and implementers at the district level.

Field-based supervision. In addition to the role played by the MOs, PHCs, and ANMs, the DAPCU played a crucial role in implementing and monitoring integration activities.

(See annex 5 for a range of reporting formats.)

4.7 Challenges and How They Were Addressed

The RCH-HIV integration programme faced implementation challenges, but for the most part, these issues were addressed through innovative strategies of and cooperation among partners. When considering programme replication and scale-up, it is important to understand some of the bottlenecks encountered during programme rollout. The technical team was able to identify the following challenges and provide a brief summary on how they were addressed.

Challenge 1: Operationalising integration between two health systems (health staff-Medical Officer, ANMs under RCH-2/NRHM and ICTC under KSAPS)
Before RCH-HIV integration, services under the HIV prevention programme ran parallel with other health programmes, sometimes down to the point of service delivery, with little or no coordination between the two programmes. ICTC staff were asked to report to the administrative MO of their respective PHC/hospital with minimal programme and administrative coordination.

DAPCU officers were instrumental in bridging this programmatic gap. They conducted several one-on-one meetings with the MOs and ANMs at the PHCs to help them understand the importance of implementing integration activities. These meetings also helped build relationships among all professionals working under RCH, TB, and HIV programmes and provided a forum to identify gaps in service and reach. All coordination issues related to implementation of the integration activities are regularly resolved and feedback is provided to staff to help improve service provision.

Challenge 2: Revising work objectives and field support for ICTC staff
Because of integration, the ICTC staff (counsellor and lab technician) were assigned to work in the peripheral institutions (i.e., PHCs), which was not part of their job descriptions. ICTC staff were not paid for travel expenses or given daily allowances, which raised concern.

Once the issue was identified, ICTC staff received travel and daily allowances (TDAs) from the untied fund of NRHM. The actual cost of travel was reimbursed on submission of the travel tickets. A daily allowance of Rs 120 is paid by the MO of the PHCs/peripheral institution where they are expected to work.

Challenge 3: Sensitising district-level officials on stigma and discrimination
The integration process was launched through a fast track mechanism. However, lack of resources to orient healthcare providers on HIV/AIDS threatened to hinder programme progress. However, the DAPCUs dealt with this strategically. Because no resources existed to build the capacity of the health staff involved in implementing integration activities, the DAPCU officers intervened in the
regular meetings organised for the health staff, using this platform to sensitisethem to HIV-related issues. This effort by DAPCU officers was effective in shaping a positive attitude among both health professionals and stakeholders.

**Challenge 4: Creating demand for HIV screening among pregnant women**
This challenge was localised to a few PHCs in some districts. The challenge was to change the attitude of the ANMs to reach out to women in ANCs and talk about the importance of HIV testing.

During the weekly meetings, ANMs received feedback on their performance, particularly on mobilising women in their second trimester to get tested for HIV. With time and repeated meetings, their attitude has changed. In addition, an alternative approach was adopted to mobilise people by involving outreach workers from PLHIV networks. ASHAs are also involved in motivating and mobilising women in ANC for HIV testing.

**Challenge 5: Mobilising the spouse for HIV testing**
Whether a woman tests positive or negative for HIV, it is often difficult to mobilise her spouse to get tested. Women often face the risk of abuse and violence, particularly those who are HIV+. In every case, the ANMs or outreach workers provided counselling to the HIV+ pregnant woman at the subcentre and encouraged her to come for a second post-test counselling session with her husband. HIV+ clients were counselled on how to disclose their status to their family. Because the ANM is a well-recognised and respected figure in the community, she would accompany the HIV+ woman to help disclose her status, if the client desired. At other times the woman would bring her spouse to the PHC, where the ANM would disclose the status of her client through an approach that would minimise risk of abuse. Following these discussions, it was not unusual for some couples to decide mutually not to disclose their status to their parents.

The link workers, especially male link workers, who are trained in counselling for HIV prevention and care have been instrumental in engaging the husbands of the HIV+ pregnant women to come forward for testing and provide the necessary support to their wife.

**Challenge 6: Ensuring high quality in monitoring and reporting**
Reporting and monitoring were, for the most part, well carried out, although some districts lagged behind in high-quality and consistent record keeping. DAPCU officers addressed the issue by reorienting all staff to the various data collection tools. District supervisors increased the number of supervisory visits to provide support and help improve the situation. Performance reviews were conducted during monthly state reviews to increase transparency and promote healthy competition among districts to improve performance.

**Challenge 7: Reaching women at the time of labour and delivery**
Despite the health department’s best efforts to reach pregnant women during their second trimester, the challenge remains of women going directly for delivery without any ANC checkups or HIV tests. For these women, a Tridot HIV test is administered after obtaining client consent. Labour and delivery nurses have been trained in this testing. The following morning the ICTC counsellor and laboratory technician complete any remaining HIV testing and provide post-test counselling. If the mother tests positive for HIV, nevirapine is administered to the mother and child as per NACO guidelines.
**Challenge 8: Reducing the number of backlog cases (women in their third trimester)**

At the time of the integration launch, many women were already in their third trimester of pregnancy and had completed their routine ANC tests. These women were considered “backlog” cases. It was a major challenge to mobilise this group of women for HIV testing.

To address this issue, the Health Department organised camps and provided outreach facilities to cover the backlog. A *seemantha* ceremony (local ceremony organised to felicitate pregnant women and gift her with fruits/flower, bangles, etc.) was organised at PHCs. All women who came for the event were also provided free meals. On the day of the programme, the Health Department conducted routine health checkups and voluntary HIV testing. The *seemantha* ceremony provided an innovative way to reach women in their third trimester.

### 4.8 Costing the Integration Model

Integrating HIV with other health services is a cost-effective intervention. Karnataka has maximised the benefits from integrating RCH and HIV programmes to prevent mother-to-child transmission of HIV. One factor that allowed the concerned partners in the state to move quickly with the implementation of the plan was that the model did not rely on additional financial support; this is an important element, given that disbursement and allocation of funds can be a time-consuming process. Some key initiatives to minimise costs include the following:

- All components of the PPTCT programme were integrated into existing RCH activities, including review meetings. The regular review meetings of the RCH department provided the platform for seeking updates and providing feedback on the integration process. No additional processes were necessary.

- Existing initiatives (e.g., Yeshaswini, NRHM untied funds, and Rogi Kalyan Samitis) were optimally used to achieve programme goals and objectives through the support of the concerned departments/organisations. Examples include the following:
  - NRHM reimbursed the cost for cashless delivery to FHPL as per standard norms.
  - The Department of Cooperation paid the service charge for the Yeshaswini Scheme, which was used by the HIV+ pregnant women for safe delivery.
  - TDAs for counsellors involved in outreach work, especially to cover the backlog in registration of pregnant women, was covered through the untied grants available under the village and sanitation committee funds of the NRHM scheme.
  - NRHM untied grants were also used for providing centrifuges, consumables, and refrigerators to those PHCs where these items were in poor condition.
  - Similarly, KSAPS used its budget for capacity building to cover the cost of training/sensitisation for relevant staff of NRHM, KSAPS, RCH-II, Yeshaswini, etc.
  - KSAPS also used its information, education, and communications budget for printing related materials, such as flow charts, flip charts, signage, etc.

- Use of a horizontal approach promoted joint ownership by the NRHM, RCH, and KSAPS, rather than a vertical programme with ownership vested in a few. This enabled effective use of the resources of each of the partner departments based on their comparative strengths.

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8 Patient welfare societies in Karnataka called Arogya Raksha Samithis (ARS).
The reports of each of the concerned departments appropriately reflected the results achieved.

- Overall, existing staff implemented the initiative, using key persons from each partner organisation. However, extra data entry operators were necessary due to the substantial increase in workload for data collection and compilation.
Table 7: Costs for Key PPTCT Components

<table>
<thead>
<tr>
<th>Activity/Item</th>
<th>Cost Incurred in Year 1*</th>
<th>Cost Incurred by</th>
<th>Cost per Unit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reimbursements for cashless delivery to FHPL</td>
<td>Rs 4,000,000</td>
<td>NRHM</td>
<td>1. Rs 3,200 normal delivery</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>2. Rs 8,000 caesarean section</td>
</tr>
<tr>
<td>Service charges to Yeshaswini Scheme</td>
<td>Rs 93,750</td>
<td>Department of Cooperation</td>
<td>Rs 5 card (x 150 cards x 29 districts)</td>
</tr>
<tr>
<td>TDAs for counsellors and lab technicians doing outreach activities and for</td>
<td>Rs 1,635,000 + Rs 1,264,400 = Rs 2,899,400 (outreach) + camps</td>
<td>NRHM funds</td>
<td>Rs 125 per visit for counselor and Rs 125 per visit for lab technician once a week x four weeks</td>
</tr>
<tr>
<td>camps (backlog ANC attendees)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Provision of centrifuges, consumables, and refrigerators at PHCs (where these</td>
<td>Rs 3,460,000</td>
<td>NRHM</td>
<td>Rs 4,000 / centrifuge / PHC and Rs 4,000 / refrigerator / PHC x 435 PHCs of 600 24 x 7 PHCs</td>
</tr>
<tr>
<td>were not in good condition)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capacity building for all staff of KSAPS-NRHM-Yeshaswini</td>
<td>1. Rs 775,131: RCHOs/DAPCU officers/district supervisors (DSs) (two training of trainers and site visits)</td>
<td>KSAPS/SIH&amp;FW</td>
<td>1. Rs 3,875,655/batch, including site visits</td>
</tr>
<tr>
<td></td>
<td>2. Rs 13,420,000: AWWs</td>
<td></td>
<td>2. At Rs 10,000/batch x 1,342 batches</td>
</tr>
<tr>
<td></td>
<td>3. Rs 2,250,000: ANMs</td>
<td></td>
<td>3. At Rs 10,000/batch x 225 batches</td>
</tr>
<tr>
<td>Printing of information, education, and communications materials: flow charts,</td>
<td>1. Rs 294,000 (flow charts)</td>
<td>KSAPS</td>
<td></td>
</tr>
<tr>
<td>flip charts, signage, and training manuals</td>
<td>2. Rs 650,000 (flip charts)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>3. Rs 100,000 (posters)</td>
<td></td>
<td></td>
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<tr>
<td></td>
<td>4. Rs 151,000 (&quot;Shaping our Lives&quot;)</td>
<td></td>
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<tr>
<td></td>
<td>5. Rs 64,500 (laminated posters)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data entry operators, data analysts, and monitoring officers for data</td>
<td>1. One TSU team leader for mainstreaming: Rs 672,000/-</td>
<td>USAID/Karnataka Health Promotion Trust</td>
<td>1. At Rs 56,000/month</td>
</tr>
<tr>
<td>collection and compilation</td>
<td>2. One TSU data entry operator: Rs 144,000</td>
<td></td>
<td>2. At Rs 12,000/month</td>
</tr>
<tr>
<td></td>
<td>Total: Rs 816,000.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Periodic review meetings: monthly and quarterly for all three departments</td>
<td>1. Rs 80,000: NRHM review meetings</td>
<td>NRHM</td>
<td>Rs 6,000/meeting for 60 participants x 4 quarterly meetings</td>
</tr>
<tr>
<td></td>
<td>2. Rs 2,60,000: DAPCU/DSs review meetings</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Planning meetings in the beginning</td>
<td>Rs 120,000</td>
<td>NRHM</td>
<td></td>
</tr>
<tr>
<td>Any other/miscellaneous</td>
<td>Rs 50,000</td>
<td>KSAPS</td>
<td></td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>Rs 29,483,781</strong></td>
<td></td>
<td><strong>Rs 2 crore, 94 lakhs, and 83,781 only</strong></td>
</tr>
</tbody>
</table>

* April 2009–February 2010 plus one month until March 2010 (about 11 months).
Source: KSAPS staff.
5. RESULTS AND ACHIEVEMENTS

The success and achievements of the Karnataka RCH-HIV integration model can be attributed to the following:

- The model is homegrown, entirely owned and managed by the government, and developed in response to a growing HIV epidemic. It builds on existing systems, leverages available resources, and maximises new and existing opportunities.

- The key focus was on the beneficiary: pregnant women in need of PPTCT services. The purpose of integration was to ensure a minimum comprehensive package from outreach services and ANC, including access to insurance for institutional delivery.

- A detailed operational plan developed in joint consultation with technical and management teams across health systems helped clearly define roles and responsibilities for providers and programme managers through a participatory process.

- Leadership from key policymakers provided a supportive environment for integrating PPTCT into other health services.

- Buy-in at all levels, particularly districts/taluks, was an essential ingredient for programmatic success.

- Cost-effectiveness and sustainability were incorporated into programme design and implementation to maximise opportunities, reduce potential duplication of effort, and leverage human as well as financial resources. Examples follow:
  - No additional human resources were required for the PPTCT programme.
  - All components of the PPTCT programme were integrated into existing RCH activities.
  - The programme used existing initiatives to expand coverage (e.g., Yeshaswini, NRHM untied funds, and Rogi Kalyan Samitis) and cadres of outreach workers across different health systems (link workers, AWWs, ANMs, DHOs, RCHOs, counselors, MOs, etc).
  - Training and orientation on integration were incorporated into existing training programmes.
  - A horizontal, compared with vertical, approach was employed through joint ownership of key stakeholders.

Comparison between the pre-integration (April 2007–March 2008) and post-integration (April 2008–March 2009) phases demonstrates improvements in each of the programme components (table 8). The most significant achievements were observed in the number of spouses coming forward for HIV testing, the number of clients receiving pre- and post-test counselling, and the number of babies brought in 18 months after birth. The increase in the number of HIV+ babies actually indicates that the programme’s ability to identify, reach, and track new at-risk infants has been successful. As the programme expands coverage, it is likely that more HIV+ babies will be identified and brought into the health system. However, with successful PPTCT and community outreach prevention efforts, fewer infants will be HIV+ with time.
Table 8: Coverage of ANC Attendees Reached with Counselling, Testing, and Treatment before and after RCH-HIV Integration

<table>
<thead>
<tr>
<th></th>
<th></th>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of ANC attendees registered</td>
<td>2,72,263</td>
<td>5,85,459</td>
<td>8,03,551</td>
</tr>
<tr>
<td>No. of ANCs pre-test counselled and tested for HIV</td>
<td>2,42,021</td>
<td>5,68,430</td>
<td>7,96,667</td>
</tr>
<tr>
<td>Number detected HIV Positive</td>
<td>2,771</td>
<td>3,250</td>
<td>3,544</td>
</tr>
<tr>
<td>Number of spouses tested</td>
<td>865</td>
<td>4,575</td>
<td>30,811</td>
</tr>
<tr>
<td>No. of ANCs who received post-test counselling</td>
<td>215,728</td>
<td>5,36,412</td>
<td>7,69,504</td>
</tr>
<tr>
<td>Number of mother-baby pairs received nevirapine</td>
<td>1,118</td>
<td>1,617</td>
<td>2,200</td>
</tr>
<tr>
<td>Number of babies of HIV positive women coming for follow-up at 18 months</td>
<td>99</td>
<td>334</td>
<td>446</td>
</tr>
</tbody>
</table>

Community outreach to rural areas has been a noteworthy component of the programme. As data show, the epidemic in Karnataka has spread equally in rural and urban areas. Before integration, HIV testing, counselling, care, and treatment services were mainly limited to the urban and semiurban areas (taluka). After integration, basic HIV services (counselling, testing, and nevirapine) have been extended to all peripheral institutions, including the PHCs. As a result, ICTC counsellors and laboratory technicians are delegated to work in the PHCs. ICTC services were initially provided to women who came in for ANC checkups. However, by using human resources from the NRHM programme and providing travel allowances, the programme has been able to expand community outreach services to rural areas. With limited financial resource requirements, NRHM has been able to screen most women receiving ANC services for HIV, as well as provide treatment and care services to clients who test positive.
Figure 1: Impact of RCH-HIV Integration (Additional Indicators)

Figure 2: Impact of RCH-HIV Integration (2007–10)
6. LESSONS LEARNED

- **Integration starts at the highest level.** State-level leadership is crucial to making integration work. The mission and project directors from both programmes (RCH and NACP-III) should be willing and committed to integrate services and develop a joint plan of action.

- **Formalising the decision is crucial.** Circulars proved helpful in communicating the government’s commitment to RCH-HIV integration to staff at all levels of the health system. A detailed framework or operational guidelines helped ensure a standardised process for implementation.

- **At each step, it is important to keep the programme momentum going.** For example, once the circulars were issued and discussions initiated, the implementers required a set of clear guidelines to initiate the process. If a substantial time gap had existed between the two steps, the programme might have lost momentum, perhaps causing delays and unexpected challenges during implementation.

- **Programme planners must do their homework well.** It is essential to engage programme implementers at the beginning to seek input and ensure buy-in. Before joint discussions, it is important to collect information and other relevant data in anticipation of any potential issues and challenges that programme managers and implementers might raise, such as human resource capacity and financial resource requirements. Presenting relevant information and analysis at an early stage can help inform discussions and initiate the integration process more efficiently.

- **Integration is necessary at all levels.** To achieve success with service integration, the administrative systems that support it must also be integrated. For example, the ICTCs should become a part of the district health department. In addition, a well-respected liaison who is not viewed as partial to any programme could be put in place to help coordinate and bridge both the RCH and HIV programmes.

- **Providers must ensure that no pregnant woman is left out.** Women with very poor socioeconomic backgrounds are at greater risk of not being reached with health services. Programme managers must engage with the existing insurance programme and use a third party to ensure smooth management of insurance schemes to maximise benefits for the individual. If no insurance schemes exist within the state, it is necessary to look at other resources, such as NRHM untied funds, so that a cashless transaction facility can be offered to rural poor women. If resources permit, the client should be compensated for her travel and provided with food during her stay at the health centre.

- **Programme managers must clearly define roles and responsibilities of all departments.** Roles and responsibilities of all collaborating departments, as well as the implementers, should be clearly detailed. Because integration requires significant involvement among
people working in different programmes, systems, and mechanisms to foster coordination should be jointly developed.

- **Programme managers must invest in robust reporting systems and tools.** Reporting and monitoring mechanisms are integral to any health programme and should be developed as part of the programme design. Programme managers and implementers at all levels should be oriented on how to collect, report, and maintain data. Daily or frequent reporting is useful to have in the beginning, so that reporting habits are formed and the process institutionalised.

- **Commodities must be consistently available.** Supply of equipment and commodities (condoms, HIV test kits, etc.) must be consistent and on time; otherwise, the effort will face setbacks. To avoid this problem, the state-level AIDS Control Society should follow up with NACO and the DoHFW to ensure supplies and commodities are readily available to support programme requirements.

- **Managers should organise frequent review meetings.** Meetings should take place once a month to address programmatic gaps and identify opportunities and areas for improvement. These meetings should also serve as a forum to discuss lessons learned and experiences as a way to foster learning, increase transparency, and share information.

- **Programme managers should form a technical team to support and supervise the process.** Managers should identify a multistakeholder committee comprising a variety of professionals (administrators, medical officers, and counselling professionals) to support, supervise, and provide technical input to the integration process. Establishing such a team from different programmes and levels helps establish buy-in for the integration process.

- **One size does not fit all.** States and districts within a state have different realities and may require a more customised approach to addressing PPTCT through integration. The programme should be adapted to address local situations and contexts where it is implemented.

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**How Did Karnataka Keep Pregnant Women at the Centre of the Response?**

- ANMs/ASHAs make periodic visits to the home or subcentre to monitor ANC progress and coordinate with the local Anganwadi centre for nutrition.
- The MO helps HIV+ pregnant women select a hospital for institutional delivery.
- The MO ensures nevirapine tablets and syrup, protective gear, and post-exposure prophylaxis drugs are available at the hospital where delivery will be done.
- Transportation of HIV+ pregnant women is arranged through (1) 108 emergency ambulances services (Emergency Management and Research Institute - EMRI), (2) hospital ambulance services (public and private sector), or (3) private transportation (Rs 200 from untied fund).
- The ANM/ASHA accompany HIV+ pregnant women in labour to the hospital and ensure administration of nevirapine tablets to mother and baby.
- The ANM/ASHA ensure follow-up of mother-baby pairs at 6 weeks and 6, 12, and 18 months after birth.
- Link workers are used to reach at-risk populations not accessed through ANMs/ASHAs to expand coverage.
7. REFERENCE LIST


## 8. ANNEXES

### Annex 1

**Percentage of Pregnant Women Who Tested Positive for HIV at Antenatal Clinics, by District and Type of Site, Karnataka, 2004–07**

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>Bangalore Rural</td>
<td>2.80</td>
<td>2.30</td>
<td>2.50</td>
<td>1.50</td>
<td>0.25</td>
<td>0.88</td>
<td>1.00</td>
<td>0.00</td>
<td>0.50</td>
<td>0.25</td>
<td>0.00</td>
<td>0.13</td>
</tr>
<tr>
<td>Bangalore Urban</td>
<td>1.30</td>
<td>0.00</td>
<td>0.60</td>
<td>1.00</td>
<td>0.75</td>
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</tr>
</tbody>
</table>

Source: India, 2008a.

*DH = district hospital; FRU = first referral unit; Increase; Decrease.
Annex 2
(Circular dated 7.8.2008)

Government of Karnataka

NATIONAL RURAL HEALTH MISSION

Karnataka State Health and Family Welfare Society, Bangalore
(3rd Floor, Ananda Rao Circle, Bangalore 560 009)
Ph. 080-22373587, Fax. 080-22373587

No. NRHM/MCH/61/08-09 Date: 7/8/2008

CIRCULAR

Sub: Special camps to cover 3rd trimester checkups of all pregnant women in Karnataka

In supersession of the circular dated 05/08/2008 the following circular is issued for special camps. The revised calendar is in view of the school health campaigns that have to be done between 18/8/2008 and 31/8/2008.

1) The integration of PPTCT with the RCH Programme has been attempted for the first time in the country in Karnataka. The detailed operational guidelines in this regard have been issued on 19th May 2008. Each of the districts have prepared micro-plans for HIV testing of all ANC cases.

2) The Mission Director in his earlier mail has made it clear that irrespective of the date of issue of the circular, all pregnant women who are found positive should be given Yeshaswini coverage. Yeshaswini coverage has to be given to all cases of HIV+ pregnant women, irrespective of whether they choose to deliver at Government institutions or in the Yeshaswini network hospitals.

3) For every 1,000 population as per the 2001 Census (corrected to 2008 population), the pregnancies will be 25.44 per year. Thus, for each month for every 1,000 population, the total number of pregnancies will be 2.12. Hence, for each PHC having population of 25,000 (as per 2001 census corrected to 2008 population), the number of fresh pregnancies for every month will be 53 cases.

4) If we take these figures, the number of pregnant women who have to be tested for urgent backlog cases itself will be about 3.00 lakhs women (urgent backlog cases defined as those who are in the 3rd trimester already and will be delivering in August, September, or October 2008). Assuming a prevalence rate of 1 percent, this should translate to 3,000 HIV+ cases.

5) To date, only 75 cases have been given Yeshaswini coverage, which literally means we are not tackling the issue with meticulous planning.

6) This is not a happy situation and all the district RCH officers and district nodal officers need to immediately have a complete relook at the strategy to cover the urgent backlog cases.

7) To ensure 100 percent coverage of 3rd trimester ANC checkups of all pregnant women in Karnataka (including HIV testing), the following strategy needs to be adopted for covering all the backlog cases. The backlog cases are defined as urgent backlog targets.
   a) Those who have become pregnant in November 2007 to January 2008 with EDDs in August, September, and October 2008 will be treated as urgent backlog targets.
   b) Three rounds of ANC checkups will be planned to cover urgent backlog targets, which are as follows:
      Round 1: Cases that have EDD in August 2008
      Round 2: Cases that have EDD in September 2008
      Round 3: Cases that have EDD in October 2008

What is meant by the special camp approach: The special camp approach will be a daily rotation approach for the ICTCs as per a pre-announced calendar, as given in para. 8 below.

34
8) A campaign should be undertaken from 11th of August to 20th September for clearing the urgent backlog targets in both urban and rural areas per a daily calendar of rotation of ICTCs at the PHCs and other hospitals. The strategy should be a daily calendar of rotation of ICTCs as given below:

<table>
<thead>
<tr>
<th>Rounds for the coverage of urgent backlog ANCs</th>
<th>Target group to be covered</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Round I</td>
<td>EDD in August 2008</td>
<td>Daily rotation of ICTCs to PHCs from 11/08/08 to 16/08/08 (August 15 exempted)</td>
</tr>
<tr>
<td>Round II</td>
<td>EDD in September 2008</td>
<td>Daily rotation of ICTCs to PHCs from 8/09/08 to 12/09/08</td>
</tr>
<tr>
<td>Round III</td>
<td>EDD in October 2008</td>
<td>Daily rotation of ICTCs to PHCs from 15/09/08 to 20/09/08</td>
</tr>
</tbody>
</table>

9) All the ANMs, MO PHCs, taluka health officers, district supervisors, district TB officers, RCHOs, and DH&FWOs will be informed about the campaign dates immediately and all logistics need to be mobilised for the same.

10) For the urban areas, you will have to address the issue by covering the urgent backlog targets by concentrating on all hospitals that have maximum maternity cases, both government and private. Amongst the private hospitals, you should focus on the Yeshaswini Network hospitals, Janani Suraksha Yojana–accredited hospitals, and also such other maternity homes where maximum delivery happens. Use the ANMs, staff of Urban Health Family Welfare Centres, AWWs, and other community volunteers for mobilising all the uncovered ANC attendees.

11) For the urban areas, if it is government/local body/Employee State Insurance hospital/public sector undertaking hospitals (e.g., Hutti Gold Mines, BEML, HAL etc) the AMO of the hospital can be authorised to issue the Yeshaswini coverage for HIV+ cases. For the private hospitals, the RCHOs can issue the Yeshaswini coverage for district headquarters and the THO can issue Yeshaswini coverage for taluka-level hospitals.

12) The private hospitals also should be covered by special camps on a rotational basis.

13) **Should the special camp approach be only for HIV testing?**
    The answer is **NO**. The special camp should be used for all other ANC checkups and tests that have to be done for the ANC attendees routinely in the third trimester. In case you find shortage of doctors, use the private doctors in your district. Along with the routine third trimester checkups and tests, all ANC cases brought to the special camps should be counselled for HIV testing. The efficacy of counselling will determine the numbers who opt for HIV testing.

14) All other processes for shared confidentiality, recording in ICTC resisters, PHC registers, ART centre reporting, Yeshaswini coverage, dispatching Yeshaswini coverage counterfoil to FHPL, master resister recording at the RCHO level, planning for delivery, ANM accompanying all cases for institutional deliveries, reporting in forms 6A and 6B, etc. must necessarily be followed as per the operational guidelines for PPTCT, which you all already know.

15) Pregnant women who attend the PHCs for special camps should not go hungry. Hence, a good hygienic lunch should be provided to them from the untied funds at the PHCs. A good strategy will be to tie up with the mid-day meal scheme provider to provide meals to the pregnant women at the PHCs who come for third trimester ANC checkups in the special camps. The food charges would be met out of the untied funds of the PHCs.

16) TDA for counselors and lab technicians of ICTCs: TDAs to ICTC counselors and lab technicians will be paid out of the untied funds of the PHCs. The rates for disbursement are as follows: technical assistance according to actual and daily allowance @ Rs 60 per day per person. Assuming actual technical assistance is Rs 50/-, it works out to be Rs 110/- per day for the lab technician and Rs 110/- per day for the counsellor. So, for each day of the
special camp, the PHC will have to bear about Rs 220/-. It may differ from this figure if actual technical assistance is higher.

17) Please note that KSAPS has established 85 ICTCs in PHCs during 2006–07, where there is one counselor and one lab technician trained and working. A list of the ICTCs located in the PHCs is enclosed as annex 2. The RCHO/district TB officers/DPMOs in consultation with the district supervisor of the district should put up the daily rotational calendar, bearing this in mind and current vacancies in these ICTCs located in the PHCs.

18) After the urgent backlog cases have been covered in rounds I, II, and III between the 11th of August to 20th of September 2008, the following calendar should be followed:

<table>
<thead>
<tr>
<th>Month</th>
<th>Target Group</th>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>September 2008 (it will be campaign approach until the 20th of September)</td>
<td>1. EDD as Nov. 2008 + 2. All such ANC cases that have entered 2nd trimester</td>
<td>Daily rotation of ICTCs to PHCs until 20th September 2008. Later revert to two times a week rotation of ICTCs to cover each PHC two times in a month.</td>
</tr>
<tr>
<td>October 2008</td>
<td>1. EDD as Dec. 2008 + 2. All such ANC cases that have entered 2nd trimester</td>
<td>Two times a week rotation of ICTCs to cover each PHC two times in a month</td>
</tr>
<tr>
<td>November 2008</td>
<td>1. EDD as Jan. 2009 + 2. All such ANC cases that have entered 2nd trimester</td>
<td>Two times a week rotation of ICTCs to cover each PHC two times in a month</td>
</tr>
<tr>
<td>December 2008</td>
<td>1. EDD as Feb. 2009 + 2. All such ANC cases that have entered 2nd trimester</td>
<td>Two times a week rotation of ICTCs to cover each PHC two times in a month</td>
</tr>
<tr>
<td>January 2009</td>
<td>1. EDD as Mar. 2009 + 2. All such ANC cases that have entered 2nd trimester</td>
<td>Two times a week rotation of ICTCs to cover each PHC two times in a month</td>
</tr>
<tr>
<td>February 2009</td>
<td>Those that have entered 2nd trimester *</td>
<td>Weekly rotation of ICTCs (Thursdays) Each PHC being visited once in a month</td>
</tr>
<tr>
<td>March 2009</td>
<td>Those that have entered 2nd trimester *</td>
<td>Weekly rotation of ICTCs (Thursdays) Each PHC being visited once in a month</td>
</tr>
</tbody>
</table>

* Those who have an EDD in February 2009 are already covered in September 2008 when they enter the 2nd trimester. So, from February onwards, there will be no backlog and only current month’s target of those entering the 2nd trimester will have to be covered.

19) For the urgent backlog targets, please give the daily report to pakhsdrp@qmail.com and ddmchkar@qmail.com and naina@khpt.org in the attached annex 1. Please do not change the format. Although you should send us the details taluka-wise, ensure that at the district level the same data are available, PHC-wise from the talukas. You should not send us the PHC-wise data, but retain it at the district level.

Mission Director
National Rural Health Mission
1. Annex 3
   (Circular dated 23.10.2008)

|   | January 2009 | 1. All such ANC cases that have entered 2nd Trimester (EDD as June 2009) + | Once a week rotation of ICTCs to cover each PHC once in a month (Thursday's) |
|   |              | 2. Missed out cases having EDD as May 2009 | |
|   | February 2009 | 1. Those that have entered 2nd Trimester (EDD as July 2009) + | Weekly rotation of ICTCs (Thursday's) Each PHC being visited once in a month |
|   |              | 2. Any missed out cases of previous month | |
|   | March 2009 | 1. Those that have entered 2nd Trimester (EDD as August 2009) + | Weekly rotation of ICTCs (Thursdays) Each PHC being visited once in a month |
|   |              | 2. Any missed out cases of previous month | |

All the districts and the ICTC Counsellors and lab technicians will follow the above schedule for PPTCT camps. Except for the revised schedule all other instructions are as issued in the earlier circular dated, 07-08-2008 No.NRHM/MCH/61/08-09 for conducting special camps to cover third trimester checkups of all pregnant women in Karnataka, including regarding payment of TA/DA to ICTC Counsellors and the lab technicians will apply.

---

Project Director  
Karnataka State AIDS Prevention Society

Mission Director  
National Rural Health Mission
Annex 4
(Circular dated 18.03.2009)

NATIONAL RURAL HEALTH MISSION
Commissionerate of Health & Family Welfare Services
Anandrao Circle, Bangalore-560 009

No.DD(MCH)/106/08-09. Dated 18th March 2009

CIRCULAR

During the recent reviews conducted by me of 17 District teams - RCH Officers, DAPCU Officers and District Supervisors involved in the PPTCT- NRHM convergence activities during 2008-09, inadequate Yeshaswini Coverage as well as several gaps were observed due to ineffective co-ordination and information sharing between them which has led to poor follow-up of ANCs, and NVP administration to mother-baby pairs and their periodic follow-up until 18 months of age.

Address of mother:

Many mother-baby pairs (mb pairs) are lost to follow-up (LFU) due to casual and careless line-listing (Address of the client) by the counselors before undertaking the pre-test counseling.

Improper maintenance of Master Register:

- Discrepancies have been observed in the actual numbers of HIV positive ANCs detected and those recorded in the Master Registers of the RCHOs which have been haphazardly entered. This has led to improper preparation at the concerned hospital and follow-up of ANCs due for delivery in the current month.
- Master Register not maintained EDD wise
- Follow-up columns not filled up.
Issual of Yeshaswini coverage:

After a HIV positive ANC has been detected by the counselor, issuance of Yeshaswini Card to the client by the PHC MO/ICTC MO should be done immediately. The counterfoil of the Yeshaswini card should also be sent to the RCHO within 24 hours who should send this to FHPL in the next 24 hours.

Incentives to ANMs:

The incentives for ANMs who follow-up the HIV positive ANCs should be undertaken as follows: Remuneration needs to be paid to the ANM only after she accompanies the ANC for delivery to the Institution of her choice and after ensuring the administration of Tab. NVP to the mother and Sy. NVP to the baby at the hospital. Tab. NVP and Sy. NVP should not be handed over to the ANCs as this is resulting in home deliveries and non-compliance of NVP protocols. The payment of incentive of Rs. 500 per case is applicable only if 2 conditions are met (a) The ANM accompanies the pregnant women for delivery (b) She ensures administration of Neverapine to both the mother and the new born child as per protocol.

Annexure 4: Documentary proof of Neverapine administration:

The ANM accompanies the HIV+ pregnant women will sign and the Administrative Medical Officer of the Hospital in Annexure-4 after ensuring administration of Tab./Sy. NVP to mother and baby only has been completed. The Administrative Medical Officer of the hospital will countersign. A copy of the Annexure 4 must be submitted by the ANMs to her jurisdictional M.O (i.e. MO of PHC under whom she is working) to claim the incentive of Rs. 500/.-.

Follow-up:

The ANM will follow-up the mother-baby pairs at 6 weeks, 9 months and 18 months by ensuring administration of vaccinations to the baby at the same time.

At 6 weeks the ANM will take the baby to the Paediatric ART center for administration of prophylactic Paediatric Co-trimoxazole Suspension from the Paed. ART Centre. At 18 months
months the baby’s HIV status should be tested at the ICTC and the mother to be informed of the same and accompanied for pre-ART registration of the baby at the Pediatric ART center at the district hospital. The ANM will receive Rs. 1000/- (Rupees Thousand only) upon undertaking all the prescribed follow up as explained above. Proof of follow-up must be insisted in terms of Annexure-5 A at 6 weeks, Annexure 5 B at 9 months and Annexure 5 C at 18 months.

CMIS Reports:
The District Supervisors should send every month a copy of the CMIS report to the District RCH Officer and DAPCU Officer for validation before sending them to the M&E Officer, KSAPS.

Information Flow to the State Level
Every month information must be submitted to DD (MCH) as per Annexure 8A and 8B.

The above mentioned issues should be addressed immediately to ensure 100% institutional deliveries of HIV Positive ANCs either in the public sector hospitals or in Yeshaswini network hospitals whereby NVP administration and other PPTCT protocols for mother and baby are followed upto 18 months post delivery.

Mission Director,
National Rural Health Mission

To:
1. The Project Director, RCH
2. The Project Director, KSAPS
3. The Joint Director, Basic Services, KSAPS
4. The Deputy Director, MCH
5. The Team Leader, Mainstreaming(Health Sector), Technical Support Unit, KSAPS
6. The Consultant, MCH, NRHM
7. All the District Health & Family Welfare Officers,
8. All District Surgeons,
9. All Administrative Medical Officers of Taluka Level Hospitals in the Districts,
10. All Taluka Health Officers in the State
11. All RCHO officers in the State
12. All DAPCU Officers in the State
13. All the Medical Officers of Primary Health Centres, Community Health Centres & First Referral Units in all the Districts
14. District Supervisors of all districts.
Annex 5

**HIV Positive Register to be maintained by the Counsellor of every ICTC for ANC cases & their family**

| Sl. No. | Details of HIV Positive ANC & Family | Age | Address of (i) Husband's House (ii) Mother's House and Mobile No. of ANC | PID No. | HIV Status 1. Positive 2. Negative started CPT? Y/N | EDD | Pre-Art Reg No./CD4 Count | Whether ART initiated or not | Whether linked with ANM or any other field worker? (Name & Mobile No.) | Whether Birth plan done | Preferred Hospital for Delivery | Date of Actual Delivery & Place | NVP Administration | Whether HIV/TB Co-infection present | CD4 counts every 6 months with dates | Monthly ART/CPT follow-up | Follow-up of Mother Baby pairs | Status of baby Positive or Negative at 18 months |
|---------|-------------------------------------|-----|-------------------------------------------------------------------------|--------|-----------------------------------------------|------|-----------------------------------------------|--------------------------|---------------------------------------------------------------------|-------------------------|-----------------------------------------------|-------------------------------|-----------------------------|-----------------------------------------------|-----------------------------|-----------------------------|-----------------------------------------------|
| 1.      | Name of the HIV +ve ANC.             |     |                                                                         |        |                                               |      |                                              |                          |                                                                     |                         |                               |                               |                             |                                              |                             |                             |                                 |
| 2.      | Name of the Husband/Partner:         |     |                                                                         |        |                                               |      |                                              |                          |                                                                     |                         |                               |                               |                             |                                              |                             |                             |                                 |
| 3.      | Name of Child (1st Child):           |     |                                                                         |        |                                               |      |                                              |                          |                                                                     |                         |                               |                               |                             |                                              |                             |                             |                                 |
| 4.      | Name of child (2nd child):           |     |                                                                         |        |                                               |      |                                              |                          |                                                                     |                         |                               |                               |                             |                                              |                             |                             |                                 |
| 5.      | Name of child (3rd Child):           |     |                                                                         |        |                                               |      |                                              |                          |                                                                     |                         |                               |                               |                             |                                              |                             |                             |                                 |
| 7.      | Name of Child (5th Child):           |     |                                                                         |        |                                               |      |                                              |                          |                                                                     |                         |                               |                               |                             |                                              |                             |                             |                                 |
| 8.      | Etc.                                 |     |                                                                         |        |                                               |      |                                              |                          |                                                                     |                         |                               |                               |                             |                                              |                             |                             |                                 |

**Note:** If address given is outside your District/State inform DAPCU/DS at monthly meeting who will in turn inform the concerned DPACU/DS within 24 hrs. to follow-up the case.
CIRCULAR

Sub: Universal access to treatment and care for all HIV infected pregnant women - access to CD4 testing; integrating DAPCOs, RCHOs, ANMs and ASHAs

Prevention of maternal and neonatal/infant mortality is the goal of the RCH programme. HIV infection in the mother can result in death of the mother and the child. The life of a HIV positive ANC and her child is as precious as is any other ANC and her child both for the RCH Programme as well as the HIV/AIDS Programme. ART (Antiretroviral Therapy) is necessary to keep the mother alive and will also prevent transmission of HIV from mother to child during pregnancy, delivery and during breast feeding. ANC positive women with CD4 count less than 350 are eligible for ART. Evidence suggests that about 30% of ANCs would require ART. The CMIS data of KSAPS (April 2009-March 2010) reveals that only 53% of newly detected HIV positive ANCs have been registered with the ART Centre (located in all District Hospitals) for CD4 testing.

To address this critical gap an integrated approach for the follow-up of a HIV positive ANC by all the DH& FWOs, DAPCOs, RCHOs, DPMOs, THOs and MO PHCs, LHV, ANMs and ASHAs is essential.

The following steps should be meticulously and stringently followed to achieve this goal:

(i) RCHOs will collect the line-lists (name and address) of all HIV positive ANCs by the 7th of every month from DAPCOs & District Supervisors and will enter these details in their Master Registers (Annexure-2) as well as in their Computers immediately. (Please note that Annexures are modified and reflect the changes accordingly)

(ii) The M&E Assistant of every DAPCU will visit the District ART Centre on the last two working days of every month and collect the list of HIV positive ANCs who have done their CD4 testing and pre-ART registrations.

(iii) At every monthly meeting of Counsellors & Lab. Technicians convened by the DAPCO on the 3rd or 4th of every month, the M&E Asst. will read out and hand over the names with line-lists of all HIV positive ANCs who have done their CD4 testing at the beginning of the meeting itself.

(iv) All Counsellors and Lab. Technicians attending the monthly meeting will compulsorily carry their HIV Positive Register and undertake the steps given below. (TA to be withheld to those Counsellors/Lab. Technicians who do not bring the HIV positive Registers for the meeting)
   a. Enter in their HIV positive registers the CD4 counts of HIV positive ANCs who have done CD4 testing.
   b. Identify such HIV positive ANCs who have not done CD4 testing.
   c. Generate the names/line-lists of such HIV positive ANCs immediately, who have not done CD4 testing and hand it over to M&E Assistant, on the same day of the monthly meeting.

(v) M&E Assistant will compile all line-lists of HIV Positive ANCs who have not done their CD4 testing collected from ICTC Counsellors, Lab. Technicians and hand them over to DAPCO by the 5th or 6th of every month.

(vi) DAPCOs will give a copy of these line-lists to the RCHO by the 7th of every month.

(vii) DAPCOs and RCHOs will jointly segregate these line-lists, PHC-wise and the DAPCO will collect the names, contact numbers and address of the MO PHCs where the HIV positive ANCs reside by the 9th of every month.
(viii) DAPCOs will dispatch individual letters by post to the concerned MO PHCs by the 10th of every month with the following information:
   a. Names of HIV positive ANCs and their line-lists detected in their area whose CD4 testing is not done and
   b. Give strict instructions to all MOPHCs that the ANM/ASHA or AWW who would be involved in tracing of the HIV positive ANC in her area whose CD4 testing is not done (this information is being shared on the basis of “Shared confidentiality”) will not speak about the ANC’s HIV positive status neither to her nor to any other house-hold member during her house visit. Instead, she will ask her to come to a close-by place where there is audio-visual privacy (preferably the sub-centre if close to her residence), to motivate her to visit the closest district ART Centre for CD4 testing in the best interest of her and her baby.

(ix) Provision for drawing a sample of blood from ANCs, unable to go to the ART Centre for CD4 testing:
   Only when the ANC is unable to go to the ART centre for her CD4 testing, either due to her low socio-economic status or due to some domestic/personal problem, the lab. Technician of the closest ICTC will be contacted by the MO PHC and in the presence of the ANM, the LT will draw her blood in the PHC after ensuring the following:
   (a) Blood is drawn by the LT only in a vacutainer (purple top), after ascertaining the availability of the Lab. Technician of the ART Centre on that day & and that CD4 testing is being done that day (b) the sample of blood in the vacutainer will be placed in a vaccine-carrier (packed with ice-packs) & carried personally by the LT to the District ART centre before 12 noon of the same day (inaccurate CD4 results have been observed in blood samples which were more than 8-10 hrs. old) (c) Lab. Technician will wait at the ART Centre, collect the CD4 count report &d) ensure that the report is entered in the ICTC Register (where her HIV testing was done initially) and e) finally, the CD4 report is handed over to the HIV Positive ANC in the PHC in the presence of MO PHC & ANM.

(x) If her CD4 count is less than 350, she is asked to go to the closest District ART centre by the ANM/LT for pre-ART Registration and 3 rounds of ART Adherence Counselling (this is essential to ensure her compliance to ART life-long, even before she is initiated on ART). The ANC will be told to carry her ID proof (either a voter’s card/Ration Card/Gas connection Card; bank pass-book; BPL card etc. which has her residential address), 2 pass-port size photos and take a person with her who knows her HIV positive status to motivate her take ART medications regularly (confidante/buddy).

(xi) If her CD4 count is more than 350, then CD4 testing should be repeated every 6 months or as advised by the Medical Officer/Counsellor of the ART centre.

All the District Health & Family Welfare Officers, RCHOs, DAPCOs, DPMOs, THOs, MO PHCs, LHVss, ANMs/ASHIAs will extend their full support and co-operation immediately, to bridge this critical gap in the Prevention of Parent to Child Transmission Programme (PPTCT) of KSAPS, now integrated with the RCH services under NRHM.

Project Director,
Karnataka State AIDS Prevention Society
Bangalore

Mission Director,
National Rural Health Mission
Karnataka
Copy submitted to:
   (i) The Secretary to Government, Dept. of H&FW, Government of Karnataka
Copy to:
   (i) The Director, H&FW Services, Anand Rao Circle, B’lore
   (ii) The Director, SIH&FW, Magadi Road, B’lore
   (iii) The Project Director, RCH, Directorate of H&FW Services, Anand Rao Circle, B’lore
   (iv) The Addl. Project Director, KSAPS, Bangalore
   (v) The Nodal Officers, KSAPS, Bangalore
   (vi) The Consultants, KSAPS, Bangalore
   (vii) Dr. Stephen Moses, Country Director, KHPT, B’lore
   (viii) Dr. Reynold Washington, Chief of Party, Samastha, KHPT, B’lore
   (ix) The Team Leader, TSU-TI, KSAPS, Bangalore
   (x) Dr. Lalitha Hande, Pediatrician, ART Consultant, Clinton Foundation, Bangalore
   (xi) All the District Health & Family Welfare Officers
   (xii) All the District HIV/AIDS Programme Control Officers
   (xiii) All the RCH Officers for information and circulate to all MOPHCs
   (xiv) All the DPMOs
   (xv) All ART Medical Officers
   (xvi) The Deputy Director, Maternal Health/IUD, Directorate of H&FWS, B’lore
   (xvii) The Deputy Director, MCH, State Institute of Health & Family Welfare, B’lore
   (xviii) The Consultant, MCH, Directorate of H&FWS, B’lore
   (xix) All Lab. Technicians of ART centres
Annex 6:
OPERATIONAL GUIDELINES FOR ACCESS TO PPTCT SERVICES BY EVERY ANTENATAL CASE IN KARNATAKA- INTEGRATING WITH THE NATIONAL RURAL HEALTH MISSION

Introduction:

For prevention of HIV infection from the mother to the child, the Prevention of Parent to Child Transmission Centres (PPTCTs), currently known in its integrated form as the ICTCs, are the key entry points for antenatal cases to get counselling and testing regarding their HIV status. The HIV+ pregnant women can access a range of services to prevent transmission of HIV infection from the mother to child, including counselling services and can also get services like opportunistic infections treatment, ART prophylaxis, etc., these needs to be provided by the health systems available in the State.

The primary responsibility of management of HIV+ pregnant women will not rest solely with the KSAPS. Rather, such responsibility will rest primarily with the Department of Health and Family Welfare Services because it is basically an MCH activity. Hence, the roles and responsibilities of the Health care personnel are being prescribed to ensure that HIV+ pregnant women are facilitated for services at every institution, which she wishes to access. In fact pro-active role will have to be played by the Health and Family Welfare Department, especially the RCH wing, to enable the HIV +ve pregnant woman to be informed of these services and also to enable her to access these services.

Prevention of transmission of HIV infection from mother to child is an urgent activity of national concern and is the responsibility of every medical and paramedical person working in the Department of Health and Family Welfare. It is possible to achieve this goal if all the antenatal cases are registered and motivated to know their HIV status. In the State of Karnataka the number of deliveries per year is about 10 lakhs. The current HIV Prevalence in pregnant women is 1 percent. Hence, the expected number of HIV+ pregnant women would be 10,000 per year. The expected number of cases for an ANM in a sub centre with a population of 5,000 would be one per year. On an average the number of HIV+ pregnant women for a district in a year may be around 300. These projected numbers can be definitely handled by the existing RCH structure of the Department of H&FW for 100 percent hospital delivery, administration of Nevirapine, education on feeding practices and follow up for the child. It is, therefore, the complete and sole responsibility of the public health system of the state to ensure that all HIV+ mothers deliver safely in hospitals with all necessary protocols being followed to ensure that the risk of HIV transmission in the perinatal period is reduced.

Yeshaswini coverage for delivery of all HIV+ pregnant women in Karnataka is available giving choice to the pregnant woman, as well as the RCHO to ensure 100 percent hospital delivery. What this means is that the RCHO must ensure 100 percent hospital deliveries either by using the government hospital systems or the Yeshaswini network hospitals. In all these settings administration of nevirapine to mother-baby pair must be ensured.
Step by step guide:

1. As part of her normal duties the ANM shall register all antenatal cases in the **first trimester**.

2. It will be the responsibility of the ANM to impart the **first counselling to all ANC cases** so registered about the importance of knowing the HIV status.

3. All pregnant women must be tested for HIV status **at least once during pregnancy**. The HIV test must be conducted **during the second trimester ANC check-up**. For this the following approach must be followed:

   As per a pre announced rotational calendar, the ICTC counselor and lab. Technician will visit each of the PHCs under their jurisdiction, at least once every month, **on Thursdays (ANC days)**. On that day, all the second trimester **pregnant women** must be brought by the ANM to the concerned PHC. The ICTC counselor will do group counselling for all the pregnant women and motivate them for undergoing the HIV test.

4. The ICTC counselor will follow the normal coding procedures. Blood shall be drawn at the PHC itself and tested at the PHC by the lab. Technician. The lab. Technician must carry the kits in the cold chain. Results of the HIV tests must be available on the same day. The PHC MO will sign the lab results.

5. Individual post-test counselling shall be done by the ICTC counselor for all cases, whether found HIV+ or negative. The results of HIV+ve cases will be communicated to the woman and to the ANM and PHC medical officer on a shared confidentiality basis. The ANM and PHC MO will **not disclose** the HIV+ status to anyone else.

6. The MO PHC will issue the Yehaswini coverage in prescribed coverage form to the HIV+ pregnant woman immediately and inform her about the facilities at Government and Yeshaswini network hospitals.

7. The MO of the PHC shall also send one half of the fully filled Yeshaswini coverage form to the RCH officer the very next day along with the details of the case in annex 1. It is the responsibility of the PHC MO to ensure that all HIV+ pregnant women are also **registered at the ART centre**. He will refer them to the ART centre by sending another copy of information to the jurisdictional ART Centre in annex 1

8. Based on reports from the MO, PHC in annex 1, the RCHO will immediately update the Master register as in annex 2 kept at this level. The RCHO will also update this Master Register periodically depending on the progress of the case.

9. The RCH officer shall dispatch the second part of Yeshaswini coverage form to FHPL by speed post at the prescribed address.

10. Advance planning will be done by MO PHC and the RCHO in consultation with the HIV+ve pregnant woman to identify the hospital where the delivery will be conducted. The delivery can be conducted either at Government hospitals (PHC or above levels) or at Yeshaswini Network hospitals. Advance intimation must be sent to the concerned institution to ensure that they plan the safety kits meant for the healthcare personnel conducting the delivery procurement much in advance and also to enable them to keep Nevirapine Tablets and Nevirapine syrup ready. Additional doses of Nevirapine will be kept at the disposal of the RCHO, to take care of emergent requirements.
11. In case the HIV +ve pregnant woman will be going to her mother’s house for delivery and the mother’s house is in the same district, the RCHO will ensure that the jurisdictional ANM and the MO PHC where the HIV+ve pregnant woman will reside before delivery (mother’s house) are also involved in the planning exercise as indicated in the paragraph 10 above.

12. In the event that the HIV+ ANC attendees will be moving out of the district for delivery, the RCHO of the ‘ANC registration district’ will transfer her to the RCHO of the ‘delivery district’ in the prescribed format as in annexes 3 A and B. The RCHO of the ‘delivery district’ shall update his Master register immediately on receipt of intimation in annex 3. Thereafter, the RCHO of the ‘delivery district’ shall plan for the delivery as explained in paragraph 10 fully involving the jurisdictional ANM and MO PHC where the HIV +ve pregnant woman will reside before delivery.

13. The ANM wherever the pregnant woman will be residing before delivery, will personally accompany the HIV+ mother for the hospital delivery. She and the hospital will ensure administration of tab. Nevirapine/syrup Nevirapine.

14. The hospital that conducts the delivery will inform the RCHO about the delivery and administration of Nevirapine as per prescribed format in annex 4. On receipt of such information the RCHO of the ‘delivery district’ shall dispatch a copy of annex 4 to the RCHO of the ‘ANC registration district’ will also update his Master register.

15. Post-delivery follow up of the mother-baby pair at the PHC at 6 weeks, 9th month and 18th month will be got done by the jurisdictional ANM, wherever the woman resides at the time of and after delivery, under the intimation to the PHC medical officer. These follow ups will be updated by the ANM to the relevant RCHO, through the PHC MO. The relevant RCHO will update the master register accordingly and inform KSAPS and PD RCH.

(Meaning of Relevant RCHO in case of transferred cases: The 6th week follow up in most likelihood will be in the jurisdictional PHC of the ‘delivery district’. The relevant RCHO will be the ‘delivery district’ RCHO. The 9th month follow-up and the 18th month follow up will be most likely in the jurisdictional PHC of the ‘ANC registration district’. For these the relevant RCHO will be the ‘ANC registration district’ RCHO.)

16. HIV status testing of the baby will be done in the 18th month by the jurisdictional ICTC in the jurisdictional PHC. The results will be communicated to the RCHO by the jurisdictional MO, PHC.

17. Shared confidentiality

All the ANMs, MOs of PHC and the RCHOs shall follow the principle of ‘shared confidentiality’ and will not reveal the HIV+ve status of the pregnant woman to anyone else except the Hospital where the delivery takes place. This means that the HIV+ve status will not be known to anyone else other than the relevant ANM, ICTC counselor, relevant MO PHC, relevant RCHO and the relevant medical and paramedical staff of the hospital where the delivery takes place.
Also the ANM shall take care that when she does the follow up of the pregnant HIV+ woman and the child born to her at the village level, it should not in any manner isolate are stigmatize the woman or the child born to her.

18. Training
The RCH officer along with District Supervisor ICTC and the District Project Officer DAPCU (District Aids Prevention and Control Unit) presently the District TB Officer shall give adequate training to the MOPHC and all the ANMs within the next 30 days on operationalisation of these guidelines that is the training must be completed before the 15th June 2008.

This training must also cover the aspect of confidentiality of the HIV affected pregnant women and responsibility of all the persons having shared confidentiality to keep the confidentiality.

19. The DHO, the CEO and the DC of the districts will do the review of the success of these interventions every month during the District Rural Health Mission meetings.

Mission Director
(NRHM)

Commissioner
(Health and Family Welfare Services)
REPORT OF HIV POSITIVE ANC CASE

(To be filled by the ICTC Counsellor and ANM, checked and signed by MO PHC/MO ICTC & to be sent by MO PHC/MO ICTC to the RCHO within a week of detection of HIV positive ANC) where detected positive

Copy 1: To be sent to the RCHO by MO PHC/MO ICTC
Copy 2: To be sent to the District ART Centre & to the concerned Taluka Health Officer
Copy 3: To be retained by the MO PHC/ MO ICTC

Name of PHC…………………Taluk…………………District………………ICTC Code………………
PID………………………. Date when HIV Test Result was handed over to the ANC: ………………….
Name of the pregnant woman:…………………………………………Age:………
Name of Husband………………
Month of Pregnancy/ (LMP):……..Expected Date of Delivery (EDD):………………
ANC Registration (card) No……………………………………
Yeshaswini coverage Card No…………………

Current (Husband’s House) Address

| W/o: ……………………………. | Mother’s House Address: ………………… |
| Door No:………………….Street: ………………… | D/o: …………………………… |
| Location/Landmark:…….Village/Town:…… | Door No:………………….Street: ………………… |
| Land Line Phone No:……..or PP No……….. | Location/Landmark:…….Village/Town:…… |
| Mobile No:………………. | Land Line Phone No:……..or PP No……….. |

Mobile No:……………….

Name in Block Letters    Signatures:
Counsellor…………………… ..........................................................
ANM/ASHA……………………….. ..........................................................
Medical Officer……………………… ..........................................................
MO PHC/ MO ICTC ……………………… ..........................................................

(Details of this form need to be entered into the ANC register maintained at the PHC level include pre-ART/ART registration number where relevant)

This format has to be sent to RCHO & DAPCUO by MO PHC/MO ICTC

RCHO/DAPCUO acknowledgment to be sent back to MO PHC/MO ICTC within one week of detection of the HIV positive ANC

I, Dr……………………….have received the report of HIV +ve ANC with PID No ………… on…………
at…….am/pm from MO PHC/MO ICTC………………

Name of the RCHO………………………………………………….District

Signature with seal:…………………… Date……………………
OG- Annex-2

Annexure 2- Master Register

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<th>Month wise</th>
<th>Year:</th>
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<th>*EDD Month wise</th>
<th>Name of the pregnant woman</th>
<th>Age</th>
<th>PID number</th>
<th>ICTC code</th>
<th>Complete Address</th>
<th>Contact Number</th>
<th>Month of Pregnancy when registered</th>
<th>Name of ANM/ASHA and contact number</th>
<th>Name of the MO PHC/MO ICTC and contact number</th>
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<tr>
<th>Date of HIV testing</th>
<th>ANC card No</th>
<th>Yeshaswini card no.</th>
<th>Pre-ART/ART registration number</th>
<th>CD 4 Count / ART Initiated Yes/ No</th>
<th>Whether Transferred Out to other district (Name the district to which transferred out)</th>
<th>Whether confirmation slip from RCHO of Delivery District received</th>
<th>Whether Transferred in case (Transferred in from which district)</th>
<th>Date of Dispatch of acknowledgement to ANC registration district RCHO</th>
<th>Date of despatch of Yeshaswini coverage form to FHPL</th>
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<tr>
<th>Names and location of preferred hospital</th>
<th>Availability of Disposable (safety) Delivery Kits in the planned hospital</th>
<th>Availability of Nevirapine Tab and Syrup in planned hospital</th>
<th>Conducted at which hospital? Status whether mother &amp; baby alive?</th>
<th>Whether Tab NVP administered to mother at onset of labour pains?</th>
<th>Whether syrup NVP administered to child within 72 hours?</th>
<th>Whether mb pairs followed up at 6 weeks? Yes/No. If yes, whether EID done for baby? Result +ve / -ve</th>
<th>What feeds are being given to the baby? EBM/EAF/ Mixed Feeds</th>
</tr>
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<tr>
<th>Whether mb pairs followed up at 6 months? Yes/No</th>
<th>Whether mb pairs followed up at 12 months? Yes/No</th>
<th>Whether mb pairs followed up at 18 months? Yes/No</th>
<th>Whether HIV Rapid tests (3 Tests) for confirmation of the baby done at 18 months at ICTC? Yes/No</th>
<th>What is HIV status of the baby at 18 months? +ve or -ve</th>
<th>What is the CD4 % of baby? pre-Pre-ART registration number of baby</th>
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### Annexure 3 A - Transfer - In Form

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<th>Name of District</th>
<th>Transferred from (District)</th>
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<tbody>
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<table>
<thead>
<tr>
<th>RCHO Name</th>
<th>RCHO Name</th>
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<tbody>
<tr>
<td>Dr.</td>
<td>Dr.</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>EDD</th>
<th>Name of the pregnant woman</th>
<th>Age</th>
<th>PID number</th>
<th>ICTC code</th>
<th>Complete Address</th>
<th>ANC card No.</th>
<th>Yeshaswini card no.</th>
<th>date of intimation to FHPL</th>
<th>Names of preferred hospital</th>
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<th>Date</th>
<th>Signature</th>
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**Case Transfer Acknowledgement**

**Slip**

I, Dr. ........................................... , RCHO .................................. District have collected details of HIV Positive ANC from Dr. ............................ RCHO.............................District & assure the DH & FWO that I will work up on the case & ensure safe institutional delivery in the institution of her choice & ensure administration of T. Nevirapine to the mother & Sy. Neverapine to the baby.

**Signature with**

**Seal:**

**Date:**
Annexure 3 B - Transfer Out Form

<table>
<thead>
<tr>
<th>Name of District</th>
<th>Transferred to (District)</th>
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<thead>
<tr>
<th>RCHO Name</th>
<th>RCHO Name</th>
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<tbody>
<tr>
<td>Dr.</td>
<td>Dr.</td>
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</table>

Signature of RCH Officer of ANC Registration District

<table>
<thead>
<tr>
<th>EDD</th>
<th>Name of the pregnant woman</th>
<th>Age</th>
<th>PID number</th>
<th>ICTC code</th>
<th>Complete Address</th>
<th>ANC card No</th>
<th>Yeshaswini card no.</th>
<th>date of intimation to FHPL</th>
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Date of Receipt in Delivery District

Date: ___________________________  Signature of RCH Officer of ANC Registration District

Case Transfer Acknowledgement

Slip

(Send by speed post to RCH Officer of the ANC Registration District)

I, Dr. ___________________________, RCHO ________________________. District have received details of HIV Positive ANC from Dr. ____________________________, RCHO ________________________. District & hereafter it is my responsibility to ensure safe Hospital delivery in the institution administration of T. Nevirapine to the mother & Sy. Neverapine to the baby. I confirm that I have entered the information at page no. ______________ of the master register of my district.

Signature with Seal: RCH Officer of Delivery District

Date: ___________________________
Annexure 4

To:
Dr.
RCHO & DAPCUO:
District:

Given below are the details of HIV positive Pregnant woman who has delivered a baby in our hospital

Name of the Mother:

W/o:
Address
Name of the Hospital:
Hospital in-patient (IP No.) number
ANC card number
Yeshaswini card number
PID number(given by ICTC)
Date of admission:
Date and Time of delivery:
Delivery conducted by:
Type of delivery: Normal
Forceps (not to be done for HIV positive ANCs)
LSCS
Nevaripine administered to mother by ------------Name-------------- at ------------Date & time------------
Sy.Nevarapine administered to baby by ----------------- Name-------------- at Date & time----------------

Name of contact person of the hospital:

Signature of ANM/ASHA who has accompanied the pregnant women for delivery and is herself present at the time of delivery

Name of the subcentre/PHC:
Date:

Please Note: Signature of the ANM/ASHA of the Area who has accompanied the HIV+ve ANC and is present at the time of Delivery
**HIV Positive Register to be maintained by the Counsellors in every ICTC for ANC cases & their Family**

<table>
<thead>
<tr>
<th>Sl. No</th>
<th>Details of HIV Positive ANC &amp; Family</th>
<th>Age</th>
<th>Address of: (i) Husband's House (ii) Mother's House &amp; Mobile Number of ANC</th>
<th>PID No.</th>
<th>HIV Status 1. Positive 2. Negative started ART? Y/N</th>
<th>EDD</th>
<th>Pre-ART Reg No./CD4 Count</th>
<th>Whether ART initiated or not</th>
<th>Whether linked with ANM or any other field worker? (Name &amp; Mobile Number)</th>
<th>Whether Birth plan done</th>
<th>Preferred Hospital for Delivery</th>
<th>Date of Actual Delivery &amp; Place</th>
<th>NVP Administration</th>
<th>Whether HIV/TB Co-infection present</th>
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<tbody>
<tr>
<td>1</td>
<td>Name of the HIV +Ve ANC:</td>
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<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
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<td>2</td>
<td>Name of the Husband/Partner:</td>
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<td>3</td>
<td>Name of Child (1st Child):</td>
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<td>4</td>
<td>Name of Child (2nd Child):</td>
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<td>5</td>
<td>Name of Child (3rd Child):</td>
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<td>6</td>
<td>Name of Child (4th Child):</td>
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<td>7</td>
<td>Name of Child (5th Child):</td>
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**Note:**

If address given is outside your District/State inform DAPCU/DS at monthly meeting who will in turn inform the concerned DAPCU/DS within 24 hrs to follow-up the case.
Special camps being conducted at PHCs for ANCs (convergence with NRHM)
Special camps being conducted at PHCs for ANCs (convergence with NRHM)
District AIDS Prevention & Control Unit, UDUPI

ANM Training Programme at UDUPI Taluk
ANM Training Programme at KARKALA Taluk

ANM Training Programme at KUNDAPUR Taluk