

A Study for Developing Evidence Based Intervention to Improve the Antenatal Care Services for North 24 Parganas in West Bengal

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Abstract:

Background: Antenatal care (ANC) helps in getting a healthy mother and a healthy baby at the end of pregnancy. This requires early registration of mother and a host of services as ANC package like IFA tablets, Tetanus toxoid, advices (regarding diet, rest) etc. Antenatal visits may raise awareness about the need for care during delivery or give women and their families a familiarity with health facilities that enables them to seek help more efficiently during a crisis. The National Health Policy, launched in March 2017 aspires to ensure that everyone has access to health care, especially the poorest. It emphasizes wellness and preventive healthcare, good quality maternal and child care, as well as comprehensive primary healthcare with two-way referrals. The recently launched Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) is aimed at reducing maternal and infant mortality rates assured antenatal care to pregnant women with support from the private sector to supplement the government's effort in safe pregnancies and safe deliveries. However, uptake of ANC services is far from universal even in settings where they are widely available. With government antenatal care services in place, it is important to look at the reasons for under/ non-utilisation of these services. A study at the behest of the Indian Institute of Public Health, Delhi was done in November 2016 endeavouring at understanding the Antenatal care of the maternal health component of North 24 Parganas district of West Bengal for developing evidence based intervention for improving the quality of the Antenatal care services under Maternal Health. This was attempted in the light of the observations of the State Level Review Meeting on 29 September 2016 district-wise analytical comments in respect to the key performance indicators as per the HMIS data. It revealed that North 24 Parganas district's % ANC registration in first trimester against reported pregnancy in 2015-16 was less than the State average 77%. Similarly, the % of 3 ANC against reported pregnancy in 2015-16 too was less than the State average 85%.

Methods: The North 24 Parganas district Health Management Information System (HMIS) data for the three consecutive years 2013-14, 2014-15 and 2015-16 accessed and the datasets with detailed antenatal provider and user information analysed. Relevance records and registers were viewed to draw inferences. Reference was also drawn from the District Level Health Study (DLHS-4 2012-13), the Rapid Survey on Children 2013-14, the National Family Health Survey (NFHS 4) 2015-16 and other relevant studies on the district. Participant observation, informal discussions and in-depth interviews with the District MCH Officials and staff helped to identify and explain health workers' practices and contextual factors influencing antenatal care provision.

Findings:

The major lacunae observed on the quality of Antenatal service delivery in the district are as follows:-

- The 1st ANC registration timing of first visit for ANC by pregnant women marked substantial variation across quintile group on an average 4-6 months gestation.
- The Ante-natal check up with all quality parameters, such as regular weight monitoring, BP check, urine test, Hb test, not maintained.
- The 4th ANC happening for pregnant women at community level not given due importance and recorded in the HMIS.

Recommendations: There is need to embark at improving the Ante-natal Care indicators for the district by initiating the piloting in one of the identified low performing CD Blocks. Utilizing the existing Health Department infrastructure and initiation of convergence of programmes with other concerned departments of the district with minor additional budget proposed the piloting will aim at (1) Sensitization of ASHA and HW and endeavouring involvement of the registered SHG group members and more involvement of AWWs at the Community Level; (2) Sensitization of ANMs, Health Supervisors, Block ASHA Supervisor for better monitoring at the Outreach level and (3) Facility based improvement in the maintenance of documents and monitoring. If the piloting is successful it can be scaled up in the North 24 Parganas district of West Bengal

Keywords: Antenatal care, Quality ANC, Mother & Child Protection (MCP) Card, 1st Trimester, 4th ANC

I. Background:

Antenatal care (ANC) helps in getting a healthy mother and a healthy baby at the end of pregnancy. This requires early registration of mother and a host of services as ANC package like IFA tablets, Tetanus toxoid, advices (regarding diet, rest) etc. Antenatal care can also play a critical role in preparing a woman and her family for birth by establishing confidence between the woman and her health care provider and by individualizing promotional health messages. Further antenatal visits may raise awareness about the need for care during delivery or give women and their families a familiarity with health facilities that enables them to seek help more efficiently during a crisis.

The National Health Policy, launched in March 2017 aspires to ensure that everyone has access to health care, especially the poorest. It emphasizes wellness and preventive healthcare, good quality maternal and child care, as well as comprehensive primary healthcare with two-way referrals. It aims to make healthcare affordable, through free drugs, diagnostics and emergency services and proposes to raise public health expenditure to 2.4% of the GDP by 2025, as well as to cut family health expenditure by 25% by 2025. The recently launched Pradhan Mantri Surakshit Matritva Abhiyan (PMSMA) is aimed at reducing maternal and infant mortality rates assured antenatal care to pregnant women with support from the private sector to supplement the government's effort in safe pregnancies and safe deliveries. However, uptake of these services is far from universal even in settings where they are widely available. With government antenatal care services in place, it is important to look at the reasons for under/ non-utilisation of these services. Addressing these issues will ensure increase in utilisation of these services and in turn decrease maternal and child mortality.

The study at the behest of the Indian Institute of Public Health, Delhi was conducted with the endeavour at understanding the Antenatal care of the maternal health component of North 24 Parganas district of West Bengal. The district is situated in the urban fringe of the metropolitan city of Kolkata is considered to be the West Bengal's most populous and most economically developed district. The district jurisdiction consists of the savvy planned city of Salt Lake, the up-coming Newtown at Rajarhat, the Netaji Subhas International Airport, the historically relevant and industrial subdivision of Barrackpur and a portion of Sundarban delta region. However with a rise in income and purchasing power in the ever-spreading urban areas, acute distress in the rural areas (nearly 30 per cent of rural households) and severe malnutrition in the slums, the North 24 Parganas district projects the mixed picture of socio-economic development status of its population. The district has been ranked fifth among the five developed districts regarding the maternal and child health (*Refer 'Status of Maternal and Child Health in West Bengal' Geographical Review of India, 72(4), 2010: 414-419*). In the District Level Study in September 2011 (*refer 'Health for Development: A district level study in West Bengal by the Centre for Studies in Social Science*), the North 24 Parganas district was ranked Fourth based on its standing at that time on combined indicators as ANC, delivery care, PNC, Mortality and Morbidity. The said study also pointed that the State sponsored health care infrastructure of the district was not uniformly distributed over the district as 68% hospitals are located in the municipalities in western part of the district. Notably since May 2012 the State Government formed and made functional two health districts as Bashirhat (comprising 10 Blocks) and North 24 Parganas (comprising 12 Blocks) – though the combined reporting of the two health districts continue as the North 24 Parganas HMIS dashboard till 2015-16.

For the purpose of the ANC status study of North 24 Parganas, the HMIS data of the North 24 Parganas health district (comprising 22 community development blocks and 25 municipalities), focusing the NRHM data (rural) is being reviewed in terms of the advice by the District Health Officials interacted for the purpose. This was primarily due to the feedback received from the DMCOH that indicated that HMIS data capturing on many ANC indicators at the NUHM structure (the urban segment) was currently not available for comprehensive study. Accordingly the HMIS data as availed for the district for the last 3 years on major ANC coverage under maternal health captured as-

Total number of pregnant women registered: 2015-16- **167178**
2014-15- **171299**
2013-14- **178323**

Number of institutional deliveries - 2015-16- **Govt. -59391 + Private-6254 = 65645 (39%)**
2014-15- **Govt. -58683 + Private-5967 = 64650 (38%)**
2013-14- **Govt. - 62184 + Private- 6415 = 68599n (38%)**

Number of deliveries by SBA - 2015-16- 4775 (3%)
2014-15- **7443 (4%)**
2013-14- 13189 (7%)

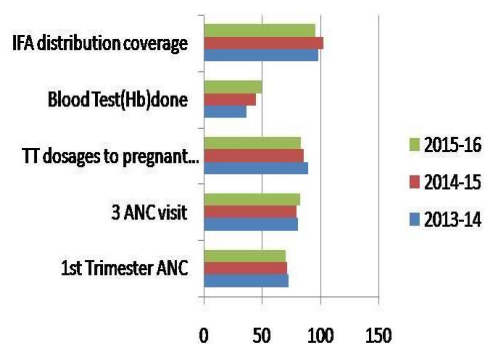
Indicator	2013-14				72%	2014-15				71%	2015-16				70%
	Target	Urban	Rural	Total		Target	Urban	Rural	Total		Target	Urban	Rural	Total	
Pregnant Women who had antenatal check up in 1 st trimester	150851	27259	81977	109236		152452	27548	80934	108482		146693	24267	79638	103905	
Pregnant Women who had 3 or more ANC	150851	43977	76864	120841	80%	152452	44746	75706	120452	79%	146693	42167	78258	120425	82%
Pregnant Women whose last child birth protected against neonatal tetanus	150851	48863	85352	134215	89%	152452	44176	83350	127526	85%	146693	40708	81968	122676	83%
Pregnant Women who consumed 100 IFA	150851	63665	84872	148537	98%	152452	74315	81464	155779	102%	146693	65469	74405	139874	95%
Pregnant Women whose blood tested (Hb)	150851	14319	43038	57357	36%	152452	14222	53806	68028	44%	146693	18756	53740	72496	49%

Based on the above it can be observed that the coverage data on institutional delivery for the district was not encouraging – though HMIS data for the 2015-16 indicated 39% (slight improvement from the previous years) yet the institutional delivery remained poor. The SBA delivery decreased in 2015-16 at 3% from 7% in the past two years. The above data analysis of North 24 Parganas district would also indicate that the 1st Trimester registration of pregnant women has dipped to 70% from 71% (2014-15) and 72% (2013-14). The 3 ANC coverage and Blood Test (Hb) of pregnant women during 2015-16 (82%) and (49%) bettered slightly against the previous years- though the later facility based service for the district looked weak. Similarly, the neonatal tetanus preventive intervention among pregnant women too dipped to 83% from 85% in 2014-15 and 89% in 2013-14. The IFA distribution to Ante-natal Mothers, coverage stood as 95% (2015-16), 102%(2014-15) and 98%(2013-14) for the district.

However as indicated by the District Maternal & Child Health Officer, North 24 Parganas, during the interface, that considerable mismatch existed for the district in connection with the IFA distribution and scheduled consumption by Pregnant Women, as he stated that the DLHS 2012-13 for the district indicated about 70% pregnant women had anaemia and that more than 14% children born with low birth weight. The situation according to him not improved in spite of the increased IFA distribution among pregnant women as the low birth weight among under 5 years of age children in the district indicated 17% and 69.7% children with diarrhoea with considerable pregnancy complications among pregnant women in rural areas observed tending to be anaemic (NHFS4).

Notably, the analytical comments of the State Level Review Meeting on 29 September 2016, put up in public domain, in respect to the key performance indicators as per the HMIS data revealed that North 24 Parganas % ANC registration in first trimester against reported pregnancy in 2015-16 was less than the State average 77%. Similarly, the % of 3 ANC against reported pregnancy in 2015-16 too was less than the State average 85%. Above ANC scenario emerged in spite of the fact that the district is reportedly endowed with suitable healthcare infrastructure, manpower and funds. According to the DMCOH, the major challenge areas under the ante-natal care indicators for the districts continue to be under-achievement in meeting the targets in

ANC status of North 24 Parganas District at a Glance for last 3 years



institutional delivery, quality ANC in terms of timing of 1st ANC visit by pregnant women as well as 4th ANC happening at the community level and ensuring due consumption of IFA by pregnant women among others. With a view to understanding the ANC status of the district's rural areas *vis-a-vis* Blocks' standing in the District ANC scenario, the HMIS data of the 22 blocks, including the identified 7 RH Blocks was availed as under-

North 24 Parganas District Block-Wise Anc Data 2015-16

Sl. No	Name of the Block	Number of Pregnant women registered		Mother who had antenatal check-up in 1 st trimester		3 ANC check up		Administered TT2 Doses		100 IFA tablets distribution		Pregnant women whose Blood tested (Hb)		SBA Delivery		Institutional Delivery	
		2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16	2015-16
1	Amdanga	3697	3411	92%	3202	86%	3380	91%	3063	82%	6	0.16%	47	1.2%	783	21%	
2	Barasat I	4942	4329	87%	4821	97%	4492	90%	3920	79%	0		93	1.8%	292	6%	
3	Barasat II	4294	3816	83%	3474	80%	4014	93%	3386	78%	0		138	3.2%	274	6%	
4	Deganga	6761	6049	89%	5700	84%	6302	93%	5286	78%	0		243	85%	738	11%	
5	Habra I	3429	2999	87%	2800	81%	3050	88%	2560	74%	0		89	2.5%	84	2.4%	
6	Habra II	3234	2902	89%	2855	88%	2901	89%	2921	90%	2	0.06%	31	0.9%	256	8%	
7	Rajarhat	3462	3295	95%	3167	91%	3104	89%	3139	90%	0		89	2.5%	222	6%	
8	Gaighata	4818	4194	87%	3976	82%	4612	95%	3975	95%	0		55	1.1%	291	6%	
9	Bongaon	5971	5151	86%	5189	86%	5169	86%	4261	71%	0		219	3.6%	4	0.06%	
10	Bagdah	3727	3278	87%	2993	80%	3422	91%	3434	92%	0		133	3.5%	918	25%	
11	Barrackpur I	2622	2251	85%	2333	88%	2295	87%	2329	88%	0		18	0.6%	8	0.30%	
12	Barrackpur II	3297	2566	77%	2714	82%	2903	88%	2307	69%	0		17	0.5%	152	5%	
13	Basirhat I	3665	3094	89%	3284	89%	3542	96%	3210	87%	4	0.40%	354	10%	213	7%	
14	Basirhat II	4743	4329	91%	4242	89%	4279	90%	4374	92%	0		344	7.2%	832	17%	
15	Baduria	5233	4908	93%	4793	91%	4933	94%	4604	87%	0		94	1.7%	952	18%	
16	Haroa	4480	4099	91%	3849	85%	4079	91%	3450	77%	6	0.13%	332	7.4%	1457	32%	
17	Minakhan	4310	3915	91%	4077	94%	4078	94%	3459	80%	0		314	7.2%	1615	37%	
18	Hasabad	4399	3807	86%	4131	93%	3948	89%	4038	91%	0		731	17%	419	9%	
19	Hingalgunj	2512	2223	88%	2116	84%	2196	87%	2259	89%	0		75	3%	568	23%	
20	Sandeshkhali I	3197	2886	90%	2780	86%	2962	85%	2941	91%	0		410	12%	616	19%	
21	Sandeshkhali II	2924	2416	82%	2128	74%	2499	85%	2358	80%	3		714	24%	229	8%	
22	Swarupnagar	4116	3720	90%	3634	88%	3808	92%	3131	76%	0		236	6%	229	8%	
	Total	89833	79638	88%	78258	87%	81968	91%	74405	82%	21	0.02%	4776	5%	4776	12%	

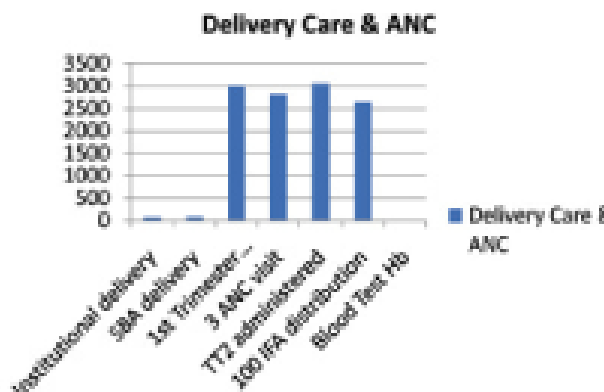
NB: Blocks From S.No. 1 To 12 Falls Under Barasat And S.No. 13 To 22 Under Basirhat Health Districts

In terms of the 2015-16 Block-wise HMIS ANC data as above, it can be noted that the Barasat health district fared below par on the ANC indicators than the Basirhat health district of North 24 Parganas. Notable has been the fact that both institutional and SBA deliveries and procedural Hb test during ANC happened poorly. The Hb blood test of the rural areas contributed meagrely with 0.02% of the district total on the Hb test count that indicated 49% during 2015-16. Mentionable is that the NHFS 4 (2015-16) report stated that 62.2% rural women found anaemic. Furthermore, the NHFS 4 also indicated 100 days IFA consumption among pregnant women was 21.5% (2015-16); against the district projected IFA distribution as 95% during the corresponding year. The BPHCs share of institutional and SBA deliveries during 2015-16 stood as 12% and 5% respectively. On all counts the revealed ANC related data pose concerning trends for the district. Also among the blocks, 3 blocks, *namely* Habra 1, Barrackpur 1 and Barrackpur II observed to project below par performance on ANC indicators during 2015-16. Interfaces with the District Health Officials, including the nodal officer, the District Maternal & Child Health Officer, on the three BPHCs (whose HMIS data constitute the rural health services data) provided their expressed concerns on the poor ANC performances of the blocks, but the Officials' also pointed out that the Barrackpur I & II blocks being primarily urbanized blocks, people tend to attend multiple Government Hospitals located at Barrackpur, Panihati, Bhatpara and B.N.Bose MC for health care issues- including majority of pregnant women getting check-up and deliveries done at these health facilities. These apart a good number of pregnant women avail services from the Private Hospitals and Nursing Homes in the adjoining district. Resultantly the pregnancy care and delivery data maintained at the BPHC could not capture the healthcare service uptakes for the individuals living in the Barasat I & II blocks area but availing services from out of the BPHCs. In the context of Habra I however, they stated that a substantial number of rural population depended on the Rautara PHC and Habra Rural Hospital. Some families also cover the distance

to attend the Bhatpara SG Hospital. Thus according to the District Health Officials, programmes at improving the institutional and SBA deliveries and ANC out of the three low performing blocks, need to focus firstly on Habra I block should choice among low performing Blocks made.

Based on the above interactions with Health Officials, the existed HMIS data trends and banking on the suggestions of the District Health Officials, the first intervention focus on Habra I rural block observed reasonable in the given circumstances. Accordingly the proposal for intervention of the first piloting, at improving upon the ANC and Institutional based deliveries, is proposed for Habra I Block of the district. The Delivery Care and ANC scenario (HMIS data 2015-16) depicted as

HABRA-1: Delivery & Ante-Natal Care Data 2015-16



Notably the Habra I, consisted 7 gram panchayets with 225,200 population (2011 census), is a rural community development block that forms an administrative division in Barasat Sadar subdivision. As per the records, 34.81% of households in this CD Block lived below poverty line. The Block, whose groundwater on record is affected by arsenic contamination, had 3.45% of its villages with maternity and child welfare centres, and had 3 health centres and 21 sub-centres. The Block is notably endowed with 586 reportedly active self-help groups – whose involvement if can be mobilized is sure to contribute towards the efforts of the ASHAs and other Health Workers at improving the current maternal health services dip for the block.

The major lacunae observed on the quality of Antenatal service delivery in the district are as follows:-

- The 1st ANC registration by the 1st trimester- No proper reporting on the same currently done in the district, sources in the District Health Department indicated that while the 1st ANC in urban areas by and large registered within 3 months of pregnancy, yet for the rural area the timing of first visit for ANC by pregnant women marked substantial variation across quintile group on an average 4-6 months gestation.
- Improving quality of Ante-natal check up- with all quality parameters such as regular weight monitoring, BP check, urine test, Hb test done at each visit so that early identification of at risk pregnant women can be made effectively - The DLHS 3 (2012-13) data indicated for pregnant women whose BP taken as 71.9%, those blood tested (Hb) as 61.7%, whose abdomen examined as 45.6% and those who undergone 4 ANC as 35.4% - all in variance.
- The 4th ANC happening for pregnant women at community level- as current focus on the same appeared diluted as the data was not getting captured in the HMIS. Notably the DLHS 4 (2012-13) indicated 4th ANC coverage for the district as 35.4% (rural 27.8%) and the Rapid Survey on Children under the MoWCD (2013-14) indicated the coverage as 45%.

In the light of the above, it is felt that a comprehensive intervention focusing primarily at outreach and community level activities, with due coordination with the health facilities, is required to improve upon the overall Ante-Natal Care under Maternal Health scenario for the block. Simultaneously sensitize front-line health worker on the ANC Goal to prepare for birth and parenthood as well as prevent, alleviate or manage three types of health problems during pregnancy that affect mother and babies i.e. (1) complications of pregnancy itself; (2) pre-existing conditions that worsen during pregnancy; and (3) effects of unhealthy life styles. Simultaneous attempt at involving the district's registered Self-Help Group female members at helping ASHA, AWW and Health Workers for timely identification and registration of pregnant women at villages should auger well ANC quality improvement.

The interventions on the major 3 ANC indicators proposed are -

- Improving the 1st ANC visit to or by pregnant women – with the ensuring the first visit happening by the 1st trimester of pregnancy.
- Improving quality of Ante-natal check up- with all quality parameters such as regular weight monitoring, BP check, urine test, Hb test done at each visit so that early identification of at risk pregnant women can be made effectively.
- Effectuating 4th ANC happening for pregnant women at community level

II. Study Methodology

The North 24 Parganas district Health Management Information System (HMIS) data for the three consecutive years 2013-14, 2014-15 and 2015-16 were accessed and the datasets with detailed antenatal provider and user information analysed. Relevance records and registers were viewed to draw inferences. Reference was also drawn from the District Level Health Study(DLHS-4 2012-13), the Rapid Survey on Children 2013-14, the National Family Health Survey (NFHS 4) 2014-15 and other relevant studies on the district. Participant observation, informal discussions and in-depth interviews with the District MCH Officials and staff helped to identify and explain health workers' practices and contextual factors influencing antenatal care provision.

Ethical Considerations

The study had the approval of the Indian Institute for Public Health, Delhi. In conformity with the Government norms, the IIPH, Delhi procedurally written to the West Bengal State Health Directorate Authority stating the purpose of the study and requesting the necessary approval and assistance for the researcher. The study received clearance from the Chief Medical Officer (Health) and the District Maernal & Child Health Officer, North 24 Parganas. The consent was obtained from Health Department Officials, Staff and Health Workers participating in the study after explaining the purpose of the study to them and informing them of their right to withdraw at any time.

Findings:

The major lacunae observed on the quality of Antenatal service delivery in the district are as follows:-

- The 1st ANC registration timing of first visit for ANC by pregnant women marked substantial variation across quintile group on an average 4-6 months gestation.
- The Ante-natal check up with all quality parameters, such as regular weight monitoring, BP check, urine test, Hb test, not maintained.
- The 4th ANC happening for pregnant women at community level not given due importance and recorded in the HMIS.

III. Recommendations

In line with the above findings, the intervention is proposed for piloting in one of the identified low-performing Block as follows and if found successful, the same can be scaled up in the other Blocks of the district-

I. Goals and objectives:

Goals and objective of the program area			
Program Area	Goals	Objectives	Specific remarks
Habra 1 Block Covering 7 Gram Panchayets	Piloting new indicators in a high priority Block to meet the Goal of ANC package to prepare for birth and parenthood as well as prevent, detect, alleviate or manage health problems during pregnancy that affect mothers and babies.	Embark at improving the Ante-natal Care indicators for the district by initiating the piloting in one of the identified low performing CD Blocks.	If the piloting is successful it can be scaled up in the North 24 Parganas district of West Bengal

II. Indicators (impact indicators)

Indicators (at least 3)	Data of the district (any district of the state)- most recent data (mention the source and year)	Data of the STATE (mention the source and year)	Data of INDIA(mention the source and year)
Timely 1 st ANC - registration of pregnant women for in the first trimester	103% *	54.9 %	Not available
Quality Ante-natal check up- with provision of care adhered to the required standards.	Not available	Not available	Not available
4 ANC visit improved and recorded	Not available	25.2% +	Not available

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*HMIS data 2015-16
+NHFS-4 2015-16

(a) Coverage indicators

Interventions	Coverage Measure	Data of previous year/s (Specify source and year)	Most recent data (Specify source and year)	Target	Is the district on track? (Yes / No)
1 st ANC Registration	Outreach & facility	71%	70%	146693(15-16) 152452(14-15)	NO
Quality ANC	Outreach & facility	No record	No record	No record	NA
4 th ANC coverage	Community	No record	No record	No record	NA

Program planning for implementation

Domain	Intervention	Status of implementation [Fully/ Partially/ Not at all]	How well the activity was done	Best Practices	Bottlenecks/ Problems
Home and community	Sensitization of ASHA & HW Functionaries for mobilizing SHGs-plus of AWWs	Fully	Participants' attendance	Attempted to be evolved	Involving Anganwadi Workers would require inter departmental liaison among Health and ICDS
			Pre & Post session questionnaire		
Outreach	Sensitization of ANMs, Health Supervisors, Block ASHA Supervisor for monitoring	Fully	Participants' attendance	Attempted to be evolved	Inter-departmental coordination.
			Pre & Post session questionnaire		
			Monthly Report		
Facility	Maintenance of Documents	Fully	Monthly Review		Policies at the District Health structure
	Monitoring		HMIS Data		
			MCTS record		

Activities proposed:

Activities	Coverage targets (Set by national level)	Activity-related targets for the district	Identify resources needed to meet the targets
1 st ANC- timely registration of pregnant women	Not available	146693 as 1 st ANC coverage target 2015-16 (HMIS)	ASHA, HW assisted by AAWs already in place
Quality ANC	Not available	Not available	ASHA, HW assisted by AAWs already in place
4 th ANC coverage	Not available	Not available	ASHA, HW assisted by AAWs already in place

FOOT NOTE:

Evidently each district in West Bengal has different sets of challenges based on their individual topography, socio-cultural practices, access to services among others that tended to impact the health-seeking behaviour of its population including that of ante-natal care for pregnant women. The same hold true for North 24 parganas- the district characterized by the highest urban settlement, containing large parts of areas coming under the Sundarban delta - marked by marshes, swamps, mangroves and accessibility problems. In addition many of the Blocks in the district have already been identified with arsenic contaminated ground water conditions. In summing up it can be stated that the proposal for additional cost effective intervention for ANC improvement for the district at one point (subsequently to be scaled up) would require broad agenda built on intersectional coordination at the grassroots' level. Simultaneously increased awareness of maternal and

newborn health needs and self-care during pregnancy has to continue with imparting focused ANC services to derive positive outcome of the special drive.

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