

OPERATIONAL PLAN

1. Name of the Operational Plan (OP) : Nursing Education and Services (NES).
2. Name of the Sector Programme : Health, Population and Nutrition Sector Development Programme (HPNSDP)
3. Sponsoring Ministry : Ministry of Health and Family Welfare
4. Implementing Agency : Directorate of Nursing Services (DNS)
5. Implementation Period
 - a) Commencement : July, 2011
 - b) Completion : June, 2016
6. Objectives of the OP :
 - a). General: To improve quantity and quality of Nursing & Midwifery training, education and services.
 - b) Specific:
 - i) To upgrade and strengthen the Directorate, Nursing Institutes and Colleges.
 - ii) To strengthen and upgrade the Directorate of Nursing Services.
 - iii) To develop and strengthen human resource plan in nursing and midwifery;
 - iv) To strengthen nursing & midwifery education for producing competent and efficient nurse-midwives.
 - v) To develop the capacity of nurses in specialized areas and also in leadership, management and administration.
 - vi) To establish a national nursing research council by strengthening the Nursing Research Cell (NRC) for evidence-based practice.
 - vii) To strengthen networking within National and International Bodies.
 - viii) To develop and strengthen the Nursing Management and Information System (NMIS)
7. Estimated Cost :
 - 7.1 PIP and OP cost : (Taka in lakh)

	Total	GOB	PA (RPA)	Source of PA
Approved cost of the PIP (Development Budget)	2217666.00	860350.00	1357316.00 (869791.00)	Pool and non pool fund.
Estimated Cost of the OP.	30000.00	6030.00	23970.00 (9658.00)	Pooled Fund, WHO & CIDA,
Cost of OP as % of PIP	1.35	0.70	1.76 (1.11)	---

7.2 Estimated Cost OP (According to Financing Pattern):

(Taka in lakh)

Source	Financing Pattern	2011-12	2012-13	2013-14	2014-15	2015-16	Total	Source of fund
GOB	GOB Taka (Foreign Exchange)	1466.00 (-)	1546.00 (-)	1706.00 (-)	506.00 (-)	506.00 (-)	5730.00 (-)	GoB
	CD-VAT	140.00	160.00	-	-	-	300.00	GoB
	GOB Others (e.g. JDCF)							
	Total GOB=	1606.00	1706.00	1706.00	506.00	506.00	6030.00	
PA	RPA (Through GOB)	2331.60	2431.60	2431.60	1231.60	1231.60	9658.00	Pooled fund
	RPA (Others)							
	Subtotal RPA=	2331.60	2431.60	2431.60	1231.60	1231.60	9658.00	
	DPA(Non-pool)	2062.40	1862.40	1862.40	4262.40	4262.40	14312.00	WHO-5062.00 CIDA-9250.00
	Subtotal DPA=	2062.40	1862.40	1862.40	4262.40	4262.40	14312.00	
	Total PA=	4394.00	4294.00	4294.00	4294.00	4294.00	23970.00	
Grand Total=		6000.00	6000.00	6000.00	6000.00	6000.00	30000.00	

8. OP Management Structure and Operational Plan Components (Attached Management set up at Annexure-I)

8.1 Line Director : Director, Directorate of Nursing Services.

8.2 Major Components of OP and their Programme Managers / DPM:

Major Components	Program Manager	Deputy Program Manager
Nursing and Midwifery Services Improvement and Training	Deputy Director (Education), DNS	Assistant Director (Edu.), Directorate of Nursing Services
MIS and Monitoring		Co-Ordinator (Accounts), DNS
Quality Nursing & Midwifery Education	Deputy Director (Administration), Directorate of Nursing Services	Project Officer, Directorate of Nursing Services
HR Administartion and Management		Co-Ordinator (Admin), DNS

8.3. Proposed manpower in the development budget:

The recommended manpower under development budget for this OP is as follows. The recruitment for these posts will be through direct recruitment.

Sl. No.	Name of the Post	Number of the Post	Pay Scale	Grade	Pay Person / month (Consolidated)	Per Month	Total Month	Total Pay (Taka in Lakh)
	A. Officer							
1.	Programmer	01	18500-29700	06	27625/-	60		20.00
2.	Assistant Programmer	09	11000-20370	09	16750/-	60x9=540		105.00
	B. Staff							
3.	Data Entry Operator	16	6400-14255	16	10,400/-	60x16= 960		117.50
	Total	26	-		-			242.50

9. Description :

a) Background information, current situation

“**Nursing**, as an integral part of the health care system, encompasses the promotion of health, the prevention of illness, and care of the physically ill, mentally ill, and disabled people of all ages, in all health care and other community settings. Within this broad spectrum of health care, the phenomena of particular concern to nurses are individual family and group responses to actual or potential health problems. These human responses range broadly from health restoring reactions to an individual episode of illness to the development of policy in promoting the long-term health of a population”(International Council of Nurses, 1987). These nurses are working for promoting the health of the people and reducing mortality, morbidity and fertility rate which ultimately help to achieve the target of MDG 4 and 5. The **Nursing education** consists in the theoretical and practical training provided to nurses with the purpose to prepare them for their duties as nursing care professionals. This education is provided to nursing students by experienced nurses and other medical professionals who have qualified or experienced for educational tasks. Most countries offer nurse education courses that can be relevant to general nursing or to specialized areas including mental health nursing, pediatric nursing and post-operative nursing. Courses leading to autonomous registration as nurse typically last four years. Nurse education also provides post-qualification courses in specialist subjects within nursing. **Nursing service** is the part of the total health organization which aims at satisfying the nursing needs of the patients/community. In nursing services, the nurse works with the members of allied disciplines such as dietetics, medical social service, pharmacy etc. in supplying a comprehensive program of patient care in the hospital. WHO expert committee on nursing defines the nursing services as the part of the total health organization which aims to satisfy major objective of the nursing services and provides prevention of disease and promotion of health.

Situation of Nursing Services in Bangladesh:

Bangladesh Nursing Council has registered 26,644 nurses in January 2011. There are 17,605 posts in the public nursing services and education. Out of which 15,086 are working in the public sector and 2,513 posts are vacant (DNS: Jan 2011).

Total number of nursing institutes are 72 (public 43: 1550 seats and private 29:1090 seats) providing 3 years Diploma in Nursing Science and Midwifery course. There are 18 nursing colleges (public-7:700 seats; private-11:340 seats) offering 4 years BSc. in Nursing Course. In addition there are 12 (public 4: 500 seats and private 8:245 seats) post basic nursing colleges where Bachelor of Nursing Science course are provided for the diploma nurses (BNC 2011). Master degrees are still not conferred in Bangladesh, although there are about 200 Master graduates in the country. This data concludes that the human resource in nursing education/ management is still not adequate to run the quality nursing education.

The present nurse: bed ratio is 1:13 in the morning shift; doctor: nurse ratio is 2:1 and population: nurse ratio is 5000:1 in Bangladesh (HRD data sheet 2010). This has to be seen against an international standard of one nurse for four patients in general beds and 1 nurse for one patient in intensive care units in a shift. So there is acute scarcity of nurses for providing services to the hospital patients.

Directorate of Nursing Services (DNS) and Bangladesh Nursing Council (BNC) are two salient organizations for managing nursing education and services. The first recruitment rule for the nursing service was made in 1977, since then it was revised three more times – in 1979, 1984 and in 1985. Recruitment and promotional rules in the Directorate of Nursing are complicated and there are separate rules for separate posts, which left these posts in effect as blocked posts. This has barred regular promotion to staff who are serving for almost 30 to 35 years. A single draft recruitment rule has been prepared to recruit as per seniority and merit. This policy has been approved by the National Executive Committee on Administrative Reform but it will have to wait to see the light of the day. Based on the past experience it does not seem probable within any short period of time. No regular director of nursing was ever posted since 1993 in the Directorate of Nursing.

The present number of students enrolled in the public and private nursing schools of Bangladesh is 1,500 and 600, respectively. Training in this scale will not increase the required number of nurses for supplying and therefore the shortage of nurses will increase year by year. At present there are only 2 to 3 full time staff per nursing institute and external resource persons are paid only taka 200 per class (50% of the teachers at present are guest teachers, usually medical graduates). Most of these trainers do not follow the curriculum. In addition, it should be considered that the implementation of effective training will become difficult due to the deterioration of nursing school facilities and staff shortage which will combine with the lack of training equipment. Considering the lack of experience in the teachers as well as no established techniques for implementation of

curriculum in the existing nursing schools indicates that the training of nurses along this curriculum is impossible. Therefore, it is indispensable to retrain the teachers and improve the current curriculum and establish developed educational techniques in order to conduct an effective nursing education.

The nursing curricula have been revised several times since 1993, the last one being in 2008 by the Bangladesh Nursing Council. There are about 460 activities included in the curricula. Given this huge number of activities, their capacity (supportive environment for providing services) and capability (individual skill for providing services) are obviously limited for several reasons.

As per the curricula each nursing college should have seven laboratories. This is not the case in other three nursing colleges. Even in Dhaka Nursing College, the laboratories are in pitiable shape. There are not enough class rooms in this college even, which is supposed to be the best nursing college in the public sector of the country. This situation however, is going to change soon, as new constructions have been started to ease this situation. It is interesting to note that although 10% of the students of the nursing colleges and institutes are males there is no hostel for them in any institute or college.

Until 2007 the diploma courses ran for four years, now the graduate courses are run for four years and diploma nursing for three years. As of now those nurses who have four year diploma or bachelor degree will be promoted to staff nurse (for diploma holders after certain duration in service). The next promotion post is the Senior Staff Nurse, then Supervising Nurse, then Instructor in nursing colleges or institutes. Next promotion post is the Lecturer or Matron or Assistant Director this is the level where the class one position begins in the nursing service in Bangladesh, which is on the other hand, the entry level position for the medical graduates. Next higher post is that of the Deputy Director and finally Director of Nursing. According to the present promotion rule however, an assistant director will never be able to get any further promotion, while the instructors may retire from the highest post, i.e., that of the director.

Attainment of MDG 5 is conditioned upon the development of a midwifery cadre. There is lack of knowledge & skills of present nurse midwives practically all the normal deliveries are conducted by the senior level students of medical colleges or medical doctors. Senior faculties of the Gyne-Obs department are also reluctant to allow nurses to conduct even normal deliveries. Alternate arrangements are therefore necessary to prepare midwives may be trained exclusively through a short course.

There is no specific job description for the registered nurse midwives on midwifery services and no clear deployment plan for nurses in the public sector for this purpose.

Policy Issues:

The Honorable Prime Minister committed while addressing the 65th General Assembly of the UN on progress in attaining the MDGs:

"Doubling the percentage of births attended by a skilled health worker by 2015 (from the current level of 24.4%) through training an additional 3000 midwives, staffing all 427 sub-district health centres to provide round-the-clock midwifery services, and upgrading all 59 district hospitals and 70 Mother and Child Welfare Centres as centres of excellence for emergency obstetric care services. Bangladesh will also reduce the rate of adolescent pregnancies through social mobilization, implementation of the minimum legal age for marriage, and upgrading one third of MNCH centres to provide adolescent friendly sexual and reproductive health services. Bangladesh will halve unmet need for family planning (from the current level of 18%) by 2015; and ensure universal implementation of the Integrated Management of Childhood Illness Programme".

Prime Minister has also declared nurses entry point in public job as 2nd class in the notification of the National Salary Scale, 2009. A policy (Strategic) direction paper has been developed by the Directorate of Nursing Services (DNS) and Bangladesh Nursing Council (BNC) for enhancing the contribution of nurse-midwives (NMs) in addressing the maternal, child and neonatal health issues which is approved by the MOHFW and implementation phase is going on.

Sixth Five Year Plan:

The SFYP has stated that as a priority activity of MoHFW, Nursing Training Institutes (NTIs), Colleges and District Hospitals will be strengthened for midwives and Community SBA training. A midwifery plan according to international standard will be formulated with participation from different stakeholder. Through developing guidelines FWV and C-SBA training will also be open for non-public sectors to provide. Possibilities will also be explored to utilize nurse-midwives for providing maternity services. These initiatives are expected to produce significant numbers of skilled service providers to care for normal childbirths. Efforts will be strengthened for more Upazila Health Complexes to provide comprehensive and emergency essential obstetrical care by training and placement of requisite human resources and providing required instruments and supplies.

MTBF (2011-12 to 2015-16):

The key activities identified in the MTBF are as follows:

- Provide training and expand the service coverage of community based skilled birth attendants
- Conduct nursing services at different hospitals
- Conduct and expand the existing specialized health care services at different levels
- Impart education and training to nurses.

MIDWIFERY STRATEGY

The strategy to scale-up the midwifery workforce in Bangladesh aims to establish high quality, sufficient and sustainable midwifery training capacity in Bangladesh by mobilizing partners around the target of 3,000 appropriately trained midwives deployed in areas of greatest need in Bangladesh by 2015. An internationally agreed definition of a midwife has been established that is adopted in this strategy for Bangladesh. Midwives are critical to attaining outcomes related to the availability and accessibility of high quality maternal health services from antenatal care through to safe delivery for both mothers and newborns and to post-partum and neonatal care. It is expected that an effective supply of midwives will not only help achieve these service delivery targets but also contribute significantly to improved maternal, newborn and reproductive health outcomes.

To achieve this ambitious objective of training and deploying 3,000 midwives by 2015, consultations with those involved in midwifery training in Bangladesh, as well as experts internationally, suggest a number of critical components that this scale-up plan must address. These include, but are not limited to:

- 1) Standards for training, practice and capacity for regulatory oversight;
- 2) Student entry-points and pathways for training;
- 3) Recruitment and development of faculty;
- 4) Training site identification and preparation; and
- 5) Employment and career opportunities for midwives.

Issues to be addressed

Nursing service aim at strengthening of the public sector nursing by creating adequate posts and filling-up the same, so that existing mismatch of physicians: nurses, nurses: patients, nurses: bed and nurses: population ratios can be improved substantially. A standard ratio of nurse to bed may be 1:4 in general hospitals (for surgical services it may be 1:3) and 1:2 in specialized hospitals, subject to reaching consensus. In general a doctor: nurse ratio of 1:2 may be the standard and a ratio of 1:3 doctor: paramedic (of different disciplines) ratio may be the standard.

Nursing and midwifery services to be expanded to cover specialist nursing & midwifery services like in cardiology, pediatric, midwifery, community, psychiatric, gerontology, trauma & orthopedic, nephrology, neurology, etc. Nursing and midwifery education is expected to be expanded for training more nurses both in public and non-public sectors covering diploma and bachelor courses. Specific activities need to be taken up for strengthening capacity of nursing & midwifery education and services like establishment of national nursing research cell; introduction of performance audit system through monitoring and evaluation. DNS, BNC and all educational institutions suffer from the absence of an effective MIS.

It is found that seat capacity is inadequate to fulfill the current demand of human resource development in nursing and midwifery. So seat capacity need to be increased with infrastructure including teaching and human resources. In educational management institutions there are 460 posts of teachers in public sector out of which only 72 teachers are in position; so there is acute shortage of teachers. Most of the teaching institutions run

by the deputed nursing staff. Thus faculty preparation and recruitment rules/deployment policy need to be considered

The main issues that need to be addressed in the nursing are: establishment of career planning, development and introduction of quality assurance and accreditation system, enhancement of leadership and management skills, development of tools and guidelines for institutionalization of in service training, arrangement for Ph.D. and master courses, facilitating research, further upgradation of senior level nursing services, construction of directorate of nursing building and continued education center for teachers' development, amendment and introduction of nursing acts, legislations, regulations and accreditation systems.

If existing nurses trained in midwifery which would ensure availability of management and referral of normal deliveries.

Reviewing of the job descriptions of the different categories of nurses is warranted. Nursing education will be expanded for training more nurses both in public and non-public sectors covering diploma and bachelor courses. Quality of nursing education will be improved by providing respectable amount of honorarium to the trainers, removing bottlenecks in carrier opportunities among nursing teachers, providing enough physical space and logistics for laboratories in nursing institutes and colleges for students' dormitories, teachers' lounges and offices and laboratories. Sufficient measures will be taken to make the teaching and learning environment comfortable and enjoyable. Practical training of nurses in the medical facilities will be ensured through cooperation of the administration of the relevant medical facilities and Director, Hospitals and Clinics and Civil Surgeons. Nursing education will be expanded to create more specialist nursing services.

A nursing & midwifery workforce planning has become time honored, keeping the future needs, standards and appropriate and adequate utilization of those who are being trained and educated now. It is also necessary, for the sake of uplifting the moral of the nursing & midwifery service providers to upgrade the position of the Director of Nursing Services to Director level position of the Directorate General of Nursing Services. For BNC also a slew of technical support in the areas of governance, legal affairs will be useful. Applying of the licensing conditions on the public sector institutes and hospitals should also be a condition.

The physical structures of hospitals are not nurse friendly, e.g. there are no facilities for rest room or space for nurses to change dress or study or even separate wash room for nurses, which need to be addressed through the related OP.

While as per the international standard a teacher: nursing student ratio is 1:8 in Bangladesh it is 1:27. The Guidelines for Accreditation of Private Sector Nursing College/ Nursing Institute and Nursing Course (06 October 2008) as per the Bangladesh Nursing Council Ordinance No. 61 of 1983, which are as follows, need to be applied meticulously:

(i) Basic conditions:

- Teacher: student ratio would be 40:1 (theoretical) and 8:1 (practical)
- Part time teachers would not be more than one fourth of the regular teachers
- For each 50 students the floor space would be >30,000 sq. feet.
- Within 7 years each institute/ college would have its own facility
- For each 50 students there should be one class room
- There would be 7 laboratories or laboratories of a medical college should be used
- There should be office room for teaching faculty, an auditorium, a general office, a room for accountant and cashier, a room for audio-visual equipment, a store room, common room for students, library, office of the principal, office of the vice principal and for each professor
- There should be enough equipment and demonstration models for practical training and transport for distant learning
- For starting nursing courses the applicant must have a 100 bed hospital with all common departments
- Renewal will be necessary every three years
- Course curriculum would be developed by the institute, but this must conform to the universal standard
- Bangladesh Nursing Council will monitor a new teaching facility every year in the first five years and every two years thereafter.

(ii) For teaching B.Sc. nursing course:

- Conditions of Grants Commission (UGC)/ public universities will be fulfilled
- For the post of principal the basic educational background would be masters in nursing/ MPH with five years teaching experience in nursing
- For teachers the minimum basic requirement would be masters in nursing or medical science or B.Sc. in nursing/ public health
- Other applicable conditions of UGC must be fulfilled

(iii) For diploma nursing course

- One principal (at least B.Sc. in nursing or public health with at least five years teaching experience)
- The ratio of teachers and students would be 1:20

Components of OP:

Component 1: Ensuring Quality of Nursing and Midwifery Education

Strengthening nursing & midwifery education, training and practices for producing competent and efficient nurse-midwives for delivering/ensuring holistic care depending on agreed roles and responsibilities. Establishment of a curriculum cell for curriculum development and review. Developing Midwifery curriculum. **Up-gradation of DNS** with required manpower to uphold and ensure quality of nursing & midwifery education & services

Component 2: Nursing & Midwifery Education and Services Improvement and Training

Strengthening nursing & midwifery education for producing competent and efficient nurse-midwives and specialized nurses.

Component 3: HR Administration and Management

Develop comprehensive human resources plan (HRP) to ensure workplace safety for the nurses including midwives for the benefit of the people. Post creation and proper deployment of the nurses & midwives will be ensured. Human Resources planning & implementation for equitable distribution and utilization for the benefit of the people through developing the capacity of nurses in specialized areas and also in leadership, management and administration.

Component- 4. MIS, Monitoring, Supervision and Research.

Establishment of computer-based Nursing and Midwifery Management and Information System (NM-MIS). Establishment of phase-wise distribution and installation of computers and computer programs for MIS at head office, Nursing Institutes and Nursing Colleges or College of Nursing.

10. Priority activities of the OP

1. a. Ensure the quality of nursing & midwifery services through establishing monitoring and evaluation system.

- Ensuring well balanced NMs (nurse-midwives) ratio in different areas.
- Establishing mechanism for monitoring & evaluation system.
- Establishing monitoring and evaluation cell within the DNS or DGN to ensure quality of services for providing better patient care.
- Ensuring required resources for providing NMs services.
- Introducing policy for incentive package a) for posting in remote places & b) to encourage women to enter into nursing.
- Establish curriculum cell for curriculum development, review and updating.

1.b. Up-gradation of DNS to DGNS with required manpower to uphold and ensure quality of nursing & midwifery education & services

- Up-grading position of DNS and to facilitate smooth functioning and maintaining nursing and midwifery services on the basis of GOB decision
- Furniture, equipment and others logistic for Construction of ‘Nursing Bhaban’
- Modification of existing recruitment rules

2.a. Faculty preparation: Develop Nursing Faculty to strengthen nursing and midwifery education.

- By the end of 2016, at least 300 nurses are trained in abroad as 1. Master Trainers of Clinical Specialists in fifteen identified areas (Total $15 \times 20 = 300$) who start in country training.
- Develop a master plan for subject-wise teachers' preparation.
- Develop one teachers training colleges for the nurse-midwives to prepare faculty with subject based competency.
- Strengthen nursing colleges for introducing Post-graduation program

2.b Expansion of the Nursing institutes and colleges

- Vertical expansion of the existing nursing institutes and colleges
- Establishing a set of well equipped Laboratory (Total 8 lab): 4 nursing lab, one midwifery lab, one science lab, one English lab & one computer lab for each of all individual nursing educational institutions.
- Ensuring the availability of vehicle for the nursing officials and for each individual nursing educational institution to facilitate teaching learning activities.
- Establishing one staff development college at national level for capacity building of Nurses as continuing education program (CEP)

3. a Regulation: Establish the system to ensure safeguard for the client & care provider in collaboration with Bangladesh Nursing Council (BNC).

- Developing & reviewing nursing & midwifery act, regulation & accreditation.
- Developing Comprehensive Exam for Licensing for RN, RM and Specialized nurses
- Training of nurse educators regarding licensing exam
- Developing mechanism for renewal of registration.
- Training nurses on code of professional conduct/practice
- Upgrading the existing Nursing Research Cell to open the avenue for evidence based nursing education and practice.
- Establishing a structure of Bangladesh Nursing & Midwifery Research Council (BNMRC).
- Training of nurses on research methodology & Statistics.
- Conducting small scale research.
- Publishing a journal to disseminate the research paper

4. Human Resources planning & implementation for equitable distribution and utilization for the benefit of the people through developing the capacity of nurses in specialized areas and also in leadership, management and administration.

- Establishing the policy & mechanism of post creation at all levels in relation to expansion of services.
- Developing career plan
- Developing recruitment rules for nurses and midwives
- Enhance production of certified midwives through 6 months post basic midwifery course (Target 3000 midwives by 2015)
- Enhance production of midwives through 03 years Diploma in midwifery course.

5. Establishment of phase-wise distribution and installation of computers and computer programs for MIS at head office, Nursing Institutes and Nursing Colleges or College of Nursing.

- Setting up a MIS Structure. organogram of NMMIS
- Develop and installing Web-Based software and training to the

concerned persons.

- Procuring computer and its accessories.
- Providing Internet connection at all level
- Maintaining Webpage of DNS and updating NMMIS

11. Relevant Result Frame Work (RFW) Indicators and OP level Indicators

11.1. Relevant RFW indicators

Sl	Indicators	Unit of Measurement	Baseline	Projected Target
1	Proportion of Service provider positions functionally vacant at upazila, district & below level by category	Number	NA	Reduction of 50% vacant post
2	# of additional providers trained in midwifery at Upazila helth facilities	Number	NA	3000

11.2. OP level Indicators (Output/ Process)

Nursing & Midwifery Education, services and administration:

The activities under this OP will contribute to improving service delivery and in particular, will help to achieve result 1.1, increased utilization of essential HPN services, and Result 1.4, improved PHC-CC systems

Sl	Indicators	Unit of measurement	Baseline (source)	Projected Target	
				Mid 2014	Mid 2016
1.	Established curriculum cell and functional	Existence of Cell	DNS/BNC	Done	-
2.	BSc Nursing curriculum Modified	Availability of curriculum	BNC/DNS	Done	
3.	Number of BSc. Nurses Produced	Number	1400, DNS	2000	2500
4.	Developed MSc Nursing curriculum	Availability of curriculum	NA, DNS	Done	
5.	Number of MSc. Nurses Produced	Number	100, DNS	200	400
6.	Developed Diploma in Nursing and Midwifery course	Availability of curriculum	NA	Done	-
7.	Number of Diploma Nurses Produced	Number	26,644	36000	40000
8.	Number of Nurses trained on specialized course	Number	200, DNS	400	600
9.	Established Monitoring and evaluation cell	Existence of Cell	NA, DNS	Done	-
10.	Job description of Nurse	Availability of	NA, DNS	Done	-

Sl	Indicators	Unit of measurement	Baseline (source)	Projected Target	
				Mid 2014	Mid 2016
	and Midwives reviewed	approved JD			
11.	Finalized Nursing and Midwifery master plan	Availability of Master Plan	NA, DNS	Done	-
12.	Published Newsletter and Ng. Journal	Number	NA, DNS	6 (2/year)	10 (2/year)
13.	Accreditation guideline and regulations updated and approved	Availability of guideline	NA, BNC	Done	-
14.	Accreditation visits conducted with updated guideline and measures taken	Number of Reports	NA, BNC	Done	-
15.	Nursing MIS established and reported with updated information	System functional	NA, DNS	Done	-
16.	Number of additional midwives trained.		NA, DNS	1500	3000

11.3.) Source and methodology of data collection:

The primary data source will be all the reports and publications generated under this OP at the Line Director Office. The proposed NMIS will be the most important database for the nursing and midwifery services under HPNSDP. The other important data source will be the reports which will be submitted at the Ministry monthly or time to time; routinely to IMED, Planning Commission, PM Office, Office of HRD Unit of the MOHFW, PMMU under PW of MOHFW, Nursing section of the MOHFW, IBAS and others. Study findings at HEU, BMMS, BDHS, Operation Research and other studies will also be sources of data for this OP information.

In most of the cases data will be collected from the primary and secondary data sources including the NMIS. Studies may be other methods of data collection.