



Data Quality Audit Report

5TH ROUND

Based on the data quality audit visits in 7 districts of Uttar Pradesh during 26-28 February 2019

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Content

1. Executive summary.....	3
2. Background.....	5
3. Goal & objectives of the data audit	5
4. Methodology	
4.1 Audit area and audit team	5
4.2 Selection criteria of the districts and facilities for the audit	7
4.3 Data source	7
4.4 Tool used for data audit	7
5. Data audit findings and solution.....	8
5.1 District Bhadohi.....	12
5.2 District Bulandshahar.....	18
5.3 District Etah.....	23
5.4 District Jhansi.....	28
5.5 District Lakhimpur Kheri.....	32
5.6 District Maunathbhanjan.....	37
5.7 District Shahjanapur.....	42
6. Follow up mechanism.....	47
7. Glimpse of the data audit at district.....	48
8. List of Abbreviations.....	52

1. EXECUTIVE SUMMARY

Data quality audit is a supportive supervision approach with an objective to identify the data quality gap and suggest the corrective action for data quality improvement.

In view of the same, the state data quality audit team was constituted in the month of January 2018 and five rounds of audit has been conducted by the team in 108 facilities of 36 districts. The previous round of audit has also shows the sustainable improvement in the data quality of audited facilities.

The 5th round of data quality audit was conducted in 21 facilities of seven districts which include Bhadohi, Bulandshahar, Etah, Jhansi, Lakhimpur khiri, Maunathbhanjan and Shahjahapur district during 26-28 February 2019. The data audit was conducted with the help of the structured tool which comprises of 115 critical data elements covering HR, training, maternal health, family planning, child health and JSSK programs. This also covers all the data elements of ranking indicators.

The findings of 5th round of data quality audit suggests that about half (47%) of the reported data elements are only matching with the source documents and about one third (34%) of the data elements are reported as blank.

Child health (16%) and JSSK (20%) are the domain with least matching of the reported data with source document while human resource (64%) and maternal health (51%) data reporting is better among all the domain. In terms of district, matching status slightly better in Etah and Lakhimpur Kheri in comparison to rest of the 5 audited districts.

Different facilities are having a different data quality issues but some of the general reason of data quality issues identified during audit includes poor and non-uniform availability of source documents, accountability of staff for reporting of data elements is missing, raw data is available in the register but monthly summary was prepared, lack of understanding on some of data elements, regular data quality supportive supervision by district and block team is lacking, non-availability of nodal person for overall responsibility of data reporting and data quality and non-functional validation committee meeting specifically at district hospital and block level.

Based on the gaps identified, the action plan is developed for each of the audited facility and shared with facility in charge for corrective actions. The action plan includes the gaps, suggestive actionable

point, person responsible and timeline. The feedback meeting was also held with all the blocks to share the findings with all the blocks of the district.

2. BACKGROUND

The availability of good quality data is critical for any program reviews, planning and prioritization. Uttar Pradesh has developed and implemented a robust data system which provides a holistic platform to obtain all the critical data required for the identification of low performing indicators, low performing geographies and factors associated with low/high performance of indicators.

In this regards, monthly facility wise government data system (HMIS/UPHMIS) are the primarily reliable source for data use at all level of health system and it is critical to have availability of high quality data. Recognizing its criticality, the state has initiated data quality audit intervention to improve the data quality and availability of the government data system (HMIS/UPHMIS). Data quality audit is the supportive supervision approach for assessment of data quality gap at facility and corrective actions with the help of structured checklist.

The state has issued a letter (संख्या- 35/2017/303/पांच-9-2017-9(127)/12) for data audit visits by the state team in the month of January 2018.

3. GOAL & OBJECTIVES OF THE DATA AUDIT:

A sound decision depends on a sound data quality, therefore, the goal of the data audit activity is to strengthen sound data reporting by the district. Keeping in view the issues and challenges of data quality in HMIS in the state following objectives have been decided for the audit activity:

1. To validate and improve the data quality of key data elements.
2. To develop the capacity of district and block facility staff responsible for data quality by providing the hand hold support for data quality improvement.

4. METHODOLOGY

4.1 Audit area and audit team

All 75 districts are to be audited once by the state team. Seven districts were decided to be audited at one time by seven state teams. Each team comprises of members from NHM, Directorate and UPTSU. Fifth round of data audit was conducted during 26-28 February 2019. The list of districts and details of team are given below in the Table 1.

Table 1 Data Quality Audit Team

Team	Members Name	Department	Visiting District
Team 1	Dr. Rais Ahmed, Consultant-Maternal Health	NHM	Etah
	Mr. DK Srivastava, (ARO, D&E cell)	DGFW	
	Mr. Nazir Haider, M&E Specialist	UPTSU	
Team 2	Dr. Ashwini Garg, (ADRO, D&E cell)	DGFW	Bulandshahar
	Mr. Aash Mohammad	NHM	
	Mr. Arvind Goswami	NHM	
	Dr. Prahlad Kumar	UPTSU	
Team 3	Mr. Manoj Kumar, ADRO	DGFW	Shahjahanpur
	Mr. Azam Khan, M&E Officer - CP	NHM	
	Mr. Shahid Hussain, Div. Program Manager	NHM	
	Ms. Charu Yadav , M&E Specialist	UPTSU	
Team 4	Mr. Yogesh Kumar	DGFW	Mau
	Mr. Arvind Srivastva, Div. Program Manager	NHM	
	Ms. Neelima Pathak, (Const-Blood-NCD)	NHM	
	Mr. Ishan Tripathi	UPTSU	
Team 5	Dr. Ajay Ghai, JD-MCH	DGFW	Lakhimpur Khiri
	Mr. Jamal Ahmad, PC-Training	NHM	
	Mr. D.P. Singh, PC-EMTS	NHM	
	Mr. Sharad Kumar, M&E Specialist	UPTSU	
	Mr. Ved Prakash, M&E Specialist	UPTSU	
Team 6	Mr. Saran Srivastava, ARO	DGFW	Jhansi
	Mr. Anand Chaubey, Div. PM- Varanasi	NHM	
	Mr. Manish Kumar Soni, Consultant, FP	NHM	
	Dr Pradeep Gupta, M&E Specialist	UPTSU	
Team 7	Dr. SVP Pankaj, DGM-M&E	NHM	Bhadohi
	Mr. Virendra Pratap (ARO, D&E cell)	DGFW	
	Mr. Brijesh Mishra, Div. PM, Gorakhpur	NHM	
	Dr. Shiva Nand Chauhan, M&E Specialist	UPTSU	

4.2 Selection criteria of the districts and facilities for the audit

The districts were selected based on the following criteria:

- 5 districts- Randomly selected
- 1 district- Random selection among top 5 in district performance ranking
- 1 district- Random selection among bottom 5 in district performance ranking

Further, two block facilities and one district hospital are decided for the audit in each district. The block facilities were identified based on the reporting of non-zero data elements. One good performing and another poor performing block facilities were selected for the audit. District Women Hospital (DWH) or District Combined Hospital (DCH) as per availability in the district was selected. This exercise has been done by the state and the list was shared with the data audit team.

Thus, total 21 facilities from 7 districts were identified to be audited.

The purpose of selecting good performing district or facility is to understand good practices there and share during feedback meeting.

4.3 Data source

HMIS and UPHMIS reported data on UPHMIS portal for January 2019 was decided to be audited.

3.4 Tool used for data audit

A structured tool has been used which includes 115 data elements from HMIS & UPHMIS monthly reporting format. These elements are related to human resource, training status of staff, availability of RMNCH+A drugs & supplies and performance. Portal data for January 2019 was filled before visit to the facility so that data can be matched with records. Action plan sheet is also there in the tool. The tool is attached as *Annexure 1*.

5. DATA AUDIT FINDINGS AND SOLUTION

While data audit, 115 data elements reporting for January 2019 from portal data was matched with available records at the facility. The summary of data audit by different sections are given in Table 2

Table 2 Summary of 5th round data quality audit

Data Element	% of Blank	% of Matched	% of Over Reported	% of Under Reported	% of Source document not available*
HR	14	64	10	12	0
Training	42	44	7	6	36
Drugs and Supply	26	47	8	18	0
Maternal Health/FP	26	51	9	14	6
Child Health	80	16	0	4	47
JSSK program	57	20	7	16	30
Total	34	46	8	13	15
Highlighted if	> 20 %	< 50 %	> 10 %	> 10 %	> 20 %

Only 46% of data elements were found to be matched with source documents. This matching remained higher for data elements pertaining to human resource followed by maternal and family planning. Eight percent of data elements were found to be over-reported, however, 13% of data elements remained over-reported. Source document was not found to be available for 15% of data elements and these data elements are pertaining to training, child health and JSSK.

The summary of data audit by districts is given in Table 3.

***Note-** Total of blank, matched, over reported and under reported should be 100% and “% of Source document not available” is explaining reason of low data quality of facility.

Table 3- District wise summary of data quality audit

S.No.	District	% of Blank	% of Matched	% of Over Reported	% of Under Reported	% of Source document not available*
1	Bhadohi	40	43	5	13	15
2	Bulandshahar	29	46	11	13	11
3	Etah	28	52	4	16	19
4	Jhansi	54	37	4	5	34
5	Lakhimpur Kheri	25	52	9	13	0
6	Maunathbhanjan	30	42	10	18	18
7	Shahjahanpur	32	47	11	9	5
	Total	34	46	8	13	15
Highlighted if		> 20 %	< 50 %	> 10 %	> 10 %	> 20 %

Matching status remained higher in Etah and Lakhimpur Kheri comparatively. Over-reporting remained higher in Bulandshahar and Shahjahanpur, however, under-reporting remained higher in Maunathbhanjan and Etah. Source document remained challenge in Jhansi; one third of data elements are reported without source documents.

- **% of blank-** Data elements with no reported numerical value in portal. (Left blank)
- **% of matched-** Data elements reported value is matched with the value recorded in source document.
- **% of over reported-** Reported value of the data element is greater than the value recorded in source document.
- **% of under reported-** Reported value of the data element is less than the value recorded in source document.
- **% of source document not available-** Data elements whose source documents are not available at facility

***Note-** Total of blank, matched, over reported and under reported should be 100% and “% of Source document not available” is explaining reason of low data quality of facility.

MAJOR ISSUES AND SUGGESTIVE ACTION PLAN FOR IMPROVING DATA QUALITY IN THE STATE

While conducting the data audit, several issues came into notice, and these issues need to be dealt to ensure correct and complete reporting in the district. There are following suggestive action plan based on issues noticed by the teams while data audit at different districts:

1. Unavailability of source document: At many places old delivery register and manual ANC registers were found in use. Training record of facility staff is not available at many facilities, if available, it is not updated.

Action plan: The district (CMO office) needs to make available updated printed Delivery and ANC registers at all PHC, CHC & DH facilities.

BPM/ARO/MOIC at the block and DH manager/nodal of data in-charge at DH need to maintain and update the training record.

2. Data element wise accountability of staff is missing: There are 313 data elements in HMIS format and almost the same in UPHMIS format. There are many reporting points in a facility (PHC/CHC/DH). To ensure complete reporting all staff are supposed to share the information such as LT to share lab information, SN to share delivery & newborn related data elements, MO to share OPD related details and so on. However, many of the staff are not aware of regarding reporting. Therefore, completeness of the format is affected.

Action plan: Data element wise accountability of staff need to be fixed and verified by MOIC at the block and by CMS at the DH.

3. Monthly summary of reporting data elements in the record is missing: All staff rendering services and maintaining record need to report monthly summary of reporting duration i.e., 21st to 20th on time. The summary of monthly reporting data elements in records were found missing at majority of facilities.

Action plan: All reporting staff must prepare monthly summary for reporting data elements on the record. It shows accountability for reporting data elements.

4. Understanding issue with some data elements: While data audit it came to notice that there is understanding issue for the reporting of 4 ANC, 4 HB and for data elements pertaining to child health and JSSK.

Action plan: Training of facility staff (staff nurse, ANM, BPM, pharmacist etc) on definition of data elements specially related to 4 ANC, child health and JSSK need to be conducted by the district team.

5. Mentoring of block official to ensure correct and complete reporting is missing: Most of the time issues of reporting are raised in district meeting and probable solutions are discussed. But supportive supervision regarding correct and complete reporting is missing in most of the districts.

Action plan: A committee must be made at district level which may comprise of ACMO RCH, DPM, district AdRO, DDM & HMIS operator. The committee needs to replicate the data audit activity in some poor reporting blocks monthly to ensure the quality in the reporting.

6. Validation committee was found to be not functional: Validation committee has been made officially in all districts but it is not functioning at all or not functioning in effective way.

Action plan: District and block validation committee must be able to analyze and review the data quality status on monthly basis and take corrective actions. The districts need to make validation committee meeting functional and ensure quality reporting in the district on time.

Facility level action plan is also developed for each of the visited facility and shared with facility in charge during data audit with timeline for completion of each of the identified gap

5.1 DISTRICT BHADOHI

Two blocks namely Deegh and Suriyawa and district combined hospital were visited by the team for data quality audit. There are some major challenges of data quality found during the visit. Major data quality challenges, possible solution and responsible designation are given below in the table.

#	Issue	Possible solution	Responsible person
1	Completeness issue- many data elements are left blank in UPHMIS and HMIS formats.	To match portal copy of block facility formats (HMIS/UPHMIS) with filled manual formats by ARO/BPM during validation committee meeting and ensure reporting of each data element in the format.	ARO/BPM/MOIC at block facility. DH Manager/CMS at DH.
2	Use of old HMIS/UPHMIS formats at some facilities. PHCs are not filling HMIS & UPHMIS PHC format.	To ensure the use of correct HMIS and UPHMIS formats at SC, PHC and CHC levels. Validation committee during meeting will examine and ensure the use of correct HMIS/UPHMIS formats in the block.	CMO/MOIC/BPM
3	Training record of facility staff not available, if available, it is not updated.	Training record has to be maintained and updated in coordination with all required staff by Hospital Manager. In a block the training record is to be maintained in a register with the help of all staff by BPM/ARO. In order to prepare training record of facility staff (MO MBBS, MO AYUSH, Staff Nurse & ANMs/LHV) a separate register has to be made and updated it monthly so that correct information on training may be filled in monthly UPHMIS facility format.	BPM/ARO/MOIC at Block DH Manager/CMS at DH
4	Understanding issue for some data elements like 4 ANC and stock status as adequate & inadequate not found to be clear.	To inform/explain staff nurse/ANM the correct way of reporting for the data element "Number of PW received 4 or more ANC check-ups". As per HMIS manual if a woman comes for the ANC check-up for the first time, in the late	ARO/BPM

#	Issue	Possible solution	Responsible person
		<p>weeks of pregnancy it should NOT be counted as 4th ANC check-up, it would be her 1st ANC check-up. Only those pregnant women who received their 4th or more ANC check-up during the reporting month are to be reported.</p> <p>In case of stock related data in HMIS, if the stock is available for further two months of reporting month will be reported as 'Adequate' else 'Inadequate'.</p>	
5	MCTS number is missing in ANC & delivery registers.	To ensure updating MCTS number on ANC & delivery registers daily/weekly.	MOIC/MCTS operator
6	Person wise distribution of data elements is missing at the facility.	To separate data elements of HMIS/UPHMIS person wise, orient once and ensure reporting on time	MOIC at block and CMS at DH.
7	Reporting concerns for some sections like child diseases, child health and JSSK are left blank or filled with zero or incomplete.	<p>For ensuring Childhood Diseases reporting in HMIS/UPHMIS all doctors running OPD need to ensure to mark the childhood diseases in OPD register and make the summary each day.</p> <p>MOIC needs to understand and ensure the reporting of JSSK part through concerned person like SN & pharmacist and person responsible for 102 & 108 record maintenance.</p>	MOIC/Pharmacist/B PM/DH Manager
8	Validation committee is functional but it is not effective.	<p>Validation committee meeting needs to be conducted in effective way.</p> <p>It needs to fix a certain date (between 27, 28 or 29 of every month) for validation committee meeting and follow the following steps–</p> <p>Step 1- Checking use of correct format</p> <p>Step 2- Matching of manual format with portal format</p> <p>Step 3- Audit NITI AYOOG & ranking data elements with record</p>	<p>Validation committee (MOIC/ARO/HEO/BPM/MCTS operator) at block facility</p> <p>(CMO/ACMO RCH/AdRO/DPM/HMIS operator) at district level</p> <p>- Need to share meeting minutes to CMO office/DPMU</p>

#	Issue	Possible solution	Responsible person
		Step 4- Auditing some SC records with format data Step 5- Ensure correction on portal by importing off line excel data	

1. Block (Deegh): Block CHC Deegh, Bhadohi (**Date of visit:** 26/02/2019)- First day the team visited BCHC Deegh to audit the January 2019 reported data on UPHMIS portal. The team spent more than 4 hours with block officials to audit the data. The team found out gaps and gave possible solutions to meet out the gaps as soon as. The details of action plan is given below in the table.

#	Issue	Possible solution	Responsible person	Timeline
1	Training record of facility staff not available.	-In a block the training record is to be maintained in a register with the help of BPM, ARO and MOIC. -In order to prepare training record of facility staff (MO MBBS, MO AYUSH, Staff Nurse & ANMs/LHV) a separate register has to be made and updated it monthly so that correct information on training may be filled in monthly UPHMIS facility format.	BPM/ARO/MOIC	28 February 2019
2	Child health section in UPHMIS BCHC format is filled with zero showing no service for children aged 0-5 years.	To ensure reporting of child health services. Child health related data elements in HMIS/UPHMIS formats were explained to Pediatrician, pharmacist, BPM and MOIC.	MOIC/Pediatrician /Medical officer/Pharmacist	March 2019
3	Understanding issue for some data elements related to transportation from lower to higher, home to hospital and drop back separately for PW and newborn	To ensure correct reporting. Block officials were explained each data elements under JSSK section.	MOIC/BPM/ARO /The clerk	March 2019

#	Issue	Possible solution	Responsible person	Timeline
	under JSSK section reporting.			
4	Validation committee meeting is functional but not working effectively.	A certain date on 30 th was decided to fix for the validation committee meeting and to conduct it in effective way. Need to share meeting minutes to CMO office/DPMU	MOIC/HEO/BPM /MCTS operator as per order SPMU/MIS/2015-16/70/2962 dated 04/08/15	March 2019
5	Two SCs were found using old format of HMIS for reporting.	To ensure the use of correct HMIS and UPHMIS formats at SC, PHC and CHC levels. ANM must be given correct format.	MOIC/BPM	March 2019

2. Block (Suriyawa): Block CHC Suriyawa, Bhadohi (**Date of visit:** 26/02/2019)- The audit team visited block CHC Suriyawa on the second of the visit. Gaps were identified during the audit and possible solutions were discussed. The detail action plan of the block is given below:

#	Issue	Possible solution	Responsible person	Timeline
1	Correct CHC HMIS format was not used for reporting. PHCs are not filling HMIS & UPHMIS PHC format. Use of old SC UPHMIS format in the block.	To ensure the use of correct HMIS and UPHMIS formats at SC, PHC and CHC levels.	MOIC/BPM	March 2019
2	Training record is available but not updated.	To update training record monthly.	BPM	March 2019
3	Summary of delivery information in the delivery register for Jan 2019 is missing.	To ensure preparing a summary of required information at the end of reporting duration.	SN for delivery information	February 2019
4	Validation committee is partly functional.	A certain date on 29 th was fixed for the validation committee meeting and to conduct it in effective way, detailed in district summary.	MOIC/HEO/BPM/MCTS operator as per order SPMU/MIS/2015-	March 2019

#	Issue	Possible solution	Responsible person	Timeline
		Need to share meeting minutes to CMO office/DPMU	16/70/2962 dated 04/08/15	
5	Child health related summary is not prepared in OPD register by doctors.	To explain doctors child health data elements and stick the elements on the table of pediatrician/medical officers. To ensure preparing summary for child health related data elements per day in OPD register to ensure reporting.	MOIC/Pediatrician/Medical officer/Pharmacist	March 2019
6	JSSK recording issue- not clear about source document to report required information especially for transportation.	To ensure reporting of transportation for pregnant women and newborn under JSSK section. Each element under JSSK was explained to the block officials.	MOIC/BPM/ARO/The clerk	March 2019
7	Person wise distribution of data elements of HMIS/UPHMIS is missing.	To segregate elements of HMIS/UPHMIS as per reporting person. Each reporting person prepare monthly summary and submit to BPMU on 21 st .	MOIC & BPM	March 2019

3. DHQ: District combined hospital Maharaja Chet Singh, Bhadohi (**Date of visit:** 27/02/2019)-
The team visited the DCH in the first half of second day of the visit. The audit was performed with the help of DH Manager, Pharmacist and the clerk. The action plan of DCH is detailed in the below table.

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Reporting period for Jan month is of 20 days.	To ensure correct reporting for December 2018 and January 2019.	CMS and DH manager	March 2019

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
2	HR and stock sections in the format is incomplete.	Ensure to complete the HR and stock sections.	DH Manager	March 2019
3	Many sections in UPHMIS BCHC format like child health, JSSK & process indicators are left blank.	To ensure reporting of the data as per the availability. To explain doctors child health data elements and stick the elements on the table of pediatrician/medical officers. To ensure segregation of women and newborn transportation to ensure reporting under JSSK section.	MOIC/BPM	30 th Nov 2018
4	Validation committee is not formed at the DCH.	GO was shared to make the committee, process of the meeting was described and 28 th of each month was fixed for the meeting.	CMS, Pharmacist & hospital manager	March 2019
5	No operator at DCH.	HMIS operator will come at the hospital for few hours for monthly data entry.	DH Manager & DPM	March 2019
6	Person wise distribution of data elements of HMIS/UPHMIS is missing.	To segregate elements of HMIS/UPHMIS as per reporting person. Each reporting person prepare monthly summary and submit to DH manager on 21 st .	CMS, Pharmacist & DH manager	March 2019
7	Recording of 4 ANC is not taking place.	To ensure recording of 4 ANC by MO and ANM at the facility.	CMS/DH manager/MO/ANM	March 2019

5.2 DISTRICT BULANDSHAHR

Two blocks namely BCHC- Gulaothi, Bulandshahar, BCHC-Sayana and Kasturba Mahila Chikitsalya (DWH) were visited by the team for data quality audit. There are some major challenges of data quality found during the visit. Major data quality challenges, possible solution and responsible designation are given below in the table.

#	Identified issue	Possible Solution	Responsible person
1	Lack of accountability was found regarding data collection, compilation and for uploading on portal.	In the district, BPMs at blocks and Hospital Manager at DH have to own responsibility for data quality including timely collection, compilation, validation etc.	MOIC/BPM at block and CMS/Hospital Manager (HM) at DH
2	Training record for block officials was not found.	Training record has to be maintained and updated in coordination with Hospital Manager, Computer operator and SNs in DWH. -In blocks these records are to be maintained in a register with the help of BPM and SNs	BPM at a block and HM at DH
3	Summary on each record in the facility is missing.	Need to prepare a summary of required information at the end of reporting duration.	Each concerned person
4	Clarification of data elements was not updated in DH and visited block facilities.	Need an orientation of all concerned staff at blocks/facility and DWH.	MOIC at block and Hospital Manager at DWH/DM&E.
5	Validation committee not functional at all.	Need to fix a certain date (between 30 th & 1 st of every month) for validation committee meeting – Step 1- Checking use of correct format Step 2- Matching of manual format with portal format Step 3- Audit data elements with record Step 4- Auditing some SC records with format data Step 5- Ensure correction on portal by importing off line excel data	Validation committee (MOIC/ARO/HEO /BPM/MCTS operator) at block facility (CMO/ACMO RCH/AdRO/DPM/ HMIS operator) at district level
6	Not capturing JSSK data	A register is required to be made and data elements required to capture as per format in coordination with pharmacist, LT,	HM at DH/BPM at block

#	Identified issue	Possible Solution	Responsible person
		SNs/ANMs. HM in DWH and BPM in block has to be given the responsibility.	
7	Child health data was found blank and no proper document was found for collection of the data.	Summary of OPD and IPD particularly for Pneumonia and Diarrhoea cases were not found on daily and monthly basis. MOIC/Pediatrician & Pharmacist have to maintain the record properly.	MOIC/Pediatrician & Pharmacist

Block- BCHC- Gulaothi, Bulandshahar

There are following issues identified during data quality audit and suggested action plan for BCHC Gulaothi as follows:

#	Identified Issue	Action Plan	Responsible Person	Timeline
1	Lack of accountability was found regarding data collection, compilation and for uploading on portal.	A proper mechanism for data collection has to be maintained after setting responsibility by BPM and MOIC and it should be monitored regularly.	BCPM/BPM	30 th March 2018
2	Training record for block officials was not found	A prescribed format has been given for preparing training register and suggested it to update on regular basis	BPM/BCPM	30 th March 2018
3	Mismatch was found in ASHA filled against approved and mismatch was found in ASHA training record for induction module 6 & 7 round 4 was not available	Training register has to be prepared and regular update has to be done.	BCPM/ MOIC	30 th March 2018
4	All the data elements of HMIS such as delivery, live birth, PPIUCD, immunization, death and allopathic OPD was found blank means data for HMIS was not uploaded for the month.	BPM and ARO need to check the format before entry.	MOIC/BPM/ ARO	30 th March 2018
5	JSSK related data elements were left blank on portal and delicacy was found in diet record.	BPM should check the format before entry	MOIC/ BPM	30 th March 2018

#	Identified Issue	Action Plan	Responsible Person	Timeline
6	Validation committee meeting is not taking place regularly.	The meeting needs to be regularly conducted for correction of data before locking.	MOIC/ARO/BPM	30 th March 2018
7	Child health data was found blank and no proper document was found for collection of data.	Summary of OPD and IPD particularly for Pneumonia and Diarrhoea cases were not found on daily and monthly basis. MOIC/Pediatrician and Pharmacist have to maintain the record properly.	MOIC/Pediatrician & Pharmacist	30 th March 2018

Block- BHC-Sayana, Bulandshahar

Based on data audit at the facility following issues were noticed. The details of issues and suggested action plan are as follows:

#	Identified Issue	Action Plan	Responsible Person	Timeline
1	Data mismatch was found in generated report from portal for HMIS/UPHMIS and data which are collected in hard copy.	BPM and MOIC has to take responsibility for proper data validation checks.	MOIC/BPM	30 th March 2018
2	Mismatch on document, formats and portal was found.	Validation meeting should be regularly done for removing data errors.	MOIC, BPM, SN, Operator	30 th March 2018
3	Training record for all block officials was not found	A format has given for preparing training register and suggested it to update on regular basis.	BCPM/BPM	30 th March 2018
4	Source registers of HMIS data for ANC & HB and discharge within 48 hours are not available.	ANC register need to be maintained by ANM / SN giving the ANC services.	MOIC/ BPM/SN/AM	30 th March 2018
5	Source register for JSSK records like diagnosis services for pregnant women and for newborn health was not found and mismatch was found	Source register for JSSK for each elements has to be updated and concern register has to be prepared as earliest.	MOIC/BPM	30 th March 2018

#	Identified Issue	Action Plan	Responsible Person	Timeline
	in transported from home to hospital			
6	Summary of Labor room register, ANC register, referral out register not found	The summary has to be prepared for each and every register.	MOIC / CMO	30 th March 2018
7	Mismatch was found in Child health data and summary of the same was not maintained.	Summary of OPD and IPD particularly for Pneumonia and Diarrhoea cases were not found on daily and monthly basis. MOIC/Pediatrician and Pharmacist have to maintain the record properly.	MOIC/Pediatrician & Pharmacist	30 th March 2018

KMC Kasturba Mahila Chikitsalya, (DWH) – Bulandshahar:

Major issues and suggested action plan for KMC Kasturba Mahila Chikitsalya based on data quality audit are as follows:

#	Identified Issue	Action Plan	Responsible Person	Timeline
1	ANC Register was not Printed (Handmade was available) during Audit due to which 4 ANC checkups is not being captured.	To ensure the availability of printed ANC register.	CMS/Hospital Manager	30 th March 2018
2	Data on HMIS and UPHMIS are not matched as per formats like live births and still births.	It has suggested to validate the data before uploading on portal.	Hospital Manager/CMS	30 th March 2018
3	Stock register for drug and logistics was not updated	It was suggested to Pharmacist to update the Stock register regularly.	Pharmacist	30 th March 2018
4	No source register available for JSSK except diet. Register such as Diagnostic, drop back, IFT, home to hospital not available at Facility.	Source register such as Diagnostic, Drop back, IFT, home to hospital need to be maintained at facility and ensure reporting.	CMS/HM/SN	30 th March 2018

#	Identified Issue	Action Plan	Responsible Person	Timeline
5	108 and 102 records for IFI, drop back data was not updated due to poor mechanism.	The data from source register need to be bifurcated according to formats.	CMS/HM	30 th March 2018

5.3 DISTRICT ETAH

Two block facilities namely Sheetalpur BPHC, Jalesar BCHC and District Women Hospital (DWH) were visited by the team for data quality audit. There are some major challenges of data quality found during the visit. Major data quality challenges, possible solution and responsible designation are given below in the table.

#	Issue	Possible solution	Responsible person
1	Block Project Management Unit (BPMU) Sheetalpur is operational from DHQ though the BCHC is about 14 Kms far off, causing mismatch of data with source documents.	The BPMU should be made operational in the vicinity of BPHC/BCHC. This will enable the programme managers or other concerns to take necessary measures at the spot. Data can be verified with source at the facility. This will help to follow up timely data collection and corrections whenever required.	CMO/DPM/MOIC / BPM
2	Training record of facility staff not available /not updated the visited facilities.	-Training record has to be maintained and updated in coordination with Hospital Manager, Computer operator and SNs in DWH. -In blocks these records are to be maintained in a register with the help of BPM and SNs	MOIC//BPM/Hospital Manager/NM
3	Responsibility of data collection, compilation, validation and uploading on time	In the district, ARO/BPM at the block and Hospital Manager at DH has to own responsibility for data quality including timely collection, compilation, validation etc.	Hospital Manager /BPM
4	Summary on each record in the facility is missing.	Need to prepare a summary of required information at the end of reporting duration.	Each concerned person
5	Old type Delivery Register is being used at BPHC	It was talked with DPM and CMO in the meeting that the new version of delivery register should be introduced in BPHC so that data on complications of mother & NB are taken and also other data can be captured.	DPM/BPM/SN
6	Clarification of data elements is missing at the facility.	Need an orientation of all concerned staff at blocks/facility and DWH.	ARO/BPM at block and Hospital Manager at DWH/DM&E.
7	Not capturing JSSK data	Registers are required to be made and data elements required as per format must	HM at DH and BPM at the block

#	Issue	Possible solution	Responsible person
		be recorded in coordination with pharmacist, LT, SNs/ANMs. HM in DWH and BPM in block has to be given responsibility.	
8	Online data uploading	In many facilities HMIS/UPHMIS data is uploading online resulting discrepancies in data of previous months. In this regard it was suggested to prepare offline data of each facility first, and then the offline data can be imported.	DPM/BPM/DEO
9	Validation committee not functional at all	Need to fix a certain date (between 30 th & 1 st of every month) for validation committee meeting – Step 1- Checking use of correct format Step 2- Matching of manual format with portal format Step 3- Audit data elements with record Step 4- Auditing some SC records with format data Step 5- Ensure correction on portal by importing off line excel data	Validation committee (MOIC/ARO/HEO /BPM/MCTS operator) at block facility (CMO/ACMO RCH/AdRO/DPM/HMIS operator) at district level

1. Block PHC Sheetalpur, Etah (Date of visit: 26/02/2019):- At present, the block PHC is at Kharaua the new building in the name of BCHC Sheetalpur is functional at Baghwala town, but the BPMU is operational from DHQ leads to improper coordination, data collection, correction in data and uploading. The BPMU should be made operational at BCHC building at the earliest. Some of the issues observed during audit are as follows:

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Maintaining and updating of training register.	The data of ASHA training was in soft copy but not of other staff, needed to update in a register for all.	BPM/BCPM	15 th Mar 2019
2	Improper maintenance of ANC-4 and children full immunization records	Correct report need to be recoded for ANC-4 and full immunization.	BPM/ANM	15 th Mar 2019
3	Admission register for PW was not there.	It was told to make a separate register for admission of PW including delivery.	SN	5 th Mar 2019

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
4	Summary of each record in the facility is not properly maintained.	Need to prepare summary of each record as per reporting requirement at the end of reporting period in proper way and report accordingly.	Concerned person	From next reporting onwards
5	Data elements to be filled in the format were left blank and also uploaded blank.	It was suggested to give orientation to all staff concerned for reporting to fill all elements in the format properly and should be checked by ARO/BPM.	MOI/c/AR O/BPM	15 th Mar 2019
6	Data elements of Child health section was not available at all.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 years by doctors on daily basis and then compiled by the pharmacist. BPM must ensure the same. Details of medicine given to children for diarrhea and pneumonia should be mentioned and entered in portal.	MOI/c, BPM & Pharmacist	From next month onwards
6	Role distribution of data elements for data collection is missing	To ensure distribution of data elements of HMIS/UPHMIS formats to concerned persons for timely reporting.	MOIC & BPM with concerned in-charge	By 15 th Mar 2019
8	Validation committee not functional at all.	30 th /1 st of the month was proposed for the validation committee meeting. Need to share meeting minutes to CMO office/DPMU	MOIC/ARO /BPM/Data entry operator	31 st Mar 2019
9.	Improper JSSK Reporting-most of the data elements were left blank	Need to maintain the record of JSSK related data in a register in coordination with SNs, Ambulance in-charge, Pharm, LT etc.	Pharmacist/S N/ BPM	20 th Mar 2019

2. BCHC Jalesar, Etah (Date of visit: 27/02/2019). This facility has maintained the data in a better way but maternal and newborn data were not well maintained. The BPM, DEO and SNs need some more orientation on data elements of HMIS and UPHMIS formats. MOIC has to give some more focus to ensure timely and correct data availability. There are some of the issues observed data audit with action plan:

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Maintaining and updating of training register.	A separate register of training is required to be made and suggested them to update. Also, details of	BPM/BCPM/ SN	15 th Mar 2019

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
		ASHA training was there but not properly entered on portal.		
2	Improper maintenance of ANC-4 and children full immunization records	Correct report need to be recoded for ANC-4 and full immunization.	BPM/ANM	20 th Mar 2019
3	Summary of each record in the facility is not properly maintained.	Summary of each record needs to be prepared at the end of the reporting month.	SN/ANM/ BPM	From next reporting onwards
4	All data elements not filled correctly as per source register.	It was suggested to give orientation to all staff concerned for reporting to fill all the formats properly and should be checked by ARO/BPM under the supervision of MOI/c.	MOI/c/ARO/ BPM	20 th Mar 2019
5	Lack of communication among staff who are responsible of reporting.	-MOIC and BMP were told to make coordination and have a meeting on 22 nd or 23 rd of every month to compute the data	MOI/c & BPM	20 th Mar 2019
6	Data elements of Child health section was incomplete.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 years by doctors on daily basis and then compiled by the pharmacist. BPM must ensure the same. Details of medicine given to children for diarrhea and pneumonia should be mentioned and entered in portal.	MOI/c, BPM & Pharmacist	From next month onwards
7	Validation committee not functional at all.	30 th /1 st of the month was proposed for the validation committee meeting. It needs to share meeting minutes to CMO office/DPMU	MOIC/ARO/ BPM/HEO/DEO	5 th Mar 2019
8.	Improper JSSK reporting- most of the data elements were left blank.	Need to maintain the record of JSSK related data in a register in coordination with SNs, Ambulance in-charge, Pharmacist, LT etc.	Pharm/SN/BPM	6 th Mar 2019
9	No diet register at facility as it was with the vendor	Proper diet register should be prepared and maintained regularly and should be kept at the facility	MOI/c & BPM	20 th Mar 2019

3. District Women Hospital, Etah (Date of visit: 28/02/2019):- In DWH Hospital Manager is in place but data is being managed by the data entry operator and by some support of Nurse Mentor resulting many data elements left blank or zero in spite of services are available and provided.

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Training register was not available.	A separate register of training was made on the day of visit and suggested them to update.	Hospital Manager/DEO	5 th Mar 2019
2	Training on HMIS/UPHMIS of HM, SN, Pharm, DEO, LT etc.	It was suggested to organize a training of all concerned staff	DPM/HM/DM&ES	7 th Mar 2019
3	Summary of each record in the facility is missing.	Need to prepare summary of each record as per reporting requirement at the end of reporting period	Each concerned person	From next reporting onwards
4	No diet register available	Diet register should be available as per guideline and updated regularly	SN	5 th Mar 2019
5	Improper JSSK Reporting-most of the data elements were left blank or wrongly reported	Need to maintain the record of JSSK related data in a register in coordination with SNs, Ambulance in-charge, Pharmacist, LT etc.	Pharmacist/SN/HM	7 th Mar 2019
6	Role distribution of data elements for data collection is missing	To ensure distribution of data elements of HMIS/UPHMIS formats to concerned persons	CMS & Hospital Manager	7 th Mar 2019
7	Validation committee is not functional.	Need to make it functional (30 th to 1 st of each month)	Hospital Manager and concern record keeping in-charge	5 th Mar 2019

5.4 DISTRICT JHANSI

Two blocks namely Badagaon BCHC, Moth BCHC and District Women Hospital (DWH) were visited by the team for data quality audit. There are some major challenges of data quality found during the visit. Major data quality challenges, possible solution and responsible designation are given below in the table.

#	Issue	Possible solution	Responsible person
1	Training record of facility staff not available in any of the visited facilities.	-Training record has to be maintained and updated in coordination with Hospital Manager in DWH Jhansi. -In blocks these records are to be maintained in a register with the help of BPM/BCPM and DEO.	BPM/BCPM and DEO
2	Summary of complication in labor room register in the DWH is missing.	Need to prepare a summary of required information at the end of reporting duration.	SN and Hospital Manager
3	Responsibility of data collection, compilation, validation, and uploading on time	To separate data elements of HMIS/UPHMIS person wise, orient once and ensure reporting on time.	MOIC at block and CMS at DH.
4	Not capturing JSSK data	-A register is required to be made and data elements required as per format must be recorded in coordination with pharmacist, LT, SNs/ANMs. HM in DWH and BPM in block has to be given responsibility.	HM/BPM
5	Validation committee not functional at all	Need to fix a certain date (between 26 & 28 of every month) for validation committee meeting – Step 1- Checking use of correct format Step 2- Matching of manual format with portal format Step 3- Audit data elements with record Step 4- Auditing some SC records with format data Step 5- Ensure correction on portal by importing off line excel data	Validation committee (MOIC/ARO/HEO/BPM/MCTS operator) at block facility (CMO/ACMO RCH/AdRO/DPM/HMIS operator) at district level - Need to share meeting minutes to CMO office/DPMU

1. Block Moth (BCHC Moth): There are following observations and action plan based on data quality audit at the facility:

#	Identified Issue	Action Plan	Responsible person	Timeline
1	Training register was not available.	Mentioned about the register and suggested the format of register	BPM	Done
2	Stock book registers maintenance - Two stock book registers are being maintained; one by Pharmacist and other by Health supervisor.	Main stock book register to be maintained by Pharmacist and a sub stock book to be maintained by others (if needed).	Pharmacist	15 th March 19
3	Data elements of child health section was not available at all.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 years by doctors on daily basis and then compiled by the ward boy.	MO and Ward boy follow up by BPM	5 th March 19 and follow in each month
4	No source register for JSSK related data elements like Diagnosis services, IFT and drop back for Pregnant women and for newborn health	Source register for JSSK for each elements has to be prepared and updated on regular basis	BPM	15 th March 19
5	ANC register is not maintained properly- 4 ANC checkup are not mentioned.	For every ANC case all checkups should be mentioned separately. If 4 ANC is completed and mentioned in the register then only it can be considered as 4 ANC check- up	LMO/ SN	Every month

2. Block- Badagaon (BCHC Badagaon): Gaps were identified during the data quality audit and possible solutions were discussed. The detail action plan of the block is given below:

#	Identified Issue	Action Plan	Responsible person	Timeline
1	Filled UPHMIS format not available at facility and data not uploaded on the portal.	To ensure the data and format must be at facility. Data need to upload on time.	BPM/ARO/BCPM	5 th March 19
2	Training register was not available	Training register has been prepared and suggested to update every month.	BPM/ARO/BCPM	Done

#	Identified Issue	Action Plan	Responsible person	Timeline
3	Data elements of Child health section was not available at all.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 years by doctors on daily basis and then compiled by the ward boy.	Pharmacist	20 th March and follow in each month
4	No source register for JSSK related data elements like Diagnosis services, IFT and drop back for Pregnant women and for newborn health	Source register for JSSK for each elements has to be prepared and updated on regular basis	BPM	15 th March 19
5	Data validation committee are organized but verification of data is not done	Data Validation Committee should be activated and needful data correction is required for every month	MOIC/ARO/BPM	Every 25 th of the month
6	Medicine are available but reported as blank in portal	Data reporting errors on portal was corrected. Pharmacist should take responsibility for data compilation.	HMIS Operator and Pharmacist	Every 25 th of the month

3. DWH, Jhansi: The audit was performed with the help of DH Manager, Pharmacist and the clerk.

The action plan of DWH is detailed in the below table.

#	Identified Issue	Action Plan	Responsibility	Timeline
1	Human resources data base not clear and over reporting.	Establishment staff should be clear and update the data.	Senior Clerk and DEO	5 th March 19
2	Training register was not available	Training register has been prepared and suggested to update every month.	Hospital Manager	Done
3	Pathology and SNCU registers were not properly maintained and summarized.	The register should maintain and summarize at the end of the day or month.	LT and SN	5 th March 19
4	Maternal and Child complication data not reporting while data available in sources register.	To ensure monthly summary of required elements related to HMIS/ UPHMIS in Labor room register and will report in the portal.	SN	Every Month

#	Identified Issue	Action Plan	Responsibility	Timeline
5	Still birth is not bifurcated as Fresh or Macerated in Labor room register.	SNs were oriented for the same and advised that it should be part of summary in each month.	SN	Immediately and every month
6	ANC register was not properly maintained.	Suggested to maintain it in proper format	SN	5 th March 19

5.5 DISTRICT LAKHIMPUR KHERI

Two blocks namely BCHC Behjam, BCHC Nakaha and District Women Hospital (DWH) were visited by the team for data quality audit. There are some major challenges of data quality found during the visit. Major data quality challenges, possible solution and responsible designation are given below in the table.

#	Issue	Possible solution	Responsible person
1	Human Resource register & Training record of facility staff not available and ANC register not maintained properly along with BCG and Other immunization register was separated in the visited facilities.	Human Resource register, Training record and ANC Register has to be maintained and updated in coordination with Hospital Manager and SNs in DWH Lakhimpur Kheri. In blocks, these records are to be maintained in a register with the help of HEO/BPM/SNs and ARO. To prepare training record of facility staff (MO MBBS, MO AYUSH, Staff Nurse & ANMs/LHV) a separate register has to be made updated it monthly so that correct information on training may be filled in monthly UPHMIS facility format.	BPM/HM
2	Responsibility of data collection, compilation, validation, and uploading on time	In the block MOIC, ARO & BPM and Hospital Manager at DWH have to own responsibility for data quality including timely collection, compilation, validation etc.	CMS & HM at DH and MOIC/ARO/BPM at the block.
3	Summary sheet on each record in the facility is missing.	Need to prepare a summary of required information at the end of reporting duration.	Each concerned person
4	Old type delivery register is being used at BCHC Nakaha.	It was talked to ACMO and CMO in the meeting that the new version of delivery register need to be introduced in BCHC Nakaha so that data on complications of mother & NB are taken and also other data can be captured.	CMO/DPM
5	Clarification of data elements is missing at the facility.	-Need an orientation of all concerned staff at blocks/facility and DWH, On Data Element of all the Reporting formats.	MOIC at block and HM at DCH.
6	Child health (0-5 year) OPD was not maintained in all the visited facilities.	Summary of OPD and IPD particularly for Pneumonia and Diarrhoea cases were not found on daily and monthly basis. MOIC/Pediatrician & Pharmacist have to maintain the record properly.	MOIC, BPM & Pharmacist

#	Issue	Possible solution	Responsible person
7	Online data uploading	In most of the facilities, HMIS/UPHMIS data is being uploaded online resulting discrepancies in data of previous months especially blocks. So in this regard, it was suggested to prepare offline data of each facility and then excel needs to be imported.	BPM/DEO
8	Validation committee not functional at all	Need to fix a certain date (between 28 & 02 of every month) for a validation committee meeting – Step 1- Checking use of the correct format Step 2- Matching of manual format with portal format Step 3- Audit data elements with record Step 4- Auditing some SC records with format data Step 5- Ensure correction on portal by importing off line excel data	Validation committee (MOIC/ARO/HE O/BPM/MCTS operator) at block facility (CMO/ACMO RCH/DARO/DPM /HMIS operator) at district level - Need to share meeting minutes to AD & CMO /DPMU office

Recommendation: As per the discussion with ACMO –RCH & CMS during feedback meeting, Planned a reorientation training on data elements of all the reporting format for better understanding of Hospital Manager, BPM, Data Operator and also include DCPM, because DPM is not available/ Vacant in the district so that they can better understand to fill the reporting format.

1. District Women Hospital, Lakhimpur Kheri (Date of visit: 26/02/2019): Hospital Manager has just appointed it seems she was not oriented well. Data is being managed by 2 ad-hoc basis data entry operator in place resulting in many data elements left blank or zero due to clarity in spite of services are available and provided. In the Labor room, no one SN was responsible for reporting. Along with immunization, register was separated for BCG.

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Human resource register was not available.	Need to maintain a separate register of Human Resource and to update it monthly.	Hospital Manager/DEO	15th March 2019
2	Training register was not available.	Need to maintain a separate register of training and to update it monthly.	Hospital Manager/DEO	15th March 2019
3	Training on HMIS/ UPHMIS of HM, SN, Pharm, DEO, LT etc.	It was suggested to organize a training of all concerned staff.	DCPM/DARO/ HM	31th March 2019
4	Summery sheet not available at Labor register	To ensure maintaining summary at the end of the reporting by SN.	SN	15th March 2019
5	Summary of each record in the facility is missing.	Need to prepare summary of each record as per reporting requirement at the end of reporting period	Each concerned person	From next reporting onwards
6	Admission register not maintained properly so arrival of PW and maternal & NB complication data was not computed properly.	In Admission/Delivery register summary of each complication either of PW or NB need to be recorded properly and fill in the format.	HM/SN	15th March 2019
7	Validation committee is not functional.	Need to make it functional	Hospital Manager and concern record keeping in-charge	31th March 2019

2. Block CHC, Nakaha (Date of visit: 27/02/2019):- In this block, mutual coordination was found among staff like BPM, ARO, Pharmacist, HEO and data entry operator. MOIC was so sincere and active. The gaps and suggested action plan based on data quality audit are detailed in the table below:

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Maintaining and updating of Training register.	The data of ASHA training was in the soft copy but not of other staff, needed to update in a register for all.	ARO/HEO	15 th March 2019

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
2	Improper maintenance of ANC-4 registration and children full immunization records	The correct report needs to be recorded for ANC-4 and full immunization.	BPM/ANM	15 th March 2019
3	Sterilization register was not available.	The correct report needs to be recorded for sterilization	BPM/ANM/LHV	15 th March 2019
4	Summary of each record in the facility is not properly maintained.	Need to prepare a summary of each record as per reporting requirement at the end of the reporting period in a proper way and reported accordingly.	Concerned person under the supervision of MOIC	From next reporting onwards
5	Data elements filled in format was left blank and also uploaded blank	It was suggested to give orientation to all staff concerned for reporting to fill all the formats properly and should be checked by ARO/BMO under the supervision of MOI/c	MOI/c & BPM	15 th March 2019
6	Data elements of Child health section was not available at all.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 yrs by doctors on a daily basis and then compiled by the pharmacist. BPM must ensure the same. Details of medicine given to children for diarrhoea and pneumonia should be mentioned and entered on the portal.	MOI/c, BPM & Pharm	15 th March 2019
6	Role distribution of data elements for data collection is missing.	To ensure distribution of data elements of HMIS/UPHMIS formats to concerned persons	MOIC & ARO/BPM	15 th March 2019
7	Validation committee is not functional at all.	26 th /27 th of the month was proposed for the validation committee meeting. Need to share meeting minutes to CMO office/DPMU	MOIC/BPM/MCTS operator at block facility	31 st March 2019

3-Block CHC, Behjam (Date of visit: 28/02/2019):- This facility falls under Behjam block but data entry of this facility is done at District Hospital due to lack of network issue along with data entry operator not so active. He has very limited knowledge about the HMIS/UPHMIS data elements and

he has not received any training so far. The BPM and ARO of the block are not providing required attention and support.

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Maintaining and updating of training register.	The data of ASHA training was in soft copy but not of other staff, needed to update in a register for all.	ARO/HEO	15 th March 2019
2	Improper maintenance of ANC-4 registration and children full immunization records	Correct report need to be recoded for ANC-4 and full immunization.	BPM/ANM	15 th March 2019
3	Summary of each record in the facility is not properly maintained.	Summary of each record need to be prepared at the end of reporting month.	Each concerned person	31 st March 2019
4	Data elements of child health section was incomplete.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 yrs by doctors on daily basis and then compiled by the pharmacist. BPM must ensure the same. Details of medicine given to children for diarrhoea and pneumonia need to be mentioned and entered in the portal.	MOI/c, BPM & Pharm	15 th March 2019
5	Role distribution of data elements for data collection is missing	To ensure distribution of data elements of HMIS/UPHMIS formats to concerned persons	MOIC & ARO/BPM with concerned in-charge	15 th March 2019
7	Validation committee is not functional at all.	26 th /27 th of the month was proposed for the validation committee meeting. Need to share meeting minutes to CMO office/DPMU.	MOIC/BPM/MCTS operator at block facility	15 th March 2019

5.6 DISTRICT MAUNATHBHANJAN

Two blocks namely Mohammadabad BCHC, Fatehpur Mandaw BCHC and District Women Hospital (DWH) were visited by the team for data quality audit. There are some major challenges of data quality found during the visit. Major data quality challenges, possible solution and responsible designation are given below in the table.

#.	Issue	Possible solution	Responsible person
1	Training record of facility staff not available in any of the visited facilities.	Training record has to be maintained and updated in coordination with Hospital Manager, Computer operator and SNs in DWH Maunathbhanjan. In blocks these records are to be maintained in a register with the help of HEO/BPM/SNs and ARO.	MOIC/BPM/HM
2	Summary on each record in the facility is missing.	Need to prepare a summary of required information at the end of reporting duration.	Each concerned person
3	Non printed registers for Delivery, ANC, PPIUCD, Ambulance are present at facilities with no uniformity	-It was communicated to CMO Mau to provide the printed registers from the district level so that the data can be captured in a uniform formats of registers. The prototypes of registers are available with district administration.	CMO/DPM
4	Not capturing JSSK data for drugs and consumable, Ambulance and Diet	-A register is required to be made and data elements required as per format must be recorded in coordination with pharmacist, SNs/ANMs. HM in DCH and BPM in block has to be given responsibility.	HM/BPM
5	Validation committee not functional at all	Need to fix a certain date (between 26 & 28 of every month) for validation committee meeting – Step 1- Checking use of correct format Step 2- Matching of manual format with portal format Step 3- Audit data elements with record Step 4- Auditing some SC records with format data Step 5- Ensure correction on portal by importing off line excel data	Validation committee (MOIC/ARO/HEO/BPM/MCTS operator) at block facility (CMO/ACMO RCH/DARO/DPM/HMIS operator) at district level - Need to share meeting minutes to CMO office/DPMU

1. Block PHC Mohammadabad, Maunathbhanjan (Date of visit: 27/2/2019):- In this block lack of coordination among staff like, BPM, ARO, Pharmacist and HEO was found. Facility level UPHMIS and HMIS formats are not distributed to staffs at facility, BPM/ARO are not taking interest in reporting of data collection, compilation and uploading.

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Training register was not available at the facility.	A separate register of training was made on the day of visit and suggested them to update.	BPM/ HEO	27 th March 2019
2	Improper maintenance of ANC-4 and children full immunization records	Advised to ask pregnant women/mother to carry MCP card to ensure proper recording of ANC and fully immunization.	BPM/ANM/ LMO	27 th March 2019
3	Summary of each record such as delivery register, ANC, Ambulance in the facility is not properly maintained.	Need to prepare summary of each record as per reporting requirement at the end of reporting period in proper way and reported accordingly.	SN/ MOIC	From next reporting onwards
4	Record registers such as PPIUCD, Ambulance, and ANC registers was locked	It was advised to handover the registers to the Staff Nurse on duty.	MOIC & BPM	Immediately
5	Data elements of Child health section was not available at all.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 years by doctors on daily basis and then compiled by the pharmacist. BPM must ensure the same. Details of medicine given to children for diarrhea and pneumonia need to be mentioned and entered on portal.	MOIC, BPM & Pharmacist	From next month
6	UPHMIS and HMIS CHC format in hardcopy was not distributed to concern staffs	To ensure distribution of data elements of HMIS/UPHMIS formats to concerned persons and collection of formats at the end of reporting month	MOIC & ARO/BPM with concerned in-charge	By 21 st March 2019
7	Validation committee not functional at all.	26 th /27 th of the month was proposed for the validation committee meeting. Need to share meeting minutes to CMO office/DPMU	MOIC/ARO/ HEO/BPM/ DEO at block facility	27 th March 2019

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
8.	Diet register was updated for the month of January only two PW are updated in the register given diet	Diet register to be maintained for every PW admitted in the facility if diet provided.	SN/BPM	Immediately

2. BCHC Fatehpur Mandaw (Date of visit: 28/02/2019). The coordination between the staffs of the facility is very poor. BPM was not taking any responsibility for UPHMIS and HMIS reporting. Facility level formats for UPHMIS and HMIS was not filled in the hardcopy.

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Maintaining and updating of training register.	A separate register of training was made on the day of visit and suggested them to update.	HEO/SN	21 st March 2019
2	Improper maintenance of ANC-4 and children full immunization records	Advised to ask pregnant women/mother to carry MCP card to ensure proper recording of ANC and fully immunization.	BPM/ANM/MOIC	28 th March 2019
3	Summary of each record in the facility is not properly maintained.	Summary in delivery registers are not maintained at the facility due to which the data discrepancy was very high in labor room data	MOIC /SN/ANM/A RO	From next reporting onwards
4	Ambulance register not available at the facility	It was advised to maintain the registers for ambulance to record the data of Drop back, Home to hospital and hospital to hospital patients	MOIC & BPM	28 th March 2019
5	Data elements of Child health section was incomplete.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 years by doctors on daily basis and then compiled by the pharmacist. BPM must ensure the same. Details of medicine given to children for diarrhea and pneumonia need to be mentioned and entered in portal.	MOIC, BPM & Pharm	From next month

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
6	Validation committee not functional at all.	26 th /27 th of the month was proposed for the validation committee meeting. Need to share meeting minutes to CMO office/DPMU	MOIC/ARO/HEO/BPM/DEO	28 th March 2019
7	Improper JSSK Reporting-most of the data elements were left blank	Need to maintain the record of JSSK related data in a register in coordination with SNs, Ambulance in-charge, Pharm, LT etc.	Pharm/SN/BPM	28 th March 2019

3. District Women Hospital, Maunathbhanjan (Date of visit: 01/03/2019):- Report of the facility are being uploaded from the CMO office due to vacant position of DEO at the facility. There are following gaps and solution based on data quality audit at the facility:

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Training register was not available.	A separate register of training was made on the day of visit and suggested them to update.	Hospital Manager/DEO	28 th March 2019
2	Improper JSSK Reporting-most of the data elements were left blank or wrongly reported	Need to maintain the record of JSSK related data in a register in coordination with SNs, Ambulance in-charge, Pharm, Nutritionist, LT etc.	Pharm/SN/Nutritionist	From March 19 onwards
3	Summary was not maintained in the SNCU register about the inborn and out born cases	It was advised to maintain the summary at the end of the reporting month.	SN at SNCU	From March 19 onwards
4	Improper maintenance of ANC-4 and children full immunization records	Advised to ask pregnant women/mother to carry MCP card to ensure proper recording of ANC and fully immunization.	ANM/LMO	From March 19 onwards
5	Role distribution of data elements for data collection is missing	To ensure distribution of data elements of HMIS/UPHMIS formats to concerned persons and collection at the end of the reporting period.	Hospital Manager/Pharmacist/DEO	From March 19 onwards

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Training register was not available.	A separate register of training was made on the day of visit and suggested them to update.	Hospital Manager/DEO	28 th March 2019
6	Validation committee is not functional.	Need to make it functional (26 th /27 th of each month)	Hospital Manager and concerned record keeping in-charge	From March 19 onwards

5.7 DISTRICT SHAHJAHANPUR

Two blocks namely Tilhar (CHC-FRU), Nigohi (BCHC) and District Combined Hospital (DWH) were visited by the team for data quality audit. There are some major challenges of data quality found during the visit. Major data quality challenges, possible solution and responsible designation are given below in the table.

#	Issue	Possible solution	Responsible person
1	Training record of facility staff not available	Training record has to be maintained and updated in coordination with Hospital Manager in DWH In blocks these records are to be maintained in a register with the help of HEO/BPM and ARO. It needs to be prepared the training record of facility staff (MO MBBS, MO AYUSH, Staff Nurse & ANMs/LHV), a separate register has to be made updated it monthly so that correct information on training may be filled in monthly UPHMIS facility format.	MOIC/HEO/BPM
2	Summary in the facility record is missing.	Need to prepare a summary of required information at the end of reporting duration.	Each concerned person
3	Old type delivery register is being used at DWH.	It was talked to DPM and CMO in the meeting that the new version of delivery register should be introduced in DWH.	DPM/HM
4	Lack of understanding of data elements (JSSK/4ANC/Child health)	Need an orientation of all concerned staff at blocks/facility and DWH.	MOIC at block and HM at DWH.
5	Not capturing JSSK data	A register is required to be made and data elements required as per format must be recorded in coordination with pharmacist, LT, SNs/ANMs. HM in DCH and BPM in block has to be given responsibility.	HM/BPM
6	Validation committee not functional at all	Need to fix a certain date (between 26 & 28 of every month) for validation committee meeting – Step 1- Checking use of correct format Step 2- Matching of manual format with portal format Step 3- Audit data elements with record Step 4- Auditing some SC records with format data Step 5- Ensure correction on portal by importing off line excel data	Validation committee (MOIC/ARO/HEO/BPM/MCTS operator) at block facility (CMO/ACMO RCH/AdRO/DPM/HMIS operator) at district level

1. Block CHC-FRU Tilhar, Shahjahanpur (Date of visit: 26/2/2019):- CHC Tilhar have a lot of Still birth (Fresh) cases. Even maximum referral in SNCU was from Tilhar CHC. There are following issues identified and action plan based on data quality audit as follows:

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Training register not maintained.	Register was prepared during the visit. Need to keep all the supporting documents staff wise regarding their training	MOIC/BPM	27 th feb,2019
2	In attendance register staff designation not mentioned correctly	Need to put correct designation. Responsibility should be assigned to one person for writing the names and designation of all the staff on attendance register	BPM	27 th feb,2019
3	ASHA approved for the block status not very clear at block, neither block officials had any supporting documents	It was advised to keep record of ASHA approval as per PIP with the help of DPM.	BCPM	28 th feb,2019
4	Data elements of child health section was not available at all.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 yrs. by doctors on daily basis and then compiled by the pharmacist. BPM must ensure the same. Details of medicine given to children for diarrhea and pneumonia should be mentioned and entered on portal.	MOI/c, BPM & Pharmacist	From Mar 19 onward
5	Lack of understanding of data elements (JSSK/ Bags and Mask availability)	Mentored on the data elements for which facility staff had confusion.	BPM	DONE
6	Labour room register Column "PW discharged Within 48 hours of delivery" was partially filled.	Need to maintain the record properly.	Staff nurse	7 th Mar 19
7	Improper JSSK Reporting- most of the data elements were left blank	Need to maintain the record of JSSK related data in a register in coordination with SNs,	Pharmacist/S N/BPM	31 st Mar 19

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
		Ambulance in-charge, Pharm, LT etc.		
8	Standard diet register not available. Local NGO who is providing diet under PPP model which is using their own register.	Advised to use standard diet register. And discussed this issue with CMO	BPM	31 st Mar 19

2. Block Nigohi- CHC Nigohi, Shahjahanpur (Date of visit: 28/2/2019): The data quality audit was performed at the facility on February 28, 2019. There are following gaps and action plan for the facility as follows:

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Improper maintenance of ANC-4 and children full immunization records	Correct report need to be recoded for ANC-4 and full immunization.	ANM	15 th Mar 19
2	Summary of each record in the facility is not properly maintained.	Summary in Delivery register was made but not of all data elements as required in HMIS/UPHMIS. But summary need to be prepared for all including ANC, Lab test, immunization etc.	Staff Nurse	31 st Mar 19
3	Data elements of Child health section was incomplete.	To ensure daily summary of required elements related to HMIS/UPHMIS in OPD total and also for children up to 5 yrs by doctors on daily basis and then compiled by the pharmacist. BPM must ensure the same. Details of medicine given to children for diarrhea and pneumonia should be mentioned and entered in portal.	MOI/c	31 st Mar 19
4	Improper JSSK Reporting-most of the data elements were left blank	Need to maintain the record of JSSK related data in a register in coordination with SNs, Ambulance in-charge, Pharm, LT etc.	Staff Nurse/BPM	31 st Mar 19
5	Standard diet register not available. Local NGO who is providing diet under PPP model which is using their own register.	Advised to use standard diet register. And discussed this issue with CMO	BPM	31 st Mar 19

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
6	Validation committee not functional at all.	26 th /27 th of the month was proposed for the validation committee meeting. Need to share meeting minutes to CMO office/DPMU.	MOIC/BPM/DEO at block facility	1 st Mar 19
7	Case sheet not properly filled. Many columns are empty. Blank consent form was signed by beneficiary.	Need to fill quality case sheet covering all the sections.	LMO	31 st Mar 19

3. District Women Hospital, Shahjahanpur (Date of visit: 27/2/2019):- Based on the data quality audit there are following issues and action plan for the facility as follows:

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
1	Training register was not available.	A separate register of training was made on the day of visit and suggested them to update.	Hospital Manager/DEO	28 th feb'2019
2	In PW received iron sucrose section Doses of Iron sucrose was reported instead of No. Of PW, due to lack of understanding	Mentored on correct definition of data element and recommended for using HRP register for proper documentation.	Staff Nurse	15 th Mar 19
3	Summary of each record in the facility is missing.	Need to prepare summary of each record as per reporting requirement at the end of reporting period	Each concerned person	From next reporting onwards
4	Case sheet not properly filled. Many columns are empty. Blank consent form was signed by beneficiary.	Need to fill quality case sheet covering all the sections.	LMO	31 st Mar 19
5	SNCU Registers do not properly capture outcome of admission in SNCU. (Like died/survived)	Mentored staff on same and recommended to capture the outcome data in existing register by adding columns.	Staff nurse (SNCU)	7 th Mar 19
6	102 and 108 Register is not properly filled. Place of transportation is not clearly mentioned.	Need to collect information as per required reporting.	HM and Staff nurse	7 th Mar 19

#	Identified Issue	Action Plan/Taken	Responsible person	Timeline
7	Validation committee is not functional.	Need to make it functional	Hospital Manager and concern record keeping in-charge	1 st Mar 19
8	Standard diet register not available. Local NGO who is providing diet under PPP model which is using their own register.	It was advised to use standard diet register and discussed this issue with CMS.	CMS and Quality Manager	31 st Mar 19

6. FOLLOW UP MECHANISM

The implementation of action plan and follow up with the audited facilities is most critical for sustainable improvement in data quality. Thus, it is important to follow up with the respective facilities on action plan developed and observe the reported data quality status in the subsequent months. In view of the same, the following steps for follow up mechanism are suggested for better results of data quality audit

Table 4 Follow up mechanism of facilities where data audit has been conducted

#	Activity	Person Responsible	Timeline
1	Share the developed facility wise action plan with respective divisional M&E hub	State data audit team and M&E division (NHM)	Within 1 week of data audit
2	Follow up with respective facilities on action plan points as per the given timeline	Divisional M&E hub	As per given timeline in action plan
3	Share the completion status of suggested action plan with M&E division of NHM	Divisional M&E hub	Within 1 week of last timeline as per action plan
4	Prepare summary of action plan completion status for all the audited facilities	State M&E Division (NHM)	Once the information received for all the facility
5	Analyze the data quality status of audited facilities in subsequent months and observe the progress	Divisional M&E hub	Subsequent months of data audit
6	Share the data quality status of audited facilities at different platform (meetings) and levels (district hospital, block, district etc)	Divisional M&E hub	Subsequent months of data audit
7	Visit the facility if the progress in data quality is not satisfactory even after rigorous follow up and diagnose the reason	Divisional M&E hub	As per need

It is also important for divisional M&E hub to share and update the findings with respective data audit team and state M&E division at every step of follow up

7. GLIMPSE OF DATA QUALITY AUDIT OF FACILITIES AND FEEDBACK MEETING AT CMO OFFICE

Picture 1: Feedback meeting on data quality audit findings at CMO office, Bhadohi on February 28, 2018



Picture 2: Data quality audit at BCHC Deegh, Bhadohi on February 26, 2018



Picture 3: Feedback meeting on data quality audit findings at CMO office Bulandshahar on February 28, 2018



Picture 4: Data quality audit at BCHC Gulaothi, Bbulandshahar on February 27, 2018



Picture 5: Feedback meeting on data quality audit findings at CMO office Etah on February 28, 2018



Picture 6: Data quality audit at BCHC Jalesar, Etah on February 27, 2018



Picture 7: Feedback meeting on data quality audit findings at CMO office Jhansi on February 28, 2018



Picture 8: Data quality audit at DWH, Jhansi on February 28, 2018



Picture 9: Feedback meeting on data quality audit findings at CMO office Lakhimpur Kheri on February 28, 2018



Picture 10: Data quality audit at BCHC Nakaha, Lakhimpur Kheri on February 27, 2018



Picture 11: Feedback meeting on data quality audit findings at CMO office Maunathbhanjan on March 1, 2018



Picture 12: Data quality audit at BCHC Fatehpur Mandaw, Maunathbhanjan on February 28, 2018



Picture 13: Feedback meeting on data quality audit findings at CMO office Shahjahanpur on February 28, 2018

Picture 14: Data quality audit at BCHC Tilhar, Shahjahanpur on February 27, 2018



8. LIST OF ABBREVIATIONS

ACMO	Additional Chief Medical Officer
AdRO	Additional Research Officer
ANC	Ante Natal Care
BARO	Block Assistant Research Officer
BPM	Block Program Manager
BCPM	Block Community Process Manager
BCHC	Block Community Health Centre
BPHC	Block Primary Health Centre
CHC	Community Health Centre
CMS	Chief Medical Superintendent
CMO	Chief Medical Officer
DH	District Hospital
DEO	Data Entry Operator
DCH	District Combined Hospital
DPM	District Program Manager
DWH	District Women Hospital
DG FW	Director General Family Welfare
DG MH	Director General Medical Health
FP	Family Planning
FRU	First Referral Unit
HEO	Health Education Officer
HM	Hospital manager
HMIS	Health Management Information System
MH	Maternal Health
MO I/c	Medical Officer In charge
SN	Staff Nurse
SNCU	Special New-born Care Unit
JSSK	Janani Shishu Suraksha Karyakakram

UPHMIS	Uttar Pradesh Health Management Information System
UPNHM	Uttar Pradesh National Health Mission
UPTSU	Uttar Pradesh Technical Support Unit