Annexure 1: Maternal death review - Gap analysis at community, health system, monitoring and policy level

SN	Reasons	Percentage	Previous H/o	Underlying causes related to society/family	Underlying causes related to Health service delivery	Underlying causes related to policies	Underlying causes related to Monitoring	Common area/village/pada/hospital	Progrms which address these problems	Status of These programs in these areas, taluks and district	Suggested Actions	What actions actually implemented in the district
1	Home Death/ Transit		1. Previous H/o Home birth 2. Is Home birth a isolated incidence in the village/area or common occurrence 3. Home death is common to the village or taluka or whole district	1. Gone to local faith healer 2. Not aware about health facility/Not willing for taking government hospital help/No faith in modern medicine 3. No road/communication network 4. Teenage preganancy 5. Unmarried 6. Not aware about 102/108	1. No visit by ASHA or ANM in last trimester/last month 2. No visit by health worker as patient is recently shifted/came back from migration 3. Non availability of ambulance/delay in reaching ambulance/Non response from ambulance services 4. Non identification of refusal families and no follow-up 5. No action taken on previous similar H/o 6. No high-risk factor identified	1. No proper IEC/SM strategies for refusal families 2. No policy for engagement of faith healers in such areas 3. No specific policies for intersectoral involvement for this area	1. High risk areas are not mapped and activities not monitored from districts 2. Monitoring of Gram samittee activities and their involvement 3. Monitoring of Gram samittee activities and their involvement is not taken in meetings of district administration 4. No monitoring of ambulance services 5. No monitoring of delivery points for conducting high risk cases 6. Premature delivery and not anticipated by health worker	1. What is the trend of home birth over the period 2. How many affected areas due to similar reasons	1. JSSK/JSY 2. EMS services 3. IEC/BCC/SM 4. ANC care services e.g ANC visits, specialist visit 5. Perinatal visits			
2	APH / PPH		1. Was there any complication during last delivery of mother eg. APH/PPH, rupture, retained placenta etc? 2. Was mother	1. Gone to local faith healer 2. Not aware about health facility 3. Not willing for taking government hospital help/No faith	1. high risk ANC not identified during ANC period 2. No visit by ASHA or ANM in last trimester/last month 3. No action taken on previous similar H/o PPH	1. No IEC/SM strategies for refusal families 2. No policy for engage	1. No strict monitoring of high-risk ANCs at all levels 2. No monitoring of PMSMA	1. What is trend of APH PPH cases in the facility? 2. Is there any common facilities	1. ANC care services e.g ANC visits, specialist visit 2. Dakshata 3. JSSK 4. ASHA Program			

SN	Reasons	Percentage	Previous H/o	Underlying causes related to society/family	Underlying causes related to Health service delivery	Underlying causes related to policies	Underlying causes related to Monitoring	Common area/village/pada/hospital	Progrms which address these problems	Status of These programs in these areas, taluks and district	Suggested Actions	What actions actually implemented in the district
			identified as a high risk ? eg. Previous placenta abruption, rupture, Severe anemia, previous LSCS, PIH, coagulopathy etc 3.Was high risk mother treated for the cause of high risk during ANC? 4.was mother monitored for labor using partograph or safe childbirth checklist?	in modern medicine/No faith in Govt institute 4. Do not know where to contatct in case of emergency / danger signs of APH 5. Physical violence in family 6. Misconceptions about bleeding during pregnancy 7. No road/communication network	4. Premature delivery and not anticipated by health worker 5. Refusal families not identified and no followup for treatment of high risk causes 6. No Counselling by Health care workers regarding danger signs in pregnancy 7. No USG done during ANC or USG facility not available 8. No check up by Specialists under PMSMA 9. No proper examination (lack	ment of faith healers in high risk areas 3. No training or reorientation training policy for staff 4. No Near Miss Cases audit policy 5. No Policy on non rotation	program 3. No monitoring of health facility preparedness 4. No monitoring of JSSK services eg blood transfusion, diagnostic - USG 5. No monitoring of post delivery	where there is problem with APH/PPH management. 3. are their common facilities	5. PMSMA 6. 102/108 7. SUMAN 8. LaQshya 9. E Aushadhi 10. JSSK 11. FRUs			
			5.Was third stage of labor managed as per guideline (AMTSL)? 6.Was mother delivered by trained staff or whether doctor attended delivery? 7.was there any complication during delivery eg. Rutpure, retained planceta, tear? 8.was there any prolonged or obstructed labor? 9.was mother suffering from	8. Refusal from Family to seek Medical care	in quality care - Anemia, Wt gain monitoring, BP) 10.Timely referral to higher facility not done 11.No nearby facility with blood transfusion 12.No nearby FRU/ Specialist not available at FRU 13.No availability of treatment protocols at facility 14.Drugs and logistics not available at facility 15.Staff not trained for management of APH / PPH 16.Post delivery monitoring not	of trained staff working in LR	visits by ANM/ASHA 6. No monitoring of identification, management of APH PPH cases at all levels					

SN	Reasons	Percentage	Previous H/o	Underlying causes related to society/family	Underlying causes related to Health service delivery	Underlying causes related to policies	Underlying causes related to Monitoring	Common area/village/pada/hospital	Progrms which address these problems	Status of These programs in these areas, taluks and district	Suggested Actions	What actions actually implemented in the district
			any infection during labor? 10 was blood transfusion given and if yes was it done as per protocol? 11. was mother on any anticoagulants ?		done as per guidelines 17 No use of Partograph/safe childbirth checklist as per guidelines 18 No monitoring of admitted cases at facility 19. Treatment proto col not followed 20. In home delivery cases - no check up by ANM / MO within 24 hours 21 Post delivery home visits by ANM/ASHA not done 22. Non availability of ambulance/delay							
					in reaching ambulance 23. Non response from ambulance services 24. ANM / Staff not trained for identification of high risk cases /SBA Training 25. No preferral management							
3	Hypertensive Disorders in pregnancy		1.Was there similar complications during her last pregnancy?	1 Non compliance to drug (Calcium,	1 Non Identification of High Risk Pregnancy during ANC check up	1 No propoer IEC/SM strategies	1 No monitoring of health	1 What is trend of HDP/Eclampsia	1. ANC care services e.g ANC visits,			

SN	Reasons	Percentage	Previous H/o	Underlying causes related to society/family	Underlying causes related to Health service delivery	Underlying causes related to policies	Underlying causes related to Monitoring	Common area/village/pada/hospital	Progrms which address these problems	Status of These programs in these areas, taluks and district	Suggested Actions	What actions actually implemented in the district
			2. Was mother identifed as a high risk for PIH? 3. Was mother identified having PIH? 4. If identified as PIH, was mother on any treatmen t for PIH? 5. If already identified as high risk for PIH or mother having PIH, was the delivery conducted at FRUs 6. Before referral was any loading dose of Inj MgSO4 given? 7. Was any IV drip	antihypertensive drugs) 2. Not aware about danger signs 3. Do not know where to contactt in case of emergency / danger signs of APH 4. Not aware about health facility 5. Did not think that the illness is significant 6. Gone to local faith healer 7. No faith in modern	2. Errors in noting Blood pressure by health staff 3. No check up of high risk ANCs during PMSMA Day or No examination by Specialist during ANC period 4. No identification of danger signs during home visit by health workers 5. No Counselling by Health care workers regarding treatment and danger signs 6. No Counselling regarding diet (salt intake) in case of H/o HTN. 7. Staff not trained for	for refusal families 2. No policy for engagement of faith healers in such areas 3. No Near Miss Cases audit policy	facility preparedness 2. No monitoring of identification, management of PIH cases at all levels 3. No monitoring of PMSMA program 4. No monitoring of referred cases - for	mortality in the facility? 2. What is trend of HDP/Eclampsia mortality in the block? 3. What is trend of identification of hypertension among pregnant women furing ANC in the facility or block?	specialist visit 2. PMSMA 3. FRUs 4. ASHA Program 5. SUMAN / LaQshya 6. JSSK 7. Dakshata - Training 8. E Aushadhi 9. IPHS			
			of MgSO4 was started during referral? 8. was mother treated at private faci lity? 9. If treated at private facility, was treatment given as per protocol? 10. was eclampsia identified during intrapartum period at facility? 11Was safe childbirth checklist used during delivery? 12. Was delivery attended by Gynecologists?	medicine/No money available for treatment 8. No road/communication network/cut off villages/pada	diagnosis and management of PIH 8. Non availability of logistics (BP appa.), drugs with FLW and at facility 9. No follow up of PIH cases by FLWs 10. Delay in referral 11. Prereferral management of PIH cases not done as per guidelines 12. Patient not seen by Specialists at FRU 13. No proper documentation of health status when admitted in facility 14. Treatment		outcome					

SN	Reasons	Percentage	Previous H/o	Underlying causes related to society/family	Underlying causes related to Health service delivery	Underlying causes related to policies	Underlying causes related to Monitoring	Common area/village/pada/hospital	Progrms which address these problems	Status of These programs in these areas, taluks and district	Suggested Actions	What actions actually implemented in the district
			13. Was treatment given as per protocol at facility for PIH? 14. Was delivery terminated after eclampsia as per protocols?		protocol not followed 15. No monitoring of admitted cases at facility 16. Non calibrated Sphygomanometer/ Digital B.P Apparatus							
4	Sepsis		1. Was mother identified as high risk eg. Malnourished / Low BMI, Anemia etc 2. was mother normal delivered or through C section 3. Was delivery conducted by untrained staff? 4. Was safe childbirth checklist used during delivery? 5. Were multiple PVs were done against protocol? 6. Was monitoring of mothers health condition done after C section during post partum period as per protocol? 7. Was there any premature rupture of	1. Home Delivery 2. Not aware about dangers signs of sepsis 3. Unhygienic practices followed after pregnancy 4. Gone to local faith healer 5. Did not think that the illness is significant 6. Do not know where to contatct in case of emergency / danger signs 7. No road/communication network/cut off villages/pada 8. Didn't call to ambulance services	1. DAMA/LAMA in case of C-Section Delivery 2. Infection control practices not followed in facility 3. No use of Partograph/safe childbirth checklist as per guidelines 4. Treatment protocol not followed 5. No antibiotic policy followed 6. Monitoring of C section cases at facility not as per protocol 7. No check up by MO ANM in case of home delivery with 24 hours 8. Training of staff on infection control practices not done 9. No proper documentation of monitoring during hospitalisation 10. Treatment protocols not available with facility 11Disfunctional Infection control	1.No policy of near miss case audit 2. No policy for engagement of faith healers in such areas	1.No monitoring of Microbiological surveillance 2. No monitoring of infection control practices at facility 3. No monitoring of PNC visits by ANM/ASHA	1.What is trend of Sepsis in PNC cases in facility or block/areaa ? 2. What is trend of deaths due to sepsis in facility or block?	1. FRU 2. LaQshya 3. Dakshata 4. PNC Visits - HBNC 5. IPHS 6. TRAINING 7. E AUSHADHI 8. Infection control program 9. 28 DAYS PROGRAM			

SN	Reasons	Percentage	Previous H/o	Underlying causes related to society/family	Underlying causes related to Health service delivery	Underlying causes related to policies	Underlying causes related to Monitoring	Common area/village/pada/hospital	Progrms which address these problems	Status of These programs in these areas, taluks and district	Suggested Actions	What actions actually implemented in the district
			member (PROM) and if yes any antibiotic given as per protocol? 8. were all hygienic conditions followed during delivery and after? 9. Was family planning operation done after delivery? 10. Did mother stayed for all 7 days after C section or 3 days after normal delivery? 11At the time of discharge whether counseling regarding danger signs done or not? 12. was mother followed by ANM/ASHA after discharge at home?		committee 12. Late referral 13. No treatment before referral 14. Beneficiaries not informed about 102/108 services 15. No road / communication network 16. Non availability of ambulance/delay in reaching ambulance 17. No response from ambulance services 18. Driver posts Vacant on 102 19. Diesel not available at the time of referral							
5	Severe Anemia		1.Was mother identified with iron deficiency anemia/hemoglobinopathies/ other anemias	1.Non compliance to IFA tablets due to traditional myths and side- effects 2. Did not take complete dose	1No testing for anemia / hemoglobinopathies during ANC visits 2. Birth Planning for SCD, Severe anemia cases not		1No monitoring of severe anemic pregnant women detection and	1aggregation of such cases if any in the district	1Anemia Mukt Bharat/ WIFS 2.BSU / BB 3.FRU 4.TRAINING			

SN	Reasons	Percentage	Previous H/o	Underlying causes related to society/family	Underlying causes related to Health service delivery	Underlying causes related to policies	Underlying causes related to Monitoring	Common area/village/pada/hospital	Progrms which address these problems	Status of These programs in these areas, taluks and district	Suggested Actions	What actions actually implemented in the district
			during her pregnancy? 2. If mother was anemic, any treatment given during ANC period? 3. was complete treatment for iron deficiency anemia was given (inj iron sucrose) during pregnancy? 4. Was mother tested for Hb at the time of admission for delivery? 5. Was birth planning for	of Iron sucrose 3. Did not think that the illness is significant	done as per high risk status - (eg . Delivery at tertiary care level/FRUS) 3. ASHA do not know where to take severe anemic mother 4. No tracking of severe anemic mothers 5. Full dose of Inj Iron sucrose / BT not given as per protocol during ANC 6. No followup taken for severe anemic mother after detection/iron sucrose treatment 7. No followup of anemic PNC		treatment 2. No monitoring of severe treatment of anemic cases at facility 3. No monitoring of performance of BSU/BB					
			delviery of high risk case done at FRU level 6. If mother was high risk, was the delivery conducted at FRU having blood transfusion facility? 7. was mother treated at private facility? 8. If treated at private facility, was treatment given as per protocol? 9. was there any		mother by ANM or MO at PHC 8. Delivery was not conducted at FRU in case of severe anemic mother 9. Hb testing not done when admitted to facility for labor or after 10. BSU not functional at facility 11. Transfusion not given due to non availability of blood group							

SN	Reasons	Percentage	Previous H/o	Underlying causes related to society/family	Underlying causes related to Health service delivery	Underlying causes related to policies	Underlying causes related to Monitoring	Common area/village/pada/hospital	Progrms which address these problems	Status of These programs in these areas, taluks and district	Suggested Actions	What actions actually implemented in the district
			complication during delivery ? 10. Was the delivery conducted by trained staff or specialists? 11. Was any blood transufion done at the time of delivery or after? 12. If mother was anemic after delivery was any treatment given? 13. Was hb test done at the									
			time of discharge from facility? 14. was mother followed by ANM/ASHA after discharge at home?									