REPUBLIC OF KENYA
MINISTRY OF HEALTH

KHQIF Training

Quality Improvement Training

Participants Workbook

_____

Name:_____

Date: _____

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Table of Contents

List of abbreviations

ANC   Antenatal care

ART   Anti-retroviral Treatment

CCC   Comprehensive Care Clinic

CD4   Cluster of Differentiation 4

CQI   Continuous Quality Improvement

HC   Health Center

HIV   Human Immunodeficiency Virus

KQMH   Kenya Quality Model for Health

KHQIF   Kenya HIV Quality Improvement Framework

MOH   Ministry of Health

OPD   Out Patient Department

PDSA   Plan Do Study Act

PMCTC   Prevention of Mother-to-Child Transmission (of HIV)

QA   Quality Assurance

QI   Quality Improvement

QIT   Quality Improvement Team

SN   Serial Number

WIT   Work Improvement Team

EXERCISE 1

Training expectations

List out your expectations for this training. This will be collected at the end of the training.

Expectations	At end of training	
	Met	Not met

PRE TEST

The pre-test is to help the facilitators determine how much the participants know about the area of CQI. There are 25 questions in total and one bonus question. Please follow the different instructions for each question and indicate the number assigned to you in order to identify your sheet.

EXERCISE 2

MOH QI Facility Requirements (Readiness for QI)

The Ministry of Health in Kenya has guidance on the expectations of QI activities at sites. Briefly answer the following questions concerning QI activities at your site. [This should be done after finishing your pre-test or as homework on Day 1. It will be collected on Day 2.]

1. Have you been involved or attended CQI training before? If yes, describe the training.

2. Do you have a CQI (or QIT/WIT) team in your facility or place of work? If yes, who is on the team?

3. How often do you hold meetings as the CQI (or QIT/WIT) team?

4. Do you have meetings for presenting and discussing data? If yes, describe the last meeting and what was discussed.

5. Do you hold meetings to share best practices? If yes, describe the last meeting and what was shared.

6. Does your facility have a QI plan? If yes, describe what it includes.

7. Does your health facility report QI activities to the sub-county? If yes, what do you report?

8. Are you aware of the tools that can be used for QI activities at your clinic? Name some of the tools if you know them.

EXERCISE 3

Dimensions of Quality

When you or a family member last received healthcare, how did you judge its quality?
• Share and discuss the questions below with your neighbor.
• During the group plenary, 2-3 people will share their analysis of their experience by the quality dimensions.

Think of the last time you or a family member received health services. Describe your visit briefly (Reason for seeking care? What was your experience at the facility?)

Evaluate your experience by the quality dimensions – indicate if the dimension was met or not and explain your reasons.

Dimension of Quality	Dimension Met? Y/N	Comments on why met or why not met?
Safety		
Accessibility		
Effectiveness		

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Dimension of Quality	Dimension Met? Y/N	Comments on why met or why not met?
Efficiency		
Acceptability or Patient centeredness		
Equity		

EXERCISE 4

Client satisfaction surveys

Role Play

Amani health facility is doing their annual client satisfaction survey.   The facility administrator will be conducting the client interviews.   Three clients are scheduled for interviews today.

- Antenatal care (ANC) client (dissatisfied)
- Comprehensive Care Clinic (CCC) client (satisfied)
- Outpatient Department (OPD) client (mix of satisfied and dissatisfied)

Select 4 volunteers (1 interviewer, 3 clients) to role play using the questions below.

After the interviews, the QIT will review results and develop an action plan for the facility.

- What has Amani done well in terms of client satisfaction?
- What are the gaps and challenges identified through the surveys?
- What are the next steps Amani should take?

Amani Health Facility Client Satisfaction Survey

Thank you for completing this short survey. Your answers will help us serve you better.

How long have you been a patient here?

O 1st visit   O Less than 1 year   O 1-3 years   O Greater than 3 years

Please indicate whether you strongly agree, agree, disagree, or strongly disagree to the following statements.	Strongly Agree	Agree	Disagree	Strongly Dis-agree	N/A	Coments
The staff was courteous and helpful?	O	O	O	O	O	
The time in the waiting room was reasonable?	O	O	O	O	O	
The waiting area was comfortable.	O	O	O	O	O	
The staff gave me their complete attention.	O	O	O	O	O	
The staff answered my questions clearly.	O	O	O	O	O	
I was satisfied with my visit with the hospital.	O	O	O	O	O	
I received the results of my labs and/ or tests in a timely manner	O	O	O	O	O	
I am satisfied with the quality of care I received.	O	O	O	O	O	
I would recommend the hospital to friends.	O	O	O	O	O	

What can we do to make your visit better?

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EXERCISE 5

Sampling Tools

Clinical documentation audit *is a quality improvement process that seeks to improve patient care and outcomes through systematic review of documented care against explicit criteria set for clinical documentation and the implementation of change to achieving the set standards*

Below is a sample size table that will assist you to determine a sample size depending on the patient population size at the facility.

Population Size	Sample size for a 95% CI to have width of 0.16
Less than 20	All
20- 29	26
30-39	32
40-49	38
50-59	43
60-69	48
70-79	53
80-89	57
90-99	61
100-119	67
120-139	73
140-159	78
160-179	82
180-199	86
200-249	94
250-299	101
300-349	106
350-399	110
400-449	113
450-499	116
500-749	127
750-999	131
1000-4999	146
5000 or more	150

Using the sampling tool provided, indicate how many charts will you sample for the audit? Some examples are provided.

Number of Patients	Number of charts to sample	Randomly select every "nth" file
20	All (20)	Select all files
90	61	90/61=1.5, so select every 2nd file. When you reach the end of 90, start again at the beginning of the files and continue selecting every 2nd file until you reach 61
150		
499		
667		
1020		

ADULT KHQIF/OM: Appendix 7a - Adult Care Treatment File Review Abstraction Tool

Review Period: From _____ To _____

FILE REVIEW INSTRUCTIONS: 1) Based on your case load, pull a sample of patients files who were seen in the last 6 months of the review period. 2) Answer the questions by circling Y or N as applicable for every patient file. If the question does not apply to the patient, then circle "N/A". 3) Use multiple sheets according to your required sample size. 4) After completing all file reviews, fill in sum of Y and N's to calculate the % performance for each indicator. 5) Sum the totals for all sheets and transfer to a QI Indicator Summary report. [Key: Yes (Y), No (N), Not Applicable (N/A).]

Question legend:

- 1.0 Did the patient visit the clinic in the 6 months review period? (Should be yes for yes review period?)
- 1.1 Did the patient have 2 clinical visits 3 months apart in the 6 months review
- 2.0 Did the patient receive a CD4 test (and results available) during the 6 months
- 3.0 Was the patient on ART before start of the review period?
- 3.1 If no to 3.0, was the patient eligible for ART initiation during the review period?
- 3.2 If yes Q 3.1 Was the patient initiated on ART?
- 4.0 Has the patient been on ART for 12 or more months? (If not on ART, select NA)
- 4.1 If yes Q 4.0, has viral load been done in the last 12 months and result received?
- 4.2 If yes Q4.1, was viral load result <1000 copies/ml?
- 5.0 Was the patient screened for TB using ICF card at last visit in review period?
- 5.1 Did the patient have a negative TB screen result at last visit?
- 5.2 If yes Q 5.1 (negative TB screen) is the patient on IPT or been on IPT in last 2 years?
- 6.0 Was BMI or MUAC done at the last visit in review period?
- 6.1 If yes Q6.0, did the patient have a BMI <18.5 or MUAC <23 cm at the last visit?
- 6.2 If yes Q 6.1, Did the patient receive nutritional support (Suppl or Therap. food)?
- 7.0 Has the spouse(s)/partner(s) of the patient been tested for HIV within the last 12 months or have a known positive status?
- 8.0 Have children of the patient been tested for HIV or known HIV positive status?
- 9.0 Is the patient a female aged 15-49 years?
- 9.1 If Yes Q 9.0 Is the patient on any modern contraceptive methods?
- 10.0 Is the patient a female aged 18-65 years and not pregnant?
- 10.1 If Yes Q 10.0 Was the patient screened for cervical cancer in the last 12 months?

#	1.0	1.1	2.0	3.0	3.1	3.2	4.0	4.1	4.2	5.0	5.1	5.2	6.0	6.1	6.2	7.0	8.0	9.0	9.1	10.0	10.1
1	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
2	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
3	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
4	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
5	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
6	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
7	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
8	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
9	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
10	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N	Y N NA
Sum Y (Num)																					
Sum Y+N (Den)																					
Y/(Y+N) * 100%																					
QI Indicator Ref:	N/A	1.1	1.2	N/A	N/A	1.3	N/A	1.4	1.5	1.6	N/A	1.7	1.8	N/A	1.9	1.10	1.11	N/A	1.12	N/A	1.13

PEDIATRIC KHQIF/OM: Appendix 7b - Pediatric Care Treatment File Review Abstraction Tool

Reiew Period: From _____ To _____

FILE REVIEW INSTRUCTIONS: 1) Based on your case load, pull a sample of patients files who were seen in the last 6 months of the review period. 2) Answer the questions by circling Y or N as applicable for every patient file. If the question does not apply to the patient, then circle "N/A". 3) Use multiple sheets according to your required sample size. 4) After completing all file reviews, fill in sum of Y and N's to calculate the % performance for each indicator. 5) Sum the totals for all sheets and transfer to a QI Indicator Summary report. [Key: Yes (Y), No (N), Not Applicable (N/A).]

SN	1.0 Did the patient visit the clinic in the 6 months review period? (should be yes for all)	1.1 Did the patient have 2 clinical visits 3 months apart in the 6 months review period?	2.0 Did the patient receive a CD4 test (and results available) during the 6 months review period?	3.0 Was the patient on ART before start of the review period?	3.1 If no to 3.0, was the patient eligible for ART initiation during the review period?	3.2 If yes Q 3.1 Was the patient initiated on ART?	4.0 Has the patient been on ART for 12 or more months? (If not on ART, select NA)	4.1 If yes Q 4.0, has viral load been done in the last 12 months and result received?	4.2 If yes Q4.1, was viral load result <1000 copies/ml?	5.0 Was the patient screened for TB using ICF card at last visit in review period?	5.1 Did the patient have a negative TB screen result at last visit?	5.2 If yes Q 5.1 (negative TB screen) Is the patient on IPT or been on IPT in last 2 years?	6.0 Was Z score assessed at the last visit in review period?	6.1 If yes Q6.0, did the patient have a Z-score < 2 at the last visit?	6.2 If yes Q 6.1, Did the patient receive nutritional support (Suppl or Therap. food)?	7.0 Is the child currently aged 8-14 years?	7.1 If Yes Q 7.0 - Has the HIV status of the child been disclosed to him/her?
1	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
2	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
3	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
4	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
5	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
6	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
7	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
8	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
9	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
10	Y N	Y N	Y N	Y N	Y N NA	Y N NA	Y N NA	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA	Y N NA	Y N	Y N NA
Sum Y (Num)																	
Sum Y+N (Den)																	
Y/(Y+N) * 100%																	
QI Indicator Ref:	N/A	2.1	2.2	N/A	N/A	2.3	N/A	2.4	2.5	2.6	N/A	2.7	2.8	N/A	2.9	N/A	2.10

EMTCT REGISTER KHQIF/OM: **Appendix 7d: EMTCT Register Review Abstraction Tool**

INSTRUCTIONS: For every indicator, calculate the numerator, denominator, and %
based on the definition. Sources vary depending on the indicator. Transfer the total num/
den/% values to your QI Indicator Summary Report (Appendix 8) at the end of 6 months.
Review Period: From _____ to _____

SN	Key	Numerator/Denominator Definition	Month/Year __/__	Month/Year __/__	Month/Year __/__	Month/Year __/__	Month/Year __/__	Month/Year __/__	Total
3.1	Num	Number of pregnant women attending fourth ANC Visit during the review period (Source: ANC Register column (d) Number of ANC visits = 4)							
	Den	Number of expected pregnant women in the facility catchment population during the review period (Source: AWP planning data)							
	%	**% of pregnant women attending fourth ANC visit**	%	%	%	%	%	%	
3.2	Num	Number of women delivered in the facility during the review period (Source: Maternity register: sum of all women delivering in the facility within the review period)							
	Den	Number of expected deliveries in the facility catchment population during the review period (Source: AWP planning data)							
	%	**% of skilled deliveries within the facility catchment population**	%	%	%	%	%	%	%
3.3	Num	Number of deliveries with partographs accurately filled during the review period (Source: Maternity file reviews)							
	Den	Number of deliveries in the facility during the review period (Source: Maternity register)							
	%	**% of deliveries with accurately filled partographs**	%	%	%	%	%	%	%
3.4	Num	# of mother-newborn pair reviewed 7-14 days of birth [Source: PNC register column (g) - date of delivery and column (a) - date of visit =7-14 days after delivery]							
	Den	Expected number of deliveries in the facility catchment (Source: AWP planning data)							
	%	**% of Mother-newborn pairs reviewed by health care provider 7-14 days of birth**							
3.5	Num	Number of pregnant women whose partners were tested for HIV during the 6 months review period or who have known documented positive status. (Source: ANC register: column (an) status indicated as P/N/KP)							
	Den	Number of new ANC clients during the 6 months review period. (Source: ANC register: Column (c) 1st visit indicated with Y)							
	%	**% of pregnant women whose partners have been tested for HIV or who are known positive.**							
3.6	Num	Number of HIV infected pregnant women who were receiving HAART (Source: ANC register column (aa) dispensed ARVs = HAART)							
	Den	Number of HIV-infected pregnant women who had at least one ANC visit during the 6 months review period. (ANC Register column (an) Status indicated as P/KP)							
	%	% of HIV-infected pregnant women receiving HAART							
3.7	Num	Number of HEI who were DNA PCR tested by age 6-8 weeks and results available (Source: HEI register column (l) age at test in weeks and (q) test results available)							
	Den	Number of HEI in cohorts who turned 12 months of age during the 6 months review period (Source: HEI register: Column (a) Number of HEI registered in birth cohort)							
	%	% HEI who received HIV DNA PCR testing by age 6-8 weeks and results are available							

SN	Key	Numerator/Denominator Definition	Month/Year __/__	Month/Year __/__	Month/Year __/__	Month/Year __/__	Month/Year __/__	Month/Year __/__	Total
3.8	Num	Number of HIV exposed infants that are on exclusive breast feeding at age 6 months (Source: HEI register: Month 6 column (x) feeding code EBF)							
	Den	Number of HEI in cohorts who turned 12 months during the 6 months review period (Source: HEI register: Column (a) Number of HEI registered in birth cohort)							
	%	% HIV exposed infants on exclusive breast feeding at age 6 months							
3.9	Num	Number of infants seen in facility during review period whose mother/guardian also have documented visit on same day during review period (Source: HEI Register, Mother's File)							
	Den	Number of HIV exposed infants between 0 and 18 months in follow-up at the facility during the review period (Source: HEI register: Column (a) Number of HEI registered in birth cohort)							
	%	% HIV infected mother and HIV-exposed baby pair (0-18 months) in active care among facility registered							
3.10	Num	Number of infants seen in facility during review period whose mother/guardian also have documented visit on same day during review period (Source: HEI Register, Mother's File)							
	Den	Expected number of HIV exposed infants between 0 and 18 months in the facility catchment area. (Source: AWP planning data: expected number of deliveries in facility catchment area in 1 year x County ANC HIV prevalence x 2)							
	%	% HIV infected mother and HIV-exposed baby pair (0-18 months) in active care among population estimate months indicated as Pos)							
3.11	Num	Number of infants seen in facility during review period whose mother/guardian also have documented visit on same day during review period (Source: HEI Register, Mother's File)							
	Den	Number of HEI in cohorts that turned 24 months of age during the 6 months review period (Source: HEI register: Column (a) Number of HEI registered in birth)							
	%	HIV exposed infants diagnosed with HIV between 0 and 18 months							
3.12	Num	Number of infants seen in facility during review period whose mother/guardian also have documented visit on same day during review period (Source: HEI Register, Mother's File)							
	Den	Expected number of HIV exposed infants between 0 and 18 months in the facility catchment area (Source: AWP planning data: expected number of deliveries in facility catchment area in 1 year x County ANC HIV prevalence x 2)							
	%	% HIV infected mother and HIV exposed baby pair (0-18 months) in active care among population estimate							
3.13	Num	Number of HIV-exposed infants identified HIV positive by 18 months of age (Source: HEI register: column (ar) HIV status at 18 months indicated as Pos)							
	Den	Number of HEI in cohorts that turned 24 months of age during the 6 months review period (Source: HEI register: Column (a) Number of HEI registered in birth)							
	%	% HIV exposed infants diagnosed with HIV between 0 and 18 months							

SN	Performance measure	Numer-ator	Denomi-nator	%
KHQIF Operational Manual **Appendix 8: HIV QI Indicators Summary Report**				
Adult Care and Treatment				
1.1	% patients in care with 2 or more visits, 3 months apart during the 6 months review period			
1.2	% of HIV infected patients in care with at least one CD4 count during the 6 month review period			
1.3	% eligible patients initiated on ART			
1.4	% of patients on ART with at least one VL result during the last 12 months			
1.5	% of patients on ART for at least 6 months with VL suppression			
1.6	% patients screened for TB using ICF card at last clinic visit			
1.7	% of patients eligible for IPT who were initiated on IPT			
1.8	% of patients with Nutritional assessment at the last clinic visit			
1.9	% of patients eligible for nutritional support and who received nutritional support			
1.10	% of patients whose partner(s) have been tested for HIV or have known positive status			
1.11	% of patients whose children have been tested for HIV or have known positive status			
1.12	% non-pregnant women patients who are on modern contraceptive methods during the review period			
1.13	% HIV infected non-pregnant women 18 to 65 years who have been screened for cervical cancer in within the last 12 months			
Pediatric Care and Treatment				
2.1	% patients in care with 2 or more visits, 3 months apart during the 6 month review period			
2.2	% of HIV infected patients in care with at least one CD4 count during the 6 month review period			
2.3	% eligible patients initiated on ART			
2.4	% of patients on ART with at least one VL result during the last 12 months;			
2.5	% of patients on ART for at least 6 months with VL suppression			
2.6	% patients screened for TB at last clinic visit;			
2.7	% of patients eligible for IPT who were initiated on IPT			
2.8	% of patients with Nutritional assessment (Z-score or MUAC) at the last clinic visit			

2.9	% of patients eligible for nutritional support and who received nutritional support			
2.10	% children aged 8-14 who have been disclosed HIV status			
EMTCT				
3.1	% of pregnant women attending fourth ANC visit			
3.2	% of skilled deliveries within the facility catchment population			
3.3	% of deliveries with accurately filled partographs			
3.4	% of Mother-newborn pairs reviewed by health care provider 7-14 days of birth			
3.5	% of pregnant women whose partners have been tested for HIV or who are known positive.			
3.6	% of HIV-infected pregnant women receiving HAART			
3.7	% of HIV-infected pregnant or lactating women on ART for at least 6 months who had a VL assessment done			
3.8	% of HIV-infected pregnant or lactating women on ART for at least 6 months with VL suppression			
3.9	% HEI who received HIV DNA PCR testing by age 6-8 weeks and results are available			
3.10	% HIV exposed infants on exclusive breast feeding at age 6 months			
3.11	% HIV infected mother and HIV-exposed baby pair (0-18 months) in active care among facility registered			
3.12	% HIV infected mother and HIV-exposed baby pair (0-18 months) in active care among population estimate			
3.13	% HIV exposed infants diagnosed with HIV between 0 and 18 months			
Other Program Areas				
4.1	% of male clients who were circumcised with documented adverse event			

EXERCISE 6

Improving Medical Record Documentation

Identify some variables/indicators that you can check for completeness.
Fill the variables in the form and then begin medical records audit.
Complete the question audit form; the focus should be on the presence or absence of the form/indicator

File Number/SN	For every variable, circle Y (yes) if done and N (No) if not done.			
	Variable 1: Date of Birth	Variable 2: _____	Variable 3: _____	Variable 4: _____
1.	Y N	Y N	Y N	Y N
2.	Y N	Y N	Y N	Y N
3.	Y N	Y N	Y N	Y N
4.	Y N	Y N	Y N	Y N
5.	Y N	Y N	Y N	Y N
Total "Y"				
Total Files (Y+N)				
% achieved Y/ (Y+N)*100%				

What are the gaps you have observed from this medical documentation review?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Case Study: Mrs. J.O

Introduction

Huduma Health Centre provides comprehensive antenatal services including Prevention of Mother-to-Child Transmission (PMTCT) of HIV and maternity. Huduma Health Centre does not provide care and treatment services for HIV. Patients who require HIV care and treatment are referred to a nearby Health Centre or the district Hospital for further management. The district hospital is 40 kms from Huduma Health Centre and the nearby Makini Health Centre, which offers HIV care and treatment, is 4kms from Huduma.

First ANC visit

Mrs J.O. is a primigravida who attends the ANC clinic at Huduma Health Center (HC). A health education session is conducted every morning as the clients wait to be attended to. Following pre-test counseling Mrs. J.O. agrees to have a HIV test done. The HIV results are positive. She is 20 weeks pregnant and the nurse gives her Zidovudine and Nevirapine and instructs her on how and when to use them. During that visit, she was not registered in the ANC register and her HIV status is not documented in the mother-child booklet. She is then referred (without a referral letter) to the CCC at the district hospital. Mrs. J. O. is afraid of disclosing her status to her husband, fearing that he would chase her away.

Mrs J.O. at the District Hospital

Mrs. J.O. organizes herself and 5 days later leaves for the district hospital for CD4 count as instructed by the nurse. Because she does not have a referral, on arrival at the hospital (at 9am), she is not sure of where to go. She first goes to the general reception, where she is registered and asked to sit on the waiting bench. She waits for 3 hours on the queue before seeing the clinician. After consultation she is directed to the lab for CD4 testing. She arrives at the lab at 12:30pm. The lab technician tells her she is late and he has already reached his maximum number of 30 samples for CD4 testing for the day. She is given an appointment to come the following Thursday. On the particular Thursday, Mrs. J.O. finds she has no money for bus fare and no other means of transport therefore she fails to go to the district hospital. Mrs. J.O continues attending ANC at Huduma HC as scheduled.

Maternity at Huduma HC

When labour starts she reports in time at Huduma HC where a nurse/midwife receives her at the maternity. She is examined and instructed to go to the labour ward. At the second stage of labour, which was 3 hours later, Mrs. J.O through the assistance of a nurse assistant delivers a beautiful baby boy weighing 3.5kg. The following morning, she receives general health education about personal hygiene, breastfeeding and care of the baby before being discharged. She happily goes home with her husband.

Twelve months later

Mrs. J.O. is admitted at the district hospital paediatric ward. Her baby boy has had recurrent pneumonia. The doctor orders for several tests including a HIV test and the baby is found to be HIV positive.

EXERCISE 7

Quality Improvement Tools

EXERCISE 7a: Brainstorming

Brainstorm/list at least 5 problems/ gaps identified in the Mrs. J.O. study:

_____
_____
_____
_____

If you have more than 5 problems, use multi-voting to narrow down to the top 5. See Operational Manual Section 5 - QI Tools for details on multi-voting.

EXCERCISE 7b: Decision Matrix and Problem Statement

Potential performance gaps to be addressed	CRITERIA: Rank 1-5 where 5=totally meets criteria				
	Issue seen as important*	Realistic scope (Control)**	Likelihood of success via QI***	Potential Impact of QI project****	TOTAL
1.					
2.					
3.					
4.					
5.					

Note:
* Issue seen as important refers to a gap that is crucial or gap that does not meet standards set in National guidelines
** Realistic scope (control) refers to gaps that the facility are able to address at a facility level, that do not involve the macrosystem
***Likelihood of success refers to performance gaps that can be addressed easily, the so called quick wins
**** Potential Impact of QI project refers to performance gaps that if addressed will have the greatest effect
• Review the rankings and select the project with the highest score

Now write the problem statement for the problem you have chosen to address. An example is provided:

Problem Statement: *Tracking women through PMTCT care until delivery at Huduma Health Centre has been a challenge. Most pregnant women after being enrolled at the health centre fail to continue attending to clinic appointments for PMTCT care and some exit care when referred to the district hospital therefore signifying loss to follow up. Defaulting from care can result in higher risk of mother-to-child transmission.*

_____
_____
_____
_____

Now record your problem statement in the WIT QI Project Template building on the above problem statement (Exercise 8).

EXERCISE 7c: Setting Goals in QI

- A goal is a clear statement of the intended improvement and how it is to be measured
- Use your goal statement to stay focused, to establish boundaries for what is and is not included in your team's work, and to define success
- Post your goal where it is visible at every team meeting

Write a goal for improvement
Your goal should:
- Answer the question, "What do you want to accomplish?"
- Be measurable
- **Be short** so that everyone can remember it
- Does not include how you will achieve goal
- May include a beginning and end date

Your goal may be taken directly from an item on the Facility-Assessment checklists or other sources of performance data such as routine HIS reports, HIV QI indicators, patient satisfaction surveys or other sources relevant for your facility.

Example: Decrease number of missed appointments (within 14 days) among patients on ART from 75% to 50% over the next two months.
Using the selected performance gap (problem) you selected in the previous exercise, write your QI Project Goal below. Out of the top of your head, pick a baseline performance measure and target measure to assist you develop your goal.

_____

_____

_____

_____

_____

_____

_____

_____

_____

As you continue with your CQI project, you may develop additional goal ideas. Continue to jot down potential QI project goals and share updated goals with all members of team after each meeting.

Now record your goal statement and baseline data in the WIT QI Project Template building on the above problem statement (Exercise 8).

EXERCISE 7d: Process Flow Analysis

**Complete a Process Flow Analysis using the Mrs J.O Example**

- A flow chart is a diagram that uses graphic symbols to depict the nature and flow of the steps in a process.
- A picture or a road map of a process.
- Can help a QI team better understand the location of problems in the process.
- Uses standard symbols to help in charting the process (shown below).
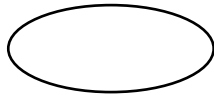
Oval: shows beginning and ending in a process

Rectangle: depicts particular step or task
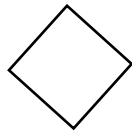
Diamond: includes a decision point

Arrow: shows direction of process flow

Let's begin by quickly sketching the Mrs J.O's flow from entry to exit (applying process flow techniques). Your facilitator will advise if you should pick one level or if you can map her entire story from 1st ANC to the pediatric ward.

EXERCISE 7e: 5 Whys

5 Whys using Mrs J.O Example

The 5 Whys is a question-asking method used to explore the cause/effect relationships underlying a particular problem. Ultimately, the goal of applying the 5 Whys method is to determine a root cause of a defect or a problem

Remember:
- This is a brainstorming discussion
- Answers come from the group
- No wrong answers
- This is not about pointing fingers at individuals
- It is about looking for leaks/defects in the system/processes and work together for an improvement plan
- Narrow your responses to actionable activities. Avoid having responses that involve the macrosystem eg. policy as a final why

Let's practice the 5 Why's with Mrs. JO's story. Find out "why" the problem happened and fill out the table below.

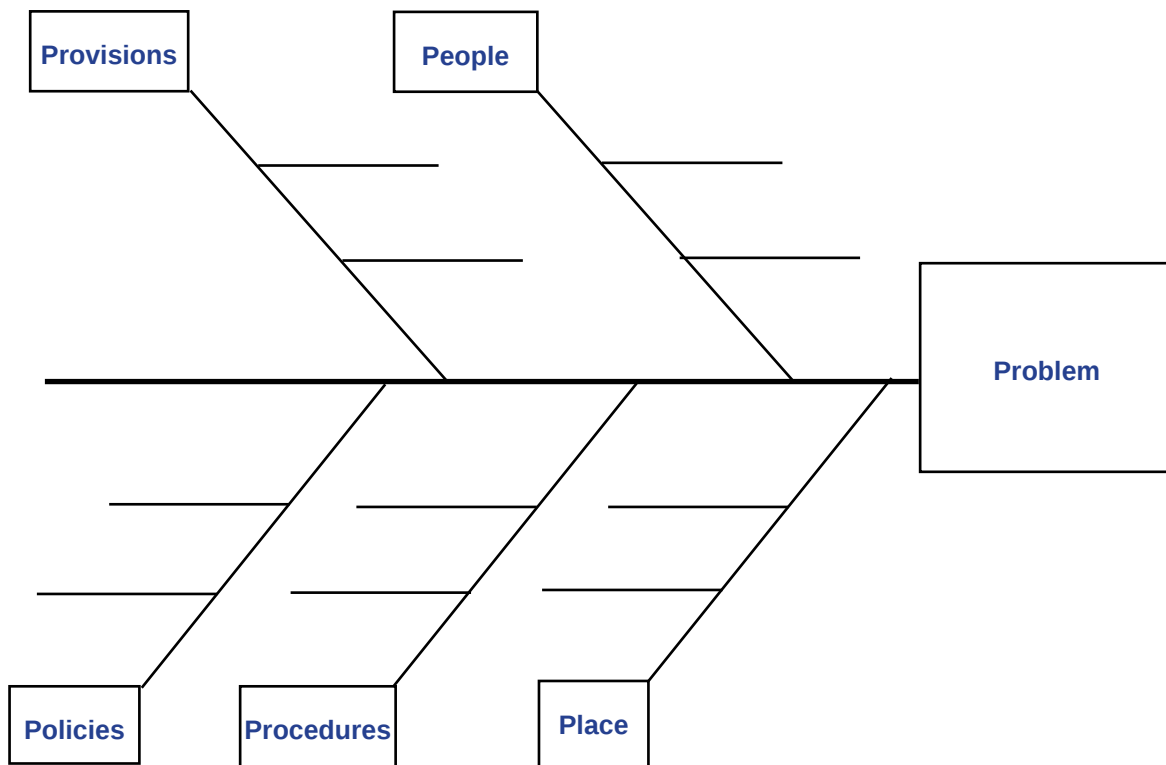| Problem:	
5 Why's	**Response**

EXERCISE 7f: Fishbone exercise

Use the Mrs JO example to complete Fishbone exercise

A fishbone is a graphic tool that helps identify, sort, and display possible causes of a problem or quality characteristic.

For this activity, enter the problem in the box on the right. Then, let's list possible causes under the following headings:
- People (patients and staff)
- Provisions (Materials & Equipments)
- Place (Environment)
- Procedures
- Policies

Note: Not all problems may require every heading.

Provisions   **People**   **Problem**

Policies   **Procedures**   **Place**

Now record your summary of the root causes of your problem determined through the process flow chart, 5-Whys, and Fishbone in the WIT QI Project Template (Exercise 8).

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EXERCISE 7g: Developing a change package

Use the Mrs JO example to develop a change package (up to 2 root causes).

SN	Root cause	Change Ideas (Interventions)

EXERCISE 7-h: Prioritization of change ideas

For each change idea above, vote a score of 1-5 (1- impossible to achieve, 5 certainly can achieve). Activities that score the highest should be implemented first.
Decision matrix template

Potential performance gaps to be addressed	CRITERIA: Rank 1-5 where 5=totally meets criteria				
	Issue seen as important*	Realistic scope (Control)**	Likelihood of success via QI***	Potential Impact of QI project****	TOTAL
1.					
2.					
3.					
4.					
5.					

Note:
 * Issue seen as important refers to a gap that is crucial or gap that does not meet standards set in National guidelines
** Realistic scope (control) refers to gaps that the facility are able to address at a facility level, that do not involve the macrosystem
***Likelihood of success refers to performance gaps that can be addressed easily, the so called quick wins
**** Potential Impact of QI project refers to performance gaps that if addressed will have the greatest   effect
• Review the rankings and select the project with the highest score

EXERCISE 7i: Performance Measurement Plan

How will you measure if your interventions resulted in improvement?
- Select both process and outcome indicators.
- The measurement should also be related to the goal statement.
- Make sure you include the indicator (and definition), method of collection, and frequency of collection.

Indicator (definition)	Method for collection	Frequency of collection

EXERCISE 7j: QI project workplan for implementing change package

Workplans are important for detailing every step of a process and assigned tasks and timelines. A sample format is provided below. Develop a workplan for implementing the change package you selected. WITs may decide to modify the template depending on their needs.

Activity plan for implementing change package	Responsible	Timeline

Now record your summary of the change package and performance measurement plan in the WIT QI Project Template (Exercise 8).

EXERCISE 8: WIT QI Project Template

Instructions:

Who/What: Team lead or designee should fill in one template for every QI project cycle undertaken by the WIT at your facility. This may also serve as an outline for a power point presentation or dissemination of results

Where to store: In your departmental Work Improvement Team (WIT) folders/file.

Reporting/ Feedback: The facility QIT lead should review and provide feedback on the completed summary.

Facility Name: ☐ Facility MFL Code: ☐☐☐☐☐☐

County: ☐ Sub County: ☐

Submitted by: ☐ Date of submission: ☐

Project Title:	
Project Team Leader:	
Project Team Members:	
Problem Statement:	
Goal Statement:	
Indicator Description:	
Baseline Data: (Indicator Performance Result)	Period under review - e.g. Jan 2014 to June 2014: _____ to _____ Results:
Plan – Describe your analysis of the process/ problem. Attach the fishbone, flowchart and/or any tool used for planning.	Fish bone diagram done? Yes No Initial Process flow chart done? Yes No Revised Process flow chart done? Yes No

Plan – Describe the change ideas/interventions you have selected to address the problem (Attach a workplan for intervention)	Root Cause	Change Interventions Selected
Plan – Performance measurement plan. Indicators (and definition), Method for collection, frequency of collection.		
Do – Describe implementation of the change package		
Study – Describe the outcomes of the interventions (should include follow-up data using the same indicator as baseline).	Follow-up Data (Indicator Performance Result) Period under review - e.g. July 2014 to Dec 2014 : ___ to _____ Results:	
Was goal achieved?	• Circle one: Yes No • If YES, continue to Act. • If NO, explain below why your team thinks the intervention did not succeed (challenges faced) and next steps/way forward e.g. beginning a new QI Project/PDSA cycle to address the problem.	
Act – Describe how you have institutionalized the intervention/change and how you will continue measuring the success of the institutionalized interventions over time.	• If successful, sustain and upscale • Describe any challenges faced during the process and how you managed to overcome them. • Describe the lessons learnt. • Recommendations for further actions.	

EXERCISE 9: Run Charts

County QIT Example

In 2013, the County Health Management Team (CHMT) formed a quality improvement team to oversee 21 work improvement teams working on many technical areas. The county tested many change ideas to specifically improve the quality of ANC care. The milestones of the improvement journey are as outlined below.

    a) January-February 2013, county QIT formed, indicators for improvement selected.

    b) March to April 2013, County QIT assisted each facility to establish a QIT and WIT.

    c) May 2013 onwards, WITs developed and tested various changes to improve quality of ANC such as sample referrals, rapid test kits introduction, and lab interrelated outreaches, besides continuous coaching.

    d) WITs continued to monitor their data to see whether they were improving.

Median – is the middle value when data has been arranged in ascending or descending order. If the data points are an even number (2 middle points), then average the 2 most middle points.
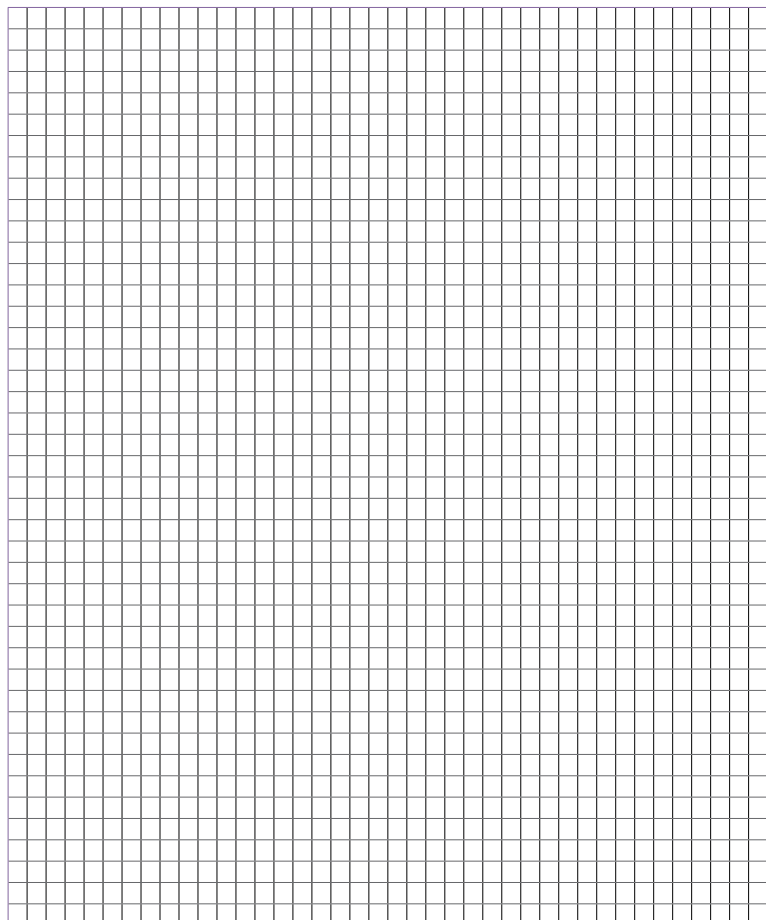
Data from facilities in the county:

Month	% ANC profile completed
1 (Jan 2013)	
2	29
3	27
4	26
5	25
6	25
7	30
8	35
9	49
10	56
11	50
12	64
13 (Jan 2014)	61
14	56
15	60
16	57
17	58
18	67
19	72
20	64

Go over aggregate data improving ANC

A)Plot a graph of the percentage ANC with ANC profile done over the given period

B) Annotate the key events

C) Did the team improve? How can you tell?

EXERCISE 10. Quality Improvement Work Plan

Instruction: The facility team should fill out this template to complete the actions for next steps after the training.

Name of Facility:

Quality Improvement Mentors/Coach:

SN	Activity	Responsible Person(s)	Suggested date of Completion	Expected date of completion
1	Feedback to facility/county/sub-county staff		Immediately you go back… next Monday!	
2	Formation of sub-county QIT, facility QIT and sectional WITs		Within one week	
3	Conduct a facility organizational assessment		Within one week	
4	Conduct facility Baseline assessment (QI File Review and any other performance measurement methods selected by the facility)		Within 2 weeks	
5	Identify areas for improvement		Within one week alongside QIT/WIT team formation.	
6	Initiate PDSA cycle		Within one week alongside team formation. Remember to begin with 5S	

EXERCISE 11. Training Evaluation

The organizers of this training would like to get your honest feedback on your experience with this training for improvement purposes. Kindly take your time and be as objective as you can.

County: _____   Date of Training: _____

PART A: Please rate the variables by circling on the number that best represents your opinion where applicable using the key below and give a comment for each; you are encouraged to be frank and constructive to enable improvement of the training.

KEY: 1= Strongly Disagree   2= Disagree   3= Not Sure   4= Agree   5= Strongly Agree

COURSE CONTENT AND ORGANIZATION	RATING	PLEASE COMMENT
The training material was easy to use and follow	1 2 3 4 5	
The stated course objectives were covered comprehensively	1 2 3 4 5	
The training manual and handouts were in useful format and included information relevant to my practice	1 2 3 4 5	
The training was well structured to achieve the learning outcomes	1 2 3 4 5	
The mix of lectures and group work was effective in helping me learn and practice new knowledge	1 2 3 4 5	
Training met my xpectations	1 2 3 4 5	
The training stimulated my interest and thought on the subject area	1 2 3 4 5	
I participated actively in the course	1 2 3 4 5	
The trainers explained the material and answered my questions well	1 2 3 4 5	
The trainers dealt effectively with my concerns	1 2 3 4 5	
It is feasible to implement what I learnt in this training	1 2 3 4 5	

PART B: Please put a tick (√) on what represents your opinion against the variables given and explain each

VARIABLES	TICK ONE	PLEASE COMMENT
The amount of time spent in didactic/ lecture sessions for this training was:	• Too little • Too much • The right amount	
The amount of time for group activities was:	Too little Too much The right amount	
The level of materials covered was:	Too easy Too hard The right level	

Are there any topics you would like added to the training?	Yes No If yes, list the topics:	
Are there any topics you would like removed from the training?	Yes No If yes, list the topics:	
Would you recommend this training to others?	Yes No Why?	

PART C: OPEN RESPONSE

1. What did you like most about the training?

2. What would you like to be changed about the training in future?

3. Any other comment?

Thank you for taking time to fill this form - we value your feedback!

Notes

Notes