**FACILITY-BASED MORTALITY AUDIT (FBMA) FORM (PART A)**

Questions are written in normal font, *Interviewer instructions in Italic, Instructions on skip patterns are underlined*

|  |  |
| --- | --- |
| 1. Facility code: | [\_\_][\_\_] |
| 1. Date of audit: | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. Field worker code: | [\_\_][\_\_] |

**Demographic and basic clinical data from records or from clinical staff who tended the deceased, the TB clinical records and the TB register**

|  |  |  |
| --- | --- | --- |
| 1. Patient Initials | [\_\_].[\_\_]. | |
| 1. Date of birth | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | |
| 1. Gender: | ☐ Female ☐ Male ☐Trans | |
| 1. Age of the patient (in years) | *(if infant, use decimal)* | [\_\_][\_\_] |

**RISK FACTORS AND VULNERABLE GROUPS**

|  |  |  |
| --- | --- | --- |
| 1. Which (if any) risk factors did this patient have? *Tick all that apply* | | |
| * HIV co-infection * diabetes * child under 5 * elderly (>60 yr) * pregnancy/postpartum * mentally ill * alcohol- addicted * drug-addicted * smoking * malnourished * previously treated for TB | * miner * factoryworker * residence in an urban slum * former prisoner or prison staff * healthcare worker * soldier * refugee or internally displaced (IDP) * contact of a TB case | * marginalized man who had sex with men * sex worker * transgender * migrant * indigenous/minority ethnic grp * homeless * orphan or vulnerable child * other (specify) * Not known\_\_\_\_\_\_\_\_ |

**TIMING OF SYMPTOMS OF TB**

1. From the time this patient started feeling ill, what health complaints did he/she have, and when did those start?

|  |  |  |  |
| --- | --- | --- | --- |
| *(Interviewer: First ask for the symptoms, then probe for the dates. Tick all options mentioned. DO NOT PROBE for symptoms, only for the dates . If exact date unknown- fill in: beginning of month=07, mid month=15, end of month = 22, if part of the month entirely unknown =99)* | | | |
| **Symptom** | ***Tick all options mentioned*** | | **Date symptom started: *dd/mm/yy*** |
| 1. cough | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. production of sputum | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. chest pain | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. haemoptysis (coughing blood) | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. fever | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. night sweats | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. weight loss | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. breathlessness | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. fatigue | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. loss of appetite | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. headache | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. body pains | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. other, specify …………………………code [\_\_][\_\_] | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |
| 1. other, specify …………………………code [\_\_][\_\_] | | [\_\_] | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] |

**TB DIAGNOSIS AND MANAGEMENT**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Date that the patient first sought medical attention for symptoms? *09/09/99 if unknown* | | | | | | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | |
| 1. How many visits to the formal health care system were made before TB was diagnosed? | | | | | | | | | |  | | [\_\_][\_\_] | | | |
| 1. Why was the TB investigation initiated? *(choose 1)* | | | | | | | | | |  | | [\_\_][\_\_] | | | |
| 1=Patient sought care for TB symptoms | | | | | | | 4= active case finding/screening | | | | | | | |  |
| 2=Routine screening of an HIV+ client | | | | | | | 5=Other (specify): ………………………….. | | | | | | | |  |
| 3=Referral from other health facility | | | | | | | 99=don’t know | | | | | | | |  |
| 1. On what basis was the TB diagnosis made? *(tick all that apply)* | | | | | | | | | | | | | | | |
| 1. Physical exam findings | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] [\_\_] | | |
| 1. Chest X-ray | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] [\_\_] | | |
| 1. Sputum sample(s) | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] [\_\_] | | |
| 1. Needle aspirate | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] [\_\_] | | |
| 1. TST/IGRA | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] [\_\_] | | |
| 1. Other (specify, below) | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] [\_\_] | | |
| 1. Specify: | | | | | | | | | |  |  | | | | |
| 1. Was TB diagnosis confirmed mycobacteriologically? | | | | | | | *1=yes, 0=no, 99=don’t know* ☐ | | | | | | [\_\_] [\_\_] | | |
| 1. If yes, how was TB diagnosis confirmed? | | | | | | | *(tick all that apply)* | | | | | |  | | |
| 1. Confirmed by smear microscopy | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] *[\_\_]* | | |
| 1. Confirmed by liquid or solid culture | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] *[\_\_]* | | |
| 1. Confirmed by GenXpert/Rif | | | | | | | *1=yes, 0=no, 99=don’t know* | | | | | | [\_\_] *[\_\_]* | | |
| 1. Date that the TB diagnosis was made? *09/09/99 if unknown* | | | | | | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | |
| 1. Type of TB? | 1=PTB S+, 2=PTB S-,3=EPTB 99=unknown | | | | | | | | | | | | [\_\_] [\_\_] | | |
| 1. New or retreatment case? | | | 1=new, 2=relapse, 3 failure, 4= return after default, 5=other, 99=unknown | | | | | | | | | | [\_\_] [\_\_] | | |
| 1. Date when the patient was notified of his/her TB diagnosis ? *(07/07/77 if not notified, 09/09/99 if unknown)* | | | | | | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | |
| 1. Date when TB treatment started? | | | | | | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | |
| 1. If TB treatment was never started, what was the main reason? | | | | 1=Drug stock out, 2=TX Consultations needed, 3=Patient refusal, 4=Early death, 5= contraindication, 6=not authorized to dispense TBTX, 7=waiting list for TB TX, 8=other | | | | | | | | | | [\_\_] [\_\_] | |
| 1. What were the other reasons? (if any) | | | | | |  | | | | | | | |  | |
| 1. If TB treatment started more than 48hrs after TB diagnosis, what was the main reason? | | | | | | 1=Drug stock out, 2=TX Consultations needed, 3=Patient refusal, 4=Early death, 5= Other | | | | | | | | [\_\_] [\_\_] | |
| 1. What were the other reasons? (if any) | | | | | | | | | | | |  | | | |
| 1. Did the patient have drug resistant TB? | | | | | | | | | 1=yes, 0=no, 99=unknown | | | | | [\_\_] | |
| 1. Which TB Treatment regimen was the patient following? | | | | | | | | | 1= Cat I, 2=Cat II, 3 =Other, 99=unknown, 77=noTX | | | | | [\_\_][\_\_] | |
| 1. Were sputum samples taken and examined at the appropriate times?(i.e, at 2 months and 5 months) | | | | | | | | 1=yes, both times 0=no, 3= once only, 77=not applicable | | | | | | [\_\_] [\_\_] | |
| 1. Was the patient started on retreatment regimen if the 5 months sputum was positive? | | | | | | | | 1=yes, 0=no, 77=not applicable 99=don’t know | | | | | | [\_\_] [\_\_] | |
| 1. How was TB treatment adherence? | | 1=Fully adherent (more than 90% of doses taken)  2=Between 70%-90% of doses taken  3=Less than 70% of doses taken  77=not applicable, treatment had just begun  99=unknown | | | | | | | | | | | | [\_\_] [\_\_] | |
| 1. What other patient factors (if any) impacted quality of TB care? | | | | | 1=language barriers, 2= facility abandonment,3= collaboration challenges, 4=lack of family/supporters, 5=other, 77=not applicable, 99=unknown | | | | | | | | | [\_\_][\_\_] | |

**HIV DIAGNOSIS AND MANAGEMENT**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Under what circumstances was HIV test conducted? | | | | 1=PICT of TB patient, 2=VCT, 3=part of clinical work-up, 99=unknown, 5=patient already known to be HIV+ (skip to Q.x) | | | | | | | | | [\_\_] [\_\_] |
| 1. Date that a blood sample(s) was taken for HIV test | | | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | | |
| 1. What was the HIV test result? | | | 1= HIV positive, 2= HIV negative, (skip to Q. X) 3=indeterminant, 88=not tested, 99=missing result | | | | | | | | | | [\_\_][\_\_] |
| 1. Date that the HIV diagnosis was made? 09/09/99 if unknown | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | | | | |
| 1. Date of HIV post-test counseling *(09/09/99 if unknown)* | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | | | | |
| 1. Was anti-retroviral therapy (ART) started in hospital or was the patient on ART when diagnosed with TB? | | | | | 1=yes, 0=no *(skip to #), 3=already on ART, 99=unknown* | | | | | [\_\_] [\_\_] | | | |
| 1. Date when ART was started? | *07/07/77= HIV NEG*  08/08/88=*not tested*  *09/09/99= unknown* | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | | | |
| 1. If ART was not started, what was the main reason? | | 1=Drug stock out, 2=TX Consultations needed, 3=Patient refusal, 4=Early death, 5= contraindication, 6=not authorized to dispense ART, 7=waiting list, 8=other | | | | | | | | | | [\_\_][\_\_] | |
| 1. Other reasons for no ART provision to HIV+ TB patients | | | | |  |  | | | | | | | |
| 1. How was ART adherence? | | 1=Fully adherent (at least 90% of doses taken)  2=Between 70%-90% of doses taken  3=Less than 70% of doses taken  77=no ARTs started, 99=unknown | | | | | | | | | | [\_\_][\_\_] | |
| 1. Was Cotrimoxazole (CPT) started? | | 1=yes, 0=no, 77=not applicable: HIV NEG,  88=not tested, 99=missing *(skip to #)* | | | | | | | | | | [\_\_] [\_\_] | |
| 1. When was Cotrimoxazole started? | | | | |  | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | | | |
| 1. If Cotrimoxazole was not started, what was the main reason? | | 1=Drug stock out, 2=TX Consultations needed, 3=Patient refusal, 4=Early death, 5= contraindication, 6=not authorized to dispense ART, 7=waiting list, 8=other | | | | | | | | | | [\_\_][\_\_] | |
| 1. Result and date of latest CD4 count before discharge/death? | | | | | [\_\_][\_\_][\_\_]  *999=if unknown* | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_]  *(09/09/99 if unknown)* | | | | |
| 1. Was HIV diagnosed before TB? | | | | | 1=yes, 0=no *(skip to #)* | | | | | | [\_\_] [\_\_] | | |
| 1. If yes, was client prescribed Isoniazid preventive therapy (IPT)? | | | | | 1=yes, 0=no 77=n/a | | | | | | [\_\_] [\_\_] | | |
| 1. If no, why not? | | | | |  | | |  | | | | | |
| 1. What other factors influenced HIV care? | | | | |  | | |  | | | | | |

**CLINICAL CARE IN HOSPITAL**

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Date admission to hospital? | | | | | |  | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | | | | | | | | |
| 1. Was patient weighed upon admission? | | | | | | 1=yes, 0=no,99=unknown | | | | | | | | | [\_\_][\_\_] | | | | | | |
| 1. What was patient’s body weight at admission | | | | | | In kg | | | | | [\_\_][\_\_] | | | | | | | | | | |
| 1. CD4 count at admission | | | *9999=if unknown* | | | | | | | | [\_\_][\_\_][\_\_][\_\_] | | | | | | | | | | |
| Indicate the total number of times the following tests were performed between admission and discharge/transfer/death? | | | | | | | | | | | | | | | | | | | | | |
| 1. Body weight measured | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Respirations measured | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Pulse measured | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Blood pressure taken | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Temperature measured | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Chest sounds measured | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Hemoglobin/Anemia measured | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Other diagnostic blood tests | | | | | Specify: | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Liver function tests | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Urine tests | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Chest X-ray performed | | | | |  | | | | | | | | | | | | | | | [\_\_][\_\_] | |
| 1. How long was the largest time span between clinical assessments by a clinician? | | | | | | | | | | | | | In hrs | | | | | [\_\_][\_\_][\_\_] | | | |
| 1. Were signs of worsening condition noted? (*tick yes if respiration rate>30/min, pulse>120/min, or temperature >39****◦****C? or other unstable vital)* | | | | | | | | | | | | 1=yes, 0=no, 99=unknown | | | | | [\_\_][\_\_] | | | | |
| 1. Were actions taken to address the worsening condition? | | | | | | | | | | | | 1=yes, 0=no, 99=unknown | | | | | [\_\_][\_\_] | | | | |
| Which actions were taken? | 1. . 2. . 3. . 4. . | | | | | | | | | | | | | | | | | | | | |
| 1. How much time elapsed between the time when worsening was noted and when actions were taken? | | | | | | | | | | | | In hrs | | | | | [\_\_][\_\_][\_\_] | | | | |
| 1. Were treatment complications identified? | | | | | | | | | | | | 1=yes, 0=no, 99=unknown | | | | | [\_\_][\_\_] | | | | |
| 1. What treatment complications were found (if any)? *(77=none)* | | | | |  | | | | | | | | | | | | | | | | |
| 1. In addition to TB, did the patient suffer from any other infectious diseases? | | | | | | | | | | | | 1=yes, 0=no, 99=unknown | | | | | | [\_\_][\_\_] | | | |
| 1. Did patient receive other treatment/support beyond TB treatment? | | | | | | | | | 1=yes, 0=no, 99=unknown | | | | | | | | | | | [\_\_][\_\_] | |
| 1. IV fluids | | | | | | | | | *1=yes, 0=no, 99=unknown* | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Corticosteroids | | | | | | | | | *1=yes, 0=no, 99=unknown* | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Diuretics | | | | | | | | | *1=yes, 0=no, 99=unknown* | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Bronchodilatators | | | | | | | | | *1=yes, 0=no, 99=unknown* | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Supplementary food | | | | | | | | | *1=yes, 0=no, 99=unknown* | | | | | | | | | | | [\_\_][\_\_] | |
| 1. Other (describe:………………………………… … …) | | | | | | | | | *1=yes, 0=no, 99=unknown* | | | | | | | | | | | [\_\_][\_\_] | |
| 1. How long was the largest time span between clinical assessments by a clinician? | | | | | | | | | | | | In hrs | | | | [\_\_][\_\_][\_\_] | | | | | |
| 1. Were there delays in provision of medication due to stock outs? | | | | | | | | | | 1=yes, 0=no,  99=unknown | | | | | | | | [\_\_][\_\_] | | | |
| 1. If yes, which ones? | |  | | | | | | | | | | | | | | | | | | | |
| 1. What was the length of time between when blood was drawn and when test results were acted upon? | | | | | | | | In hrs  *(99=unknown, 77=not applicable if no tests or TX)* | | | | | | | | [\_\_][\_\_][\_\_] | | | | | |
| 1. Was there a need for patient financial contributions to cover the costs of tests and/or treatments? | | | | | | | | 1=yes, tests only, 2= treatment only, 3= tests and treatment, 0=no, 99=unknown, 77=not applicable | | | | | | | | | | | | | [\_\_][\_\_] |
| 1. Did patient’s financial constraints contribute to delay in timely testing and/or treatment? | | | | | | | | | | 1=yes, 0=no, 99=unknown, 77=not applicable | | | | | | | | | | | [\_\_][\_\_] |
| 1. Was the patient discharged from the hospital? | | | | | | | 1=yes, 0=no | | | | [\_\_] | | | | | | | | | | |
| 1. Date of hospital discharge | | | | 99=unknown, 77=not applicable | | | | | | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | | | | | |
| 1. What was the main reason for discharge? | | | | 1=To receive palliative care  2=Request of patient or relatives  3=Condition allowed ambulatory treatment  4=Transfer to another facility  5= Other (specify) | | | | | | | | | | | | | | | [\_\_] | | |
| 1. What was patient’s weight at discharge | | | | | | In kg | | | | | [\_\_][\_\_] | | | | | | | | | | |
| 1. Where was patient transferred? | | | | | |  | | | | | | | | | | | | | | | |
| 1. Why was the patient transferred? | | | | | |  | | | | | | | | | | | | | | | |

**MORTALITY**

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1. Did the patient die? | | | | | 1=yes, 0=no |  | | |
| 1. If yes, when did the patient die? | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | |
| 1. If no, date of treatment outcome | | | | | [\_\_][\_\_]/[\_\_][\_\_]/[\_\_][\_\_] | | | |
| 1. Where did the patient die? | 1=at home, 2=in this hospital, 3=in hospice, 4=other health facility 5= other (specify) | | | | | | | [\_\_] |
| 1. What was the direct cause of death? | | | |  | | | | |
| 1. What is the source of information on cause of patient’s death | | | 1= necropsy, 2= verbal autopsy, 3= clinical data, 99=unknown, 77=not applicable | | | | [\_\_][\_\_] | |
| 1. What was the underlying cause of death? | | 1=TB, 2= other opportunistic infection of HIV, 3= other, 99=unknown, 77=not applicable | | | | | [\_\_][\_\_] | |
| 1. On what basis was this determined? | | | |  | | | | |
| 1. What were the contributing causes of death? | | | |  | | | | |

1. Additional details that may be pertinent for performance improvement: