

# Module 4

## IPD and Referral

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# IPD and Referral



## 4.1 WHAT ARE THE TOOLS USED FOR DATA COLLECTION?

The data collection tools used in the inpatient department (IPD) are shown below. They are classified as follows:

### Primary Tools

Primary data sources are essential to routine monitoring within the HIS, and are prerequisite to the calculation of indicators. They form the basis of the guidance and training within this manual, and are described in detail in the Illustrated Guides at the end of the module.

### Secondary Tools

Secondary data sources have important functions within the HIS, but are not used to directly calculate indicators. They play vital roles informing clinical decision-making and promoting service quality and performance. They are described in information boxes in the supporting text.



## > Data collection and monitoring tools

### IPD and Referral

|                            |
|----------------------------|
| Primary Tools              |
| 1. IPD Register            |
| 2. IPD and Referral Report |

|                   |
|-------------------|
| Secondary Tools   |
| 1. Ward Book      |
| 2. Clinical Notes |



## 4.2 WHO IS RESPONSIBLE FOR COLLECTING THE DATA?

An IPD Register should be used to record all admissions and discharges on each ward within the health centre. The member of clinical staff responsible for the care of the individual patient should update each entry in the register. Each staff member on each ward should therefore understand how to accurately record each admission/discharge, and should take responsibility for maintaining neat and legible records.

At the end of each week, the Head Nurse should coordinate the completion of the IPD and Referral Report and ensure that each ward has submitted in full and on time. This report should include admissions to all wards within the health facility. The Head Nurse is also responsible for monitoring the upkeep of register entries, and for ensuring the completeness of record entries each day.



## 4.3 WHAT DATA SHOULD BE COLLECTED AND HOW?

### 4.3.1 IPD Register

A summary of case-based information for each patient admitted (and discharged) from each ward in the health centre should be logged in an IPD Register.

#### > Admission Details

One register book should be kept in each ward and should record information on the identity of the patient, presenting signs and symptoms, diagnosis and treatment (see Illustrated Guide to IPD Register). A separate IPD register should be used to record medical complications seen within pregnancy (see Illustrated Guide to IPD (Pregnancy) Register).

All IPD admissions must be referred from (and therefore also reported in) the OPD section (see Module 3: Morbidity). Similarly, all IPD deaths must be reported in the mortality register (see Module 2: Mortality).

#### > Length of Stay

At the time of exit, the number of days between the date admission and discharge should be determined. A calendar should be used, particularly if this period extends over more than one month. The length of stay is inclusive of both the day of admission and the day of discharge.

## > Reason for exit

The reason for exit must be stated for every entry in the register. The available options are authorized discharge / unauthorized discharge / death < 24 hours / death > 24 hours / referral. Repatriation is considered under referral as a reason for exit. The location and/or level of referral should also be indicated in the register. Only reasons given in the legend on each register page should be recorded.

In addition to being a direct source of weekly reporting, the IPD register serves two other important functions:

### 1. Outbreak Alert

The case-based information collected in the register plays a crucial role in tracing individuals in the event of an outbreak. It is an important reference for the completion of the line listing section in the Outbreak Alert Form (see Module 3 Part 2: Outbreak Alert and Response).

### 2. Quality of Care

The centralised summary of case-information within each register acts as a useful evaluation and monitoring tool. Health Managers should periodically audit the registers, to review diagnosis and prescription practices in each IPD and certify adherence to Standard Treatment Guidelines.

An Illustrated Guide to the IPD Register and an explanation of the information that should be recorded in each, is given at the end of the module.

## 4.3.2 Patient Records

The IPD register does not replace the need to maintain detailed history and examination notes. These should be written legibly, in long-hand, in the individual patient records that are maintained by each health agency.



## 4.4 HOW AND WHEN SHOULD THE DATA BE REPORTED?

At the end of each week the IPD Registers on each ward should be used to compile the IPD and Referral Report for the camp.

The dates of the reporting weeks are shown in the Reporting Calendar. It is important that all staff are aware of these dates, and that copies the calendar are distributed to all inpatient wards.

### 4.4.1 Weekly Report

The Head Nurse is responsible for using the IPD Register to complete the corresponding table in

the IPD and Referral Report. Photocopies of the weekly form may be required to assist wards to compile their individual reports prior to aggregation into the camp totals.

Each entry should be carefully retrieved from the registers, and appropriately disaggregated by age (< 5, ≥5), status (refugee or national) and cause of admission (and death, where applicable). IPD Registers on maternity wards (used for pregnant, post-natal and newborn admissions) should also be included in the IPD and Referral Report.

It is not possible to report an exhaustive list of cause-specific admissions and deaths in the HIS. Each country must identify the priority diseases and health events that present the most significant threat to the health of the refugee and host population. Based on this selection, a morbidity and mortality list of core diseases and health events should be agreed upon.

The weekly reporting form allows up to three additional causes of admission/death to be specified and written in 'free-cells' in the mortality list. Strong coordination is required between Health agencies to ensure that the same causes are monitored across different camps. This will help safeguard the consistency of information within each country operation. For guidance on which causes of admission/death to select, see Module 3: Morbidity.

In addition to the tabulated information any IPD deaths should also be included in the line listing that accompanies the Mortality Report (see Module 2: Mortality). The line listing should include further case-based details obtained from the mortality register: including the name, sex, exact age and status (refugee or national) of the deceased; the primary and underlying causes of death; other significant conditions of note. Where applicable, case investigation reports should be included with this weekly line listing.

Referral Information, including the reason and location of referral, should be entered into the table on the reverse of the IPD and Referral Form.

#### **4.4.2 Additional Data**

In addition to information that is transferred directly from the tally sheets, three other pieces of information should be reported routinely in each IPD and Referral Report:

> **Number of days in the reporting period** refers to the number of complete working days during the reporting week, on which a full range of inpatient services and staffing were available. This should include weekends if the full range of IPD services and 24 hour medical cover is provided to each ward.

> **Number of beds** refers to the number of inpatient beds on each ward. The number in each ward should be aggregated to give the combined total for the whole camp.

> **Sum number of days stay for authorized discharges** should be reported using the length of stay columns. Note that length of stay for unauthorised discharges, deaths, and referrals do NOT contribute to this figure.

#### 4.4.3 Monthly Report

At the end of each week the paper-based report forms can be directly entered into the computer. The database will then automatically combine these into a monthly report composed of 4 or 5 weekly reports, depending on the reporting calendar. More information on data management and is given in Part 3 of the manual.



#### 4.5 HOW SHOULD THE DATA BE INTERPRETED AND USED?

The indicators for IPD and Referral are shown below. Each is classified according to the five core objectives of the HIS given in Part 1 of this manual. A summary of each indicator, including formulae, units of expression, and the corresponding standard (where available) is given in the Standard and Indicator Guide that accompanies this manual.

It is essential that staff are familiar with how these indicators are calculated, and understand how they should be applied to public health practice. A group exercise on how to calculate and interpret the indicators, using sample data, is given in the CD-ROM that accompanies this manual.



## > Indicator Summary

### IPD and Referral

| Objective  | Indicator                               | Source |
|--|---|--------|
| <b>2. Monitor trends in health status and continually address health care priorities</b> | Proportional mortality*                 | UNHCR  |
|  |   |        |
| <b>3. Evaluate the effectiveness of interventions and service coverage</b>               | Proportion of U5 deaths within 24 hours | UNHCR  |
|  | Average length of stay                  | UNHCR  |
|  | Bed occupancy                           | UNHCR  |
|  | Hospitalisation rate                    | UNHCR  |
|  | Proportion of admissions to nationals   | HIS    |
|  | Referral Rate**                         | UNHCR  |

\* Disaggregated by age (< 5; ≥5) and cause (see surveillance list in Module 3)

\*\* Disaggregated by location / level of referral

## > Illustrated Guide to IPD Register

| A       |      |     |             |                    |         | B                 |                |           |
|---------|------|-----|-------------|--------------------|---------|-------------------|----------------|-----------|
| IPD No. | Name | Age | Sex (M / F) | Status (Ref / Nat) | Address | Date of admission | New or Re-adm. | Diagnosis |
|         |      |     |             |                    |         |                   |                |           |
|         |      |     |             |                    |         |                   |                |           |
|         |      |     |             |                    |         |                   |                |           |
|         |      |     |             |                    |         |                   |                |           |

### A DEATH REGISTRATION:

**IPD No.:**

> Enter sequence number in register

**Name:**

> Print name of patient

**Age:**

> Enter age (in years)

**Sex:**

> Enter Male (M) / Female (F)

**Status:**

> Classify as Refugee (Ref) / National (Nat)

**Address:**

> Enter Camp Address (Refugee) / Nearest Village (National)

**NOTES**

It is the responsibility of the staff on each ward to record information neatly and legibly, alongside the individual patient records.

One register book should be available in each IPD ward.

### B VISIT DETAILS:

**Date of visit:**

> Enter date (dd/mm/yy)

**New or Revisit:**

> Classify as New / Revisit (refer to guidelines)

**Diagnosis:**

> Enter diagnosis. Case definition criteria should be used for reporting purposes only, and not to guide clinical management or treatment.

If more than one diagnosis is made, use a separate row to record each

**NOTES**

Classification of New and Revisit should meet criteria specified in guidelines (see Module 3: Morbidity).



C

| Past history of anti-malarial use † | Blood Smear / Lab results | Treatment | Date of exit | Length of stay (days) | Reason for exit ‡ |
|-------------------------------------|---------------------------|-----------|--------------|-----------------------|-------------------|
|                                     |                           |           |              |                       |                   |
|                                     |                           |           |              |                       |                   |
|                                     |                           |           |              |                       |                   |
|                                     |                           |           |              |                       |                   |

C

**CASE MANAGEMENT:**

**Past history of anti-malarial use:**

> For malaria patients who are revisiting for same infection, enter abbreviations to indicate name, dose and duration of prior anti-malarial use

**Blood Smear / Lab results:**

> Enter result of blood smear for malaria parasite, or other relevant laboratory investigation results as requested

**Treatment:**

> Enter annotated treatment given. Only include treatment relevant to the diagnosis. For prescribed drugs, enter name, dose and duration.

**Date of exit:**

> Enter date of exit (dd/mm/yy)

**Length of stay:**

> Enter number of days between admission and discharge

**Reason for exit:**

> Enter reason for exit, using options provided in legend at bottom of register page.

Record as Authorized Discharge / Unauthorized Discharge / Death < 24 hours / Death > 24 hours / Referral

NOTES

The IPD Register should include a ANNOTATED case information only. Detailed records of history, examination and clinical management should entered in patient notes.

In addition to statistical reporting, IPD Registers serve other important functions:

**1. Outbreak Alert**

The case-based information collected in the register can play a crucial role in tracing individuals in the event of an outbreak. It is an important reference for the completion of the line listing section within the Outbreak Alert Form (see Module 3: Morbidity; Illustrated Guide to Outbreak Alert Form).

**2. Quality of Care**

The centralised summary of case-information within each register facilitates acts as a useful monitoring and evaluation tool. Health Managers should periodically audit the books, to review diagnosis and prescription practices in each IPD.

NOTES

Use calendar to calculate length of stay. The number of day is inclusive of both day of admission and day of discharge.

Reasons for exit are listed in a key on each register page. Enter reasons listed in the key ONLY. Repatriation is included within referral as reason for exit.

## > Illustrated Guide to IPD (Pregnancy) Register

| A          |         |      |     |                    |         |                   |                   | B         |        |                 |
|------------|---------|------|-----|--------------------|---------|-------------------|-------------------|-----------|--------|-----------------|
| Serial No. | ANC No. | Name | Age | Status (Ref / Nat) | Address | Date of admission | Time of admission | Gravidity | Parity | No. of children |
|            |         |      |     |                    |         |                   |                   |           |        |                 |
|            |         |      |     |                    |         |                   |                   |           |        |                 |
|            |         |      |     |                    |         |                   |                   |           |        |                 |
|            |         |      |     |                    |         |                   |                   |           |        |                 |

### A REGISTRATION::

**Serial No.:**

> Enter sequence number in register

**Antenatal No:**

> Enter unique identifying number

**Name:**

> Print Name of expectant mother

**Age:**

> Fill age (in years)

**Status:**

> Classify as Refugee (Ref) / National (Nat)

**Address:**

> Print Camp Address (Refugee) / Nearest Village (National)

**Date of admission:**

> Enter date (dd/mm/yy)

**Time of admission:**

> Enter time (hh:mm)

**NOTES**

Use the IPD (Pregnancy) register to record all medical admissions in Pregnancy.

Women admitted in false labour should be included in this book and remain until discharge. If they progress to true labour during the same admission, they should be transferred into the Delivery Register.

### B OBSTETRIC HISTORY:

**Gravidity:**

> Number of pregnancy (see glossary)

**Parity:**

> Number of previous deliveries (see glossary)

**No. of children:**

> Number of surviving children

**LMP:**

> Date of Last Menstrual Period (dd/mm/yy)

**EDD:**

> Expected Delivery Date (dd/mm/yy)

**Gest. Age:**

> Gestational Age in weeks (XX / 36)

**Blood Pressure:**

> Blood pressure of mother (mmHg)

**Fetal HR:**

> Fetal heart rate (beats per minute)

**Presentation:**

> Cephalic / Breech / Oblique / Transverse

**RPR:**

> Enter date of test in column that corresponds with result (+ve / -ve)

| LMP | EDD | Gest. age | Blood Pressure | Fetal HR | Present'n | RPR  |      | Diagnosis | Treatment given | D            |                |                  |
|-----|-----|-----------|----------------|----------|-----------|------|------|-----------|-----------------|--------------|----------------|------------------|
|     |     |           |                |          |           | - ve | + ve |           |                 | Date of exit | Length of stay | Reason for exit* |
|     |     |           |                |          |           |      |      |           |                 |              |                |                  |
|     |     |           |                |          |           |      |      |           |                 |              |                |                  |
|     |     |           |                |          |           |      |      |           |                 |              |                |                  |
|     |     |           |                |          |           |      |      |           |                 |              |                |                  |

**C DIAGNOSIS AND TREATMENT:**

**Diagnosis:**

> Enter diagnosis. Case definition criteria should be used for reporting purposes only, and not to guide clinical management or treatment.

If more than one diagnosis is made, use a separate row to record each

**Treatment:**

> Enter annotated treatment given. Only include treatment relevant to the diagnosis. For prescribed drugs, enter name, dose and duration.

**D EXIT DETAILS:**

**Date of admission:**

> Enter date (dd/mm/yy)

**Apgar Score:**

> Enter number of days between admission and discharge

**Reason for exit:**

> Enter reason for exit, using options provided in legend at bottom of page:

> Authorized discharge / Unauthorized discharge / Death (< 24 hrs) / Death (> 24 hrs) / Referral

**NOTES**

Use calendar to calculate length of stay. The number of day is inclusive of both day of admission and day of discharge.

Reasons for exit are listed in a key on each register page. Enter reasons listed in the key ONLY.

Repatriation is included within referral as reason for exit.

Information from the register should be reported in IPD Report.

> Illustrated Guide to IPD and Referral Report (FRONT)

**Health Information System**

Reporting Form

**4.0 IPD and Referral**

**A**

Organisation: \_\_\_\_\_

Location: \_\_\_\_\_

Reporting period: \_\_\_\_\_

**B**

**4.1 In-patient Department Activities**

|   |                     | Refugee |     | National |     |
|---|---------------------|---------|-----|----------|-----|
|   |                     | < 5     | ≥ 5 | < 5      | ≥ 5 |
| Number of patients in ward at beginning of period |                     |         |     |          |     |
| Number of admissions                              |                     |         |     |          |     |
| Number of discharges                              | <i>authorized</i>   |         |     |          |     |
|   | <i>unauthorised</i> |         |     |          |     |
|   | <i>death</i>        |         |     |          |     |
|   | <i>referral</i>     |         |     |          |     |
| Deaths within 24 hours                            |                     |         |     |          |     |
| Number of patients in ward at end of period       |                     |         |     |          |     |

|   |  |
|---|--|
| Number of days in reporting period                |  |
| Number of beds                                    |  |
| Sum number of days stay for authorized discharges |  |

**C**

**4.2 In-patient Admissions and Deaths**

|                        | Refugee |        |      |        | National |        |      |        |
|------------------------|---------|--------|------|--------|----------|--------|------|--------|
|                        | < 5     |        | ≥ 5  |        | < 5      |        | ≥ 5  |        |
|                        | Adm.    | Deaths | Adm. | Deaths | Adm.     | Deaths | Adm. | Deaths |
| 1. Malaria (confirmed) |         |        |      |        |          |        |      |        |
| 2. LRTI                |         |        |      |        |          |        |      |        |
| 3. Watery diarrhoea    |         |        |      |        |          |        |      |        |
| 4. Bloody diarrhoea    |         |        |      |        |          |        |      |        |
| 5. Tuberculosis        |         |        |      |        |          |        |      |        |
| 6. Measles             |         |        |      |        |          |        |      |        |
| 7. Meningitis          |         |        |      |        |          |        |      |        |
| 8. AIDS                |         |        |      |        |          |        |      |        |
| 9. Acute malnutrition  |         |        |      |        |          |        |      |        |
| 10.                    |         |        |      |        |          |        |      |        |
| 11.                    |         |        |      |        |          |        |      |        |
| 12.                    |         |        |      |        |          |        |      |        |
| 13. Other              |         |        |      |        |          |        |      |        |

*Adm. = Admission*

## A HEADER:

### Organisation:

Print name of health partner

### Location:

Print name of Camp and Reporting Unit

### Reporting period:

Enter number of week and month (e.g. Week 1 March)

#### NOTES

The dates of the reporting weeks are shown in the Reporting Calendar. It is important that all staff are aware of these dates, and that copies the calendar are distributed to all antenatal clinics.

The Health Manager is responsible for coordinating the complete and timely submission of all sections contributing to the weekly report.

## B IN-PATIENT DEPARTMENT ACTIVITIES:

Complete Table 4.1, using information recorded in the IPD registers.

Also enter the following data for calculation of monthly indicators:

- > Number of days in reporting period
- > Number of beds
- > Sum number of days stay for authorized discharges

#### NOTES

Number of days in reporting period should include weekends, if full range of IPD services and 24 hour medical cover is provided to each ward.

Number of beds refers to the total number of inpatient beds on all wards in the camp.

The lengths of stay for unauthorised discharges, deaths, and referrals do NOT contribute to the sum number of days stay for authorized discharges.

## C IN-PATIENT ADMISSIONS AND DEATHS:

Complete Table 4.2, using information recorded in the IPD registers.

Data should be appropriately disaggregated according to:

- > status (refugee / national)
- > age (< 5; ≥5)
- > reason for admission / death (see surveillance list)

#### NOTES

All diagnoses should meet case definitions and refer to New Visits only.

Numbers 10 - 12 are 'free-cells' which permit additional causes of admission/death to be added to the list and monitored. These should be agreed upon close coordination with other health agencies to guarantee the consistency and comparability of information within each country operation.

> Illustrated Guide to IPD and Referral Report (REVERSE)

**D**

**4.3 Referral**

|                          | Emerg. | District | Regional | Zonal | National | Other |
|--------------------------|--------|----------|----------|-------|----------|-------|
| Obstetrics / Gynaecology |        |          |          |       |          |       |
| Surgery                  |        |          |          |       |          |       |
| Pediatrics               |        |          |          |       |          |       |
| Internal medicine        |        |          |          |       |          |       |
| Blood transfusion        |        |          |          |       |          |       |
| Other                    |        |          |          |       |          |       |

*Emerg. = Emergency Unit*

**D REFERRAL:**

Complete Table 4.3, using information recorded in the IPD registers.

Data should be appropriately disaggregated according to:

- > reason for referral
- > location / level of referral