

# **Hospital Statistics doc.1**

## **Frequency Distribution**

Ratio:  $x/y$

Proportion:  $x / x + y$

Rate: performance improvement /number of cases \*100

## **C-Section**

e.g. 33 patients cs out of 264

Hospital Inpatient – Person provided room, board and continuous general nursing service in an area of hospital where patients generally stay at least overnight.

Hospital Newborn Inpatient – Infant born in hospital at the current inpatient hospitalization. (born at home or on the way inpatient)

Inpatient Hospitalization – The Period in A person's life when they are inpatient in a single hospital without hospitalization.

Inpatient Admission –

Inpatient Census Data – Done 24hr period 12:01am – 12:00 midnight

Daily Census should be done at one time during the 24hr period.

## **Inpatient Service Day**

**ISD** – the greater the isd the more the revenue.

Inpatient service days = number of inpatient services for a given period/total number of days

**% Occupancy Rate the greater the occupancy the more the revenue for the hospital.**

<b>Indicator</b>	<b>x</b>	<b>y</b>
Average daily inpatient	Total Number of Inpatient Service	Total Number of Days For The Same Period
Average Daily Inpatient Census For A&C Adults and Children	Total Number Of Inpatient Service Days For A&C	Total number of Days for the same period
Average Daily Inpatient Census For Newborn	Total Number of Inpatient Service Days For NBS for a given period	Total Number of Days For the Same Period

## Bed Turnover Rate

Used to measure Hospital utilization.

Calculation = Total Discharges (including deaths) / Average Bed Count

E.g. A hospital which had 2060 discharges and had 677 beds in the month of March.

$$2060/677 = 3.0$$

Meaning each hospital bed had an average of 3 occupants during that month.

## Length of Stay

<b>Patient</b>	<b>LOS</b>
1	5
2	3
3	1
4	8
<b>Total length of Stay</b>	<b>27</b>

Average length of Stay  **$27/5 = 5.4$  days**

**Fetal Death Rate** – Still born death

**Early Fetal Death** – Less than 20 weeks gestation or weight of 500g

**Intermediate Fetal Death** – At least 20 but less than 28 weeks Gestation 501g- 1000g

**Late Fetal Death 28 weeks gestation weight  $\geq$  1000grams**

E.g. hospital with 269 live births and 13 intermediate and late fetal deaths.

$$13/269+13 * 100 = 4.6\%$$

### **Maternal Death Rate (IP)**

Death of any woman from any cause related to or aggravated by pregnancy or its management regardless of the duration or site of pregnancy.

Two types

a) Direct maternal death – results from obstetrical complications of the pregnancy labor or puerperium.

b).Indirect maternal death – is the death of a woman from previously existing disease or a disease that developed during pregnancy.

**Maternal death rate maybe an indicator of the availability of prenatal care In a community. It also helps hospitals identify conditions that could lead to maternal death.**

$$\text{Total direct maternal deaths (p)/total maternal discharges including deaths (p) * 100}$$

E.g. A hospital with 275 maternal discharges and 2 deaths in May  $2/275*100 = 0.73\%$

### **Hospital Infection Rate**

Most common morbidity rate calculated for hospitals are related to hospital acquired infections.

#### **Guidelines for reporting all types of infection (types of infection)**

1. Respiratory
2. Gastro intestinal
3. Surgical Wound
4. Skin
5. Urinary Tract
6. Septicemia
7. Intravascular Catheters

**\*\*\*\*hospitals should have 0.0% infection**

Total hospital infections/Total Discharges including Deaths \* 100

E.g. A hospital with 725 Discharges in June and had 32 hospital acquired infections in the same month so the infection rate is  $32/725 * 100 = 4.4\%$

### **Post-Operative Infection Rate**

Hospital Post-operative infection rate is the proportion or percentage of infection

Number of infections in clean surgical cases(p)/ Total number of surgical operations(p) \* 100

### **Consultation rate**

Total number of patients receiving consultations/ Total number of discharges and Deaths \* 100

### **Ambulatory Care Statistics**

Ambulatory care includes healthcare services provided to patients who are not hospitalized (Outpatients) Not considered Inpatients or residents and do not stay in the healthcare facility overnight.

### **Terms**

**Hospital Ambulatory Care-** Hospital Directed Preventive, Therapeutic & Rehabilitative Services Provided by physicians and their Surrogates to patients who are not hospital inpatients or home care patients.

**Outpatient** – A patient who receives care without being admitted for IP or Residential care.

**Hospital Outpatient** – A patient who receives services in one or more of the facilities owned and operated by a hospital.

**Emergency Outpatient** – Pt. admitted to emergency department

**Clinical Outpatient**

**Referred OP** –

**Outpatient visit-**

**Encounter -**

**Occasion of service -**

**Ambulatory Surgery Centers -**

(Martin)