

Hajj program KPIs

Health Service Delivery

Definition: Average of Health Service Availability Score and Health Service Coverage Score

Calculation: Sum of Health Service Availability Score and Health Service Coverage Score/ n

Level1 KPI:

Health Service Availability Score:

Definition: average of level2 and level3 indicators

Calculation: sum of IHR capacity and health emergency preparedness score (%), Health facilities density (%), Bed density (%)/ n

Level2 KPIs:

- A) International Health Regulations (IHR) capacity and health emergency preparedness score

Definition: Percentage of attributes of 19 core capacities that have been attained at a specific point in time.

Calculation: number of attributes attained/ total number of attributes

- B) Health facilities density

Definition: Rate and distribution of health facilities per 10 000 population

Calculation: total number of health facilities/ total population

Level3 KPIs:

- A) Bed density

Definition: Hospital bed density (per 10 000 population)

Calculation: Number of hospital beds (excluding certain ambulatory beds e.g. ER, labour and delivery beds)/ total population.

Health Service Coverage Score:

Definition: average of level2 and level3 indicators

Calculation: sum of Vaccination coverage (%), Public health alert coverage (%), Outpatient service utilization (%), Inpatient service utilization (%) / n

Level2 KPIs:

- A) Vaccination coverage

Definition: Percentage of the target population that has received obligatory vaccine e.g. meningococcal vaccine

Calculation: $\frac{\text{The number of individuals in the target group who received specified vaccine}}{\text{total population}}$

B) Public health alert coverage (HEWS)

Definition: proportion of public health alerts that had been responded to within first 6 hours

Calculation: $\frac{\text{total number of public health alerts that had been responded to within first 6 hours}}{\text{total public health alerts}}$

Level3 KPIs:

A) Outpatient service utilization

Definition: Rate of outpatient department visits per 10 000 population

Calculation: $\frac{\text{total number of outpatient department visits at a given period}}{\text{total number of patients at a given period}}$

B) Inpatient service utilization

Definition: Hospital (inpatient) admissions per 100 population

Calculation: $\frac{\text{total number of inpatient admissions at a given period}}{\text{total number of patients at a given period}}$

N.B: to calculate the level1 health service delivery KPI, level2 and level3 should be converted to percentages using the geometric mean

Health workforce:

Level1 KPIs:

Health workforce: health workforce index

Definition: average of completeness of health workers automated registry (%), health workers density (%) and health workers distribution (%)

Calculation: $\frac{\text{average of completeness of health workers automated registry (\%), health workers density (\%), health workers distribution (\%) non- core health workers density (\%), Distribution of health workers (\%)}}{n}$

Level2 KPIs:

A) Health workforce: completeness of health workers automated registry

Definition: Percentage of health workers who are registered (with certain obligatory fields such as age, sex, specialty, area distribution, qualification).

Calculation: Number of health workers registered/ total number of health workers

B) Health workforce: core health workers density

Definition: Number of core health workers per 10 000 population

Calculation: the absolute number of core health workers at a given time and area/ the total population for the same geographical area

C) Health workforce: non- core health workers density

Definition: Number of non-core health workers per 10 000 population

Calculation: the absolute number of non-core health workers at a given time and area/ the total population for the same geographical area

Level3 KPIs:

Health workforce: Distribution of health workers

Definition: The distribution of health workers according to selected characteristics (e.g. occupation, geographical region, place of work and sex).

Calculation: the number of health workers with a given characteristic/ the total number of health workers.

N.B: to calculate the level1 health workforce KPI, level2 and level3 should be converted to percentages using the geometric mean

Essential medicines:

Level1 KPIs:

Essential medicines: Essential medicines index

Definition: average of Essential medicines list score (%), essential medicines availability (%)

Calculation: $\frac{\text{Essential medicines list score (\%)} + \text{essential medicines availability (\%)}}{2}$

Level2 KPIs:

Essential medicines: Essential medicines list score

Definition: existence and distribution of updated essential medicines list

Calculation:

- If essential medicines list not exist or cannot be assessed: 0
- If essential medicines list is available and distributed: 1

Level3 KPIs:

Essential medicines: essential medicines availability

Definition: proportion of health facilities with the essential medicines

Calculation: $\frac{\text{Number of health facilities with available essential medicines}}{\text{total number of facilities}}$

N.B: to calculate the level1 essential medicines KPI, level2 and level3 should be converted to percentages using the geometric mean

Finance:

Level1 KPIs:

A) MoH expenditure on health during Hajj/Umrah

Definition: Total MoH expenditure on health during Hajj/Umrah as a percentage of the main budget

Calculation: $\frac{\text{Total MoH expenditure on health during Hajj/Umrah}}{\text{Sum of all current expenditure on health}}$ as a percentage of the main budget

b) Median consumer price ratio of essential medicines

Health Information System

Level1 KPIs:

HIS: HIS performance index

Definition: average of policy existence index (%), policy compliance index (%)

Calculation: $\frac{\text{policy existence index (\%)} + \text{policy compliance index (\%)}}{2}$

Level2 KPIs:

A) HIS: integrated HIS geographical coverage

Definition: percentage of facilities that have integrated HIS

Calculation: $\frac{\text{Number of health facilities that have integrated HIS}}{\text{total number of health facilities}}$ (including non-MOH, Medical Offices and 3rd party private sector)

Level3 KPIs:

A) HIS: Compliance of reporting by facilities (including notifiable diseases reporting)

Definition: Percentage of facilities that submit reports within the required deadline

Calculation: $\frac{\text{Number of reports received}}{\text{total number of expected reports}}$

B) HIS: Completeness of death registration

Definition: Percentage of deaths that are registered (with certain obligatory fields such as age, sex, category, cause of death in ICD-10 code).

Calculation: $\text{Number of deaths registered} / \text{total number of deaths}$

N.B: to calculate the level1 HIS KPI, level2 and level3 should be converted to percentages using the geometric mean

Governance

Level1 KPIs:

Governance: health policy index

Definition: average of policy existence index (%) and policy compliance index (%)

Calculation: $\text{policy existence index (\%)} + \text{policy compliance index (\%)} / 2$

Level2 KPIs:

Governance: health policy existence index

Definition: sum of the total indicator scores by facility

Calculation: sum of the total indicator scores (indicators to be assigned according to the relevant health needs and priorities e.g. HR, certain diseases, medicine procurement.

- If adequate policy/plan/strategy does not exist or cannot be assessed: 0
- If adequate policy/plan/strategy is available: 1

Level3 KPIs:

Governance: health policy compliance index

Definition: sum of the total indicator scores by facility

Calculation: sum of the total indicator scores (indicators to be assigned according to the relevant health needs and priorities e.g. HR, certain diseases, medicine procurement.

- If health facility is not compliant to the policy/plan/strategy or compliance cannot be assessed: 0
- If health facility is compliant to policy/plan/strategy is available: 1

N.B: to calculate the level1 governance KPI, level2 and level3 should be converted to percentages using the geometric mean

Health risk factors:

Level1 KPIs:

Mortality by cause

Cardiovascular diseases mortality

Definition: proportion of mortality due to cardiovascular disease

Calculation: total mortality due to cardiovascular disease/ total deaths

Heat stroke/ heat exhaustion incidence rate

Definition: Rate of Heat stroke/ heat exhaustion per 10 000 population

Calculation: total Heat stroke/ heat exhaustion cases/ total population

Health outcomes:

Level1 KPIs:

Crude mortality rate

Definition: death rate at a specified period of time in specified geographical area per 10 000 population

Calculation: total death rate at a specified period of time in specified geographical area/ total population at a specified period of time in specified geographical area