

WISN - Workload Indicators of Staffing Needs

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Reference

Material for this presentation is taken from:

[WISN User's Manual](#)

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What is WISN?

A Human Resource Management Tool that:

- Determines how many health workers of a particular type are required for the workload of a given health facility;
- Assesses the workload pressure of the health workers in that facility.

The Goal of Human Resource Management

To have the right number of people

- ✓ with the right skills
- ✓ in the right place
- ✓ at the right time
- ✓ with the right attitude
- ✓ doing the right work
- ✓ at the right cost
- ✓ with the right work output.

How Can WISN Help You?

1. Determine how best to improve your current staffing
2. Determine the best way to allocate new functions and transfer existing functions
3. Allow you to see where professional performance is low in comparison with other facilities
4. Plan future staffing
5. Examine the impact of different conditions of employment on staff requirements
 - changes in the length of the working week, increased vacation or different in-service training policies

Limitations of WISN

- Uses annual service statistics to assess workloads
 - Poor records = inaccurate results
 - Errors almost always from under-recording workload
- Need expert working group to:
 - Define main workload components
 - Set activity standards

Steps in the WISN Method

1. Determining Priorities
2. Estimating Available Working Time
3. Defining Workload Components
4. Setting Activity Standards
5. Establishing Standard Workloads
6. Calculating Allowance Factors
7. Determining Staff Requirements
8. Analyzing and Interpreting Results

1. Determining Priorities

- ✓ Which staff category is in shortest supply in relation to the need for staff?
- ✓ For which staff category is staff distribution likely to be most inequitable?
- ✓ Which of these staffing problems have affected the quality of care most?
- ✓ Which of them are likely to affect the quality of care soon?
- ✓ Are any of the staff categories particularly important for planned future health programmes?

2. Estimating Available Working Time

The time a health worker has available in 1 year for work

- Days/Year
- Hours/Year

Must take into account authorized and unauthorized absences

- Public Holidays
- Annual Leave
- Sick Leave
- Other (training, conferences, etc.)

Available Working Time – (in Days)

$$AWT = A - (B + C + D + E)$$

- A is the number of possible working days in a year
- B is the number of days off for public holidays in a year
- C is the number of days off for annual leave in a year
- D is the number of days off due to sick leave in a year
- E is the number of days off due to other leave, such as training, etc., in a year.

Available Working Time – (in Hours)

$$AWT = [A - (B + C + D + E)] \times F$$

- A is the number of possible working days in a year
- B is the number of days off for public holidays in a year
- C is the number of days off for annual leave in a year
- D is the number of days off due to sick leave in a year
- E is the number of days off due to other leave, such as training, etc., in a year
- F is the number of working hours in one day.

3. Defining Workload Components

Three Kinds of Workload Components:

1. Health Service Activities
2. Support Activities
3. Additional Activities

Workload Components – Ex. Midwife

Workload Group	Workload Component
Health Service Activities	Antenatal Care
	Postnatal Care (including newborn)
	Deliveries
	Family Planning
Support Activities	Recording and Reporting
	Meetings
	Home Visiting
Additional Activities	Supervision of Students
	Attending Continuing Education
	General Administration

4. Setting Activity Standards

The time necessary for a well-trained, skilled and motivated worker to perform an activity to professional standards in the local circumstances

1. A Service Standard- for health service activities
2. An Allowance Standard -for support and additional activities
 - *Category Allowance Standards (CAS)* – performed by all
 - *Individual Allowance Standards (IAS)* – performed by some

Activity Standards – Ex. Midwife

Health Service Activity	Unit Time or Rate of Working
Antenatal Care	20 Min per client
Postnatal Care	6 clients in a 4 Hour Clinic
Deliveries	8 Hours per client
Family Planning	30 Min per client
Support Activity	Working Time
Recording & Reporting	30 Min/Day (6.9%)
Meetings	2 Hours/Month (1.6%)
Home Visiting	3 Hours/Week (8.3%)
Total Category Allowance%	16.8%

Percentage Times Basis

- ✓ Average available working hours in a day = 7.2
- ✓ Available working days in a week = 5
- ✓ Available working hours in a week = 36
- ✓ Available working days in a year = 210
- ✓ Available working hours in a year = 1512

5. Establishing Standard Workloads

The amount of work within a health service workload component that one health worker can do in a year

- Use this formula when the service standard is shown as unit time:

Standard workload = AWT in a year divided by unit time.

- Use this formula when the service standard is expressed as rate of working:

Standard workload = AWT in a year multiplied by rate of working.

Standard Workload Calculation

Health Service Activity	Unit Time or Rate of Working	Standard Workload (AWT = 1512 Hours)
Antenatal Care	3 Clients per Hour (20 Min per client)	4536 Clients (1512 x 3)
Postnatal Care (Including Newborns)	1.5 Clients per Hour (6 Clients in 4 Hr clinic)	2268 Clients (1512 x 1.5)
Deliveries	8 Hours per Client	189 Clients (1512/8)
Family Planning	2 Clients per Hour (30 Min per Client)	3024 Clients (1512 x 2)

6. Calculating Allowance Factors

The Category Allowance Factor (CAF) is a multiplier that is used to calculate the total number of health workers required for *both* health service and support activities.

➤ An allowance factor is calculated separately for support and additional activities

• Support Activities → Category Allowance Factor

• Additional Activities → Individual Allowance Factor

Category Allowance Factor

$$CAF = 1 / [1 - (Total\ CAS / 100)]$$

STEP	CALCULATION	EXAMPLE
A. Preparatory	Convert all CAS to % of working time	
B. Preparatory	Add all CAS % to get total CAS	6.9 + 1.6 + 8.3 = 16.8%
C. Total CAS/100	Divide the Total CAS by 100.	16.8 / 100 = 0.168
D. [1 - (Total CAS/ 100)]	Deduct from 1 the answer from Step C above.	1 - 0.168 = 0.832
E. 1 / [1 - (Total CAS / 100)]	1 / [1 - (Total CAS / 100)] from Step D	1 / 0.832 = 1.2

Individual Allowance Factor

- The individual allowance factor (IAF) is the staff requirement to cover additional activities of certain cadre members.
- The IAF is not a multiplier. Instead, it is added to the total required number of staff members in the final WISN step.

Determining Staff Requirements (1)

Calculate the total required number of staff separately for the three different workload groups:

- 1. Health Service Activities** - Divide a health facility's annual workload for each workload component (from annual service statistics) by its respective standard workload.
 - This is the number of health workers that you require for the activity in this health facility. Add the requirements of all workload components together.
 - The answer you get is the total staff requirement for all health service activities.

Determining Staff Requirements (2)

- 2. Support Activities Done by All Members of the Staff Category** - Multiply the answer you got above (the staff requirement of health service activities) by the Category Allowance Factor.
 - This gives you the number of health workers you require for all health service activities and support activities.

Determining Staff Requirements (3)

- 3. Additional Activities of Certain Cadre Members** - Add the individual allowance factor to the above staff requirement

See: Table 9 – WISN User Guide p. 34

8. Analyzing and Interpreting WISN Results

Two Types of Results:

- Differences: shows the level of staff shortage or surplus for the particular staff category
- Ratios: shows the actual to the required number of staff - a measure of the workload pressure with which the staff is coping.