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
   - 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
   - Days/Year
   - Hours/Year
   - Must take into account authorized and unauthorized absences
     - Public Holidays
     - Annual Leave
     - Sick Leave
     - Other (training, conferences, etc.)

   \[
   \text{Available Working Time – (in Days)} = A - (B + C + D + E)
   \]

   \[
   \text{Available Working Time – (in Hours)} = [A - (B + C + D + E)] \times F
   \]

   - 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

<table>
<thead>
<tr>
<th>Workload Group</th>
<th>Workload Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health Service Activities</td>
<td>Antenatal Care</td>
</tr>
<tr>
<td></td>
<td>Postnatal Care (including newborn)</td>
</tr>
<tr>
<td></td>
<td>Deliveries</td>
</tr>
<tr>
<td></td>
<td>Family Planning</td>
</tr>
<tr>
<td>Support Activities</td>
<td>Recording and Reporting</td>
</tr>
<tr>
<td></td>
<td>Meetings</td>
</tr>
<tr>
<td>Additional Activities</td>
<td>Supervision of Students</td>
</tr>
<tr>
<td></td>
<td>Attending Continuing Education</td>
</tr>
<tr>
<td></td>
<td>General Administration</td>
</tr>
</tbody>
</table>

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

<table>
<thead>
<tr>
<th>Health Service Activity</th>
<th>Unit Time or Rate of Working</th>
<th>Standard Workload (AWT = 1512 Hours)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Antenatal Care</td>
<td>20 Min per client</td>
<td>4536 Clients</td>
</tr>
<tr>
<td>Postnatal Care</td>
<td>6 clients in a 4 Hour Clinic</td>
<td>2268 Clients</td>
</tr>
<tr>
<td>Deliveries</td>
<td>8 Hours per client</td>
<td>189 Clients</td>
</tr>
<tr>
<td>Family Planning</td>
<td>30 Min per client</td>
<td>3024 Clients</td>
</tr>
<tr>
<td>Support Activity</td>
<td>Working Time</td>
<td></td>
</tr>
<tr>
<td>Recording &amp; Reporting</td>
<td>30 Min/Day (6.9%)</td>
<td></td>
</tr>
<tr>
<td>Meetings</td>
<td>2 Hours/Month (1.6%)</td>
<td></td>
</tr>
<tr>
<td>Home Visiting</td>
<td>3 Hours/Week (8.3%)</td>
<td></td>
</tr>
<tr>
<td>Total Category Allowance%</td>
<td>16.8%</td>
<td></td>
</tr>
</tbody>
</table>

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

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

\[
CAF = \frac{1}{1 - \left(\frac{\text{Total CAS}}{100}\right)}
\]

**Determine 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.

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.

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

**Determine Staff Requirements (2)**

**Category Allowance Factor**

<table>
<thead>
<tr>
<th>STEP</th>
<th>CALCULATION</th>
<th>EXAMPLE</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Preparatory</td>
<td>Convert all CAS to % of working time</td>
<td>6.9 + 1.6 + 8.3 = 16.8%</td>
</tr>
<tr>
<td>B. Preparatory</td>
<td>Add all CAS % to get total CAS</td>
<td>16.8 / 100 = 0.168</td>
</tr>
<tr>
<td>C. Total CAS/100</td>
<td>Divide the Total CAS by 100</td>
<td>1 - 0.168 = 0.832</td>
</tr>
<tr>
<td>D. (1 - \left(\frac{\text{Total CAS}}{100}\right))</td>
<td>Deduct from 1 the answer from Step C above.</td>
<td>1 / 0.832 = 1.2</td>
</tr>
</tbody>
</table>
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.