INTRODUCTION

The RMNCH+A strategy aims to reduce child and maternal mortality through strengthening health care delivery system. In view of this, the Score Card developed by MoHFW is in use to assess & improve the service delivery through routine monitoring system. The, score card assists in comparative assessment of performance of the State, District and Sub-Districts /Blocks.

Key objectives

- Provides the status of different of services delivered under RMNCH+A strategy for the state, districts and blocks
- Compares the districts/blocks using the overall composite index.
- Facilitates use of HMIS data and improving the data quality in HMIS.

Approach

Score card shows the relative position of a State/ District/ Sub-District /Block using a composite index. A total of 16 indicators are used to calculate the composite index. These 16 indicators cover 4 stages of lifecycle mentioned below:
1. Pregnancy care
2. Child birth / delivery
3. Post natal, maternal and new born care
4. Pre-pregnancy/reproductive age

<table>
<thead>
<tr>
<th>Composite Indicators</th>
<th>Indicators</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Pregnancy care</strong></td>
<td>Registration during 1st trimester</td>
</tr>
<tr>
<td><strong>Child birth</strong></td>
<td>SBA delivery</td>
</tr>
<tr>
<td><strong>Postnatal, maternal &amp; new born care</strong></td>
<td>% Women stayed for 48 Hr</td>
</tr>
<tr>
<td><strong>Reproductive age group</strong></td>
<td>% of Male sterilisation</td>
</tr>
<tr>
<td><strong>Overall Index</strong></td>
<td>Comprises of all the sixteen (16) indicators</td>
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</table>
GENERATING COMPOSITE INDEX

Composite index is obtained by combining a number of indicators in a standardised way. It is a useful statistical measure to assess overall performance of a region over a period of time.

This section will cover the various steps involved in generation of the composite index based on the assumption that the scorecard is to be generated for State across Districts (Note: the same methodology shall apply for the district level score cards too i.e. District across blocks):

1. Generation of 16 indicators
   There are 16 indicators (as mentioned in the above table) used for the generation of Composite index. The user is required to calculate the performance on these indicators (using the data elements) in terms of percentage (%).

2. Identification of Max value and Min value
   After getting the performance percentage (%) on sixteen (16) indicators mentioned above, the user is required to identify the maximum and the minimum value for each indicator.

3. Calculation of Index value for each indicator
   After identification of the maximum and minimum value for each indicator, the user is required to convert percentage (%) values into index values. The index value is calculated on the basis of nature of the indicator, i.e. Positive indicator or Negative indicator
   a. Positive indicator: those indicators which are positively associated with development (higher value linked to better performance).
   b. Negative indicator: those indicators which are negatively associated with development (higher value linked to poor performance)

   15 indicators are positive indicators. The indicator namely "children with birth weight < 2.5 kg" is the only negative indicator. For calculation of the index value of positive indicators, the following formula is referred:

   $\text{Index} = \frac{X_{id} - \text{min}(X_{id})}{\text{Max}(X_{id}) - \text{min}(X_{id})}$ (for +ve indicator)

   $\frac{\text{max}(X_{id}) - X_{id}}{\text{Max}(X_{id}) - \text{min}(X_{id})}$ (for –ve indicator)

   $X_{id}$ (i=1,...,16) is the value of the $i$th indicator of the $d$th district in terms of percentage (%). $\text{Min}(X_{id})$ and $\text{Max}(X_{id})$ are the lowest and highest value in percentage (%) for a particular indicator for a particular.

   Composite index = Average of the index values for corresponding composite indicator (ex; Composite index for pregnancy care= average of the index values of the five (5) corresponding indicators under pregnancy care)
Overall index = Average of the index values of all the sixteen (16) indicators.

After the above, the composite scores of the districts are divided into 4 parts (for individual category) using quartiles. The lowest ranking (lowest quartile) districts coded as Red (D) - depict very low performance, pink (C) – Low performing, yellow (B) - promising and Green (A) – good performance

<table>
<thead>
<tr>
<th>Position of the composite index value</th>
<th>Above 3rd Quartile</th>
<th>Within 2nd and 3rd Quartile</th>
<th>Within 1st and 2nd quartile</th>
<th>Below 1st quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>Performance</td>
<td>Good</td>
<td>Promising</td>
<td>Low</td>
<td>Very Low</td>
</tr>
<tr>
<td>Colour code</td>
<td>Green</td>
<td>Yellow</td>
<td>Baby Pink</td>
<td>Red</td>
</tr>
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</table>