
Information session for Member States
24th April 2017
Today's information session

Agenda:
• Process to date to update Appendix 3
• Draft updated Appendix 3 for consideration by WHA70
• Technical briefs and technical annex
• Discussion
• Any other business

Participants on WebEx:
• Representatives from Member States
• WHO staff
What is Appendix 3 of the WHO Global NCD Action Plan 2013-2020?

• Menu of policy options for each of the 6 objectives of the Global NCD Action Plan.

• 81 recommendations, including 14 classified as “very cost-effective and affordable interventions for all Member States”

• Also includes a list of WHO tools and resources to assist in the implementation of each recommendation.

1 Generate an extra year of healthy life for a cost that falls below the average annual income or GDP per person
22-23 June 2015
First Expert Group Consultation (Geneva, 22-23 June 2015) to advise on proposed methodology and timeline.

25-30 Jan 2016
EB138 noted the proposed methodology and timeline for updating Appendix 3.

23-28 May 2016
WHA69 noted the process and requested DG to submit an updated Appendix 3 to WHA70 through EB140.

27-28 June 2016

July 2016

24 Apr 2016
Information session for MS.

Jan 2017
EB140 recommended to WHA70 to consider draft resolution (with bracketed text).

Aug 2016
Informal consultation with Member States on the WHO Discussion Paper.
Hearing with non-State actors on the WHO Discussion Paper.

May 2017
WHA70 will be invited to endorse the updated Appendix 3.

17 Feb 2016
Information session for National NCD Directors (Geneva, 17 February 2016).
Resolution EB140.R7

- Decided to recommend to the 70th World Health Assembly to consider the draft resolution contained in EB140.R7
- The draft resolution contains bracketed text in paragraph 1: 
  "[ENDORSES] the updated Appendix 3"

Secretariat has convened today's information session for Member States
Objective of today's information session is to provide Member States with:

- additional information to understand the underlying analysis related to interventions included in the updated Appendix 3
- additional technical briefings to understand the evidence underlying the interventions presented in the updated Appendix 3.
  - Technical briefs on each disease and risk factor and a technical annex in the WHO website
TECHNICAL BRIEFS
AND TECHNICAL ANNEX
Methodology endorsed by Member States at EB138 & WHA69

How interventions were identified for consideration:

- Minimum criteria for an intervention to be considered have been set
- All interventions on the current Appendix will be re-analysed
- WHO technical units were asked to specify any additional interventions, for which new evidence or WHO guidance has emerged
- WHO expert meetings on NCD risk factors and management in 2015 were invited to submit any additional interventions, using a template provided by the secretariat.

Interventions analysed according to:

- Cost effectiveness using WHO CHOICE method ($I/DALY averted)
- Size of health gain (total DALY averted in a population of 1 million)
- Budget implication (total $I in millions required to implement in a population of 1 million)
- Implementation considerations (qualitative analysis to consider feasibility, equity etc)
### Economic indicators

<table>
<thead>
<tr>
<th>Intervention name and description</th>
<th>Cost-effectiveness (I$/DALY averted)</th>
<th>Health gain (DALY averted in standardized population of 1 million people)</th>
<th>Total cost to implement (Cost of implementation in a standardized population of 1 million) in I$ millions</th>
</tr>
</thead>
</table>

### Implementation considerations

<table>
<thead>
<tr>
<th>Health System Considerations</th>
<th>Regulatory capacity considerations</th>
<th>Multisectoral considerations</th>
</tr>
</thead>
</table>
Technical briefs

• One developed for each policy area highlighting:
  – Selection of interventions for analysis, referencing WHO publications
  – Major modelling assumptions with data sources provided
  – Impact sizes of interventions and references
  – Major costing assumptions

• Available on Appendix 3 website
WHO CHOICE has been a programme of the WHO Secretariat since 1998

In 2003 a book outlining the complete methodology was published

More than 50 peer reviewed publications on WHO CHOICE are available in the literature

These are all available for download from www.who.int/choice/documents/en
Arriving at results: Example

Intervention selection: SALT: Industry engagement to reformulate products

- Costing
  - Identify who does what to whom
  - Define quantities: publications, expert opinion
  - Apply prices: WHO CHOICE database
  - Calculate cost of intervention

Impacts: identify effect size: 2.2g day reduction in salt (Trien et al)
- Impact of sodium reduction on blood pressure (Law et al)
- Impact of blood pressure change on AR
- Impacts: recalibration of CVD incidence (GBD, Dismod)
- Projection of health impact

ICER
A review of literature identified 4 major activities common in settings with this intervention:

- Activity 1: Review approaches taken by other countries
- Activity 2: Identify priority foods using population salt consumption data
- Activity 3: Engage food industry
- Activity 4: Set targets and timelines for different food categories
Intervention costing

- Staff required to enact this intervention within an NCD programme were considered as follows

<table>
<thead>
<tr>
<th>Staff – technical staff</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Director</td>
<td>0.125</td>
</tr>
<tr>
<td>Manager</td>
<td>0.25</td>
</tr>
<tr>
<td>Epidemiologist</td>
<td>1.0</td>
</tr>
<tr>
<td>Public health specialist</td>
<td>0.25</td>
</tr>
<tr>
<td>Public health officer</td>
<td>0.5</td>
</tr>
<tr>
<td>Health educator/trainer</td>
<td>0.5</td>
</tr>
<tr>
<td>Public Relations Manager</td>
<td>0.25</td>
</tr>
<tr>
<td>Public Relations Officer</td>
<td>0.5</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Staff – support staff</th>
<th>FTE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Administrator</td>
<td>0.5</td>
</tr>
<tr>
<td>Clerical officer</td>
<td>1</td>
</tr>
<tr>
<td>Secretary</td>
<td>0.9</td>
</tr>
<tr>
<td>Accountant</td>
<td>0.25</td>
</tr>
<tr>
<td>IT computing manager</td>
<td>0.125</td>
</tr>
<tr>
<td>IT computing officer</td>
<td>0.25</td>
</tr>
<tr>
<td>Cleaner</td>
<td>0.25</td>
</tr>
</tbody>
</table>

- Prices for salaries for each cadre were taken from the WHO CHOICE salary database, based on ILO global wages dataset
## Intervention costing

- Additionally meetings required under activity 3 are considered

<table>
<thead>
<tr>
<th>Meetings / workshops (1)</th>
<th>Quantity assumptions National</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Purpose</strong> Industry Engagement</td>
<td></td>
</tr>
<tr>
<td><strong>Meetings/workshops (1)</strong></td>
<td></td>
</tr>
<tr>
<td>Frequency of meetings (expressed per year; 1 = every year; 0.5 = every 2 years, etc.)</td>
<td>1</td>
</tr>
<tr>
<td>Number of meetings needed (within the year)</td>
<td>1</td>
</tr>
<tr>
<td>Length of meetings (days)</td>
<td>3</td>
</tr>
<tr>
<td>National experts in attendance (No., per diem, travel cost)</td>
<td>2</td>
</tr>
<tr>
<td>Travel of National Experts</td>
<td>2</td>
</tr>
<tr>
<td>Local professional staff in attendance (PerDiem)</td>
<td>20</td>
</tr>
<tr>
<td>Travel of local professional staff</td>
<td>20</td>
</tr>
<tr>
<td>Local support staff (calculated automatically as a function of number of attenders)</td>
<td>2.0</td>
</tr>
<tr>
<td>Meeting room (No. of sq m) - calculated automatically as a function of No. of attendees</td>
<td>200.0</td>
</tr>
</tbody>
</table>
Impact analysis

- Reducing salt intake is modelled to reduce population level SBP

**Female SBP distribution - expected changes**

**Male SBP distribution - expected changes**
Impact analysis

- SBP is a contributor to the total risk of CVD – a reduction will lead to a reduced incidence of CVD

Figure 1. WHO/ISH risk prediction chart for AFR D. 10-year risk of a fatal or non-fatal cardiovascular event by gender, age, systolic blood pressure, total blood cholesterol, smoking status and presence or absence of diabetes mellitus.
Impact analysis

• The recalibrated CVD risk equations are then analysed over a 100 year time frame compared to a scenario where there is no intervention

• This is done in the Spectrum modelling platform, available for download from http://www.avenirhealth.org/
Cost-effectiveness analysis

• We now have
  – The total implementation cost over 100 years
  – The total health benefit over 100 years
• For each of the 20 countries included in the analysis
• These are combined for the low/lower-middle income countries and upper-middle/high income countries
• The cost-effectiveness ratio is then calculated as:

\[
\text{cost – effectiveness ratio} = \frac{\text{change in cost}}{\text{change in health outcome}}
\]
## Cost-effectiveness analysis - results

<table>
<thead>
<tr>
<th>Label</th>
<th>Intervention</th>
<th>Low and Lower-Middle Income Countries</th>
<th>Upper-Middle and High Income Countries</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Average cost-effectiveness ratio (I$/DALY averted)</td>
<td>Health impact per year (DALY averted per 1 million)</td>
</tr>
<tr>
<td></td>
<td>Unhealthy diet</td>
<td></td>
<td></td>
</tr>
<tr>
<td>U1</td>
<td>Reduce salt intake by engaging the industry in a voluntary reformulation process</td>
<td>&lt;100</td>
<td>3,698</td>
</tr>
<tr>
<td>U2</td>
<td>Reduce salt intake through establishment of a supportive environment in public institutions such as hospitals, schools and nursing homes to enable low sodium meals to be provided</td>
<td>&lt;100</td>
<td>1,086</td>
</tr>
<tr>
<td>U3</td>
<td>Reduce salt intake through a behaviour change communication mass media campaign</td>
<td>&lt;100</td>
<td>760</td>
</tr>
<tr>
<td>U4</td>
<td>Reduce salt intake through implementation of front-of-pack labelling</td>
<td>&lt;100</td>
<td>2,200</td>
</tr>
</tbody>
</table>
Interventions in objective 3- Changes after the EB version

- **Tobacco**
  - Removed reference to ‘cross border advertising’
  - Removed reference to ‘outdoor mass gatherings’

- **Alcohol**
  - Removed reference to ‘density of outlets’

- **Unhealthy diet**
  - Analysis completed for ‘reduce sugar consumption through effective taxation on sugar sweetened beverages’

- **Physical inactivity**
  - Analysis completed for ‘Implement public awareness and motivational communications for physical activity, including mass media campaign for PA behaviour change’
Applications for the updated Appendix 3

- Support the progress towards achieving the 2025 NCD and 2030 SDG targets
- Development and costing of national NCD action plans using the cost effective estimations.
- Support the implementation by considering non financial considerations.
- Engaging other sectors using a small set of cost effective interventions.
- Development of a "global price tag" covering 2017-2030
- WHO One Health Tool can be used to develop costing at the national level.
For additional information, please contact

appendix3@who.int