Swiss Model for Outcome Classification in Health Promotion and Prevention (SMOC)

Use

The “Swiss Model for Outcome Classification in Health Promotion and Prevention (SMOC)” is a tool which may be used for analysis and quality development. In order to exploit its full potential, it should not be used by the project manager or evaluator alone, but should be used collectively e.g. in a meeting of the entire project team, or between the evaluators and key project members, etc. Generally speaking, the model can be used to analyse a situation, to plan an intervention and to evaluate a measure.

Overview of the model

A system of categorisation has been developed destined to facilitate the systematic recording of outcomes obtained by projects. Entitled the ‘Swiss Model for Outcome Classification in Health Promotion and Prevention (SMOC)’, this system has been developed on the basis of the well-known outcome model for health promotion by Don Nutbeam\(^1\). It is based on the basic assumption that health, as the ultimate goal of prevention and health promotion, cannot be achieved directly, but is attained through intermediate stages. In this sense, health promotion is understood to be a social learning process taking place on the individual, group or organizational level.

---

When assigning a place for the recording of planned, and actually obtained outcomes of health promotion projects (as well as for unintentional outcomes), both column B and C are important. Each one of these columns is further divided into categories and sub-categories. Demonstrable improvements in the population’s health are recorded in column D.

The four columns of the Swiss Model for Outcome Classification

**Improvement in the health of a population (Column D)**

In terms of a bio-psychosocial understanding of health, this is the place for recording the actually intended, ultimate goal of health promotion. Outcomes such as an increased healthy life expectancy for the population or a lower rate of preventable (or premature) morbidity depend on many factors (behaviour and circumstances), which interact in a complex manner. On this level, comprehensive outcomes can only be achieved over an extended period of time and can be verified by epidemiological evidence.

**Changes in health determinants (Column C)**

An outcome on level C is a verifiable positive change in an acknowledged health determinant in a setting and/or in a population group. A health determinant is acknowledged if it is based on empirical and/or theoretical work, i.e. on well-conducted studies, evaluations or scientific models which are relevant to target groups and circumstances in the country or culture where the intervention is taking place/Switzerland.

**Change in factors influencing health determinants (Column B)**

This is the field into which direct outcomes of health promotion strategies are entered. The categories and sub-categories offer room for indicators that have the potential to exert a positive impact on the health determinants.

**Measures for health promotion (Column A)**

Measures constitute actions that are directed towards reaching the objectives of the project, which thus render the project possible, and enable it to progress. It is not absolutely necessary to consider this column when documenting the objectives and outcomes.
Sub-categories (Columns B and C)

Every column is further divided into categories and sub-categories:

- **B1 Health promoting services**
  1. Awareness of the service
  2. Accessibility of service/reaching of target groups
  3. Use of the service and satisfaction with it
  4. Sustainability of the service
  5. Improved professionalism in health promotion

- **B2 Health promoting public policy and organizational practice**
  1. Binding engagement of decision-makers and/or other key persons
  2. Action-relevant, binding documents
  3. Successful organisational changes
  4. Successful exchange and cooperation

- **B3 Health promoting social/societal environment**
  1. Existence of active groups focusing on health-promoting concerns or themes
  2. Enlisting of new players
  3. Awareness of the concern by population groups
  4. Acceptance of the concern by population groups

- **B4 Health-related life skills**
  1. Factual health-relevant knowledge and capacity to act on knowledge
  2. Positive attitudes and intentions towards a health-relevant topic
  3. New personal and/or social skills
  4. Strengthened self-confidence regarding a health-relevant topic or an activity

- **C1 Health promoting physical environment**
  1. Reduction of pollution caused by physical-chemical influences
  2. Conservation and improvement of natural resources
  3. Health-promoting installations and products

- **C2 Health promoting social/societal environment**
  1. Social support, social networks, social integration
  2. Social climate
  3. Equal access to general social resources

- **C3 Health promoting individual resources and behavioural patterns**
  1. Health promoting individual skills
  2. Improved health-relevant behaviour and patterns of behaviour

Application of the model

i. **Situation analysis**

Situation analysis demonstrates specific health problems and health conditions in a specific case. The SMOC focuses on the analysis of planned and achieved outcomes. However, as a global classification system, it is equally useful in the early stages of a project, i.e. when examining the development of health problems/health conditions in a specific case. When analyzing a particular situation, the relevant health condition would be noted in column D, while other columns and boxes would be used to record the factors that significantly determine the described condition (column C for health determinants and column B for substantial factors influencing the health determinants). Additionally, the question of effects resulting from the activities of other players in the field can be addressed for each category (context analysis).

ii. **Intervention planning**

In the planning phase of a project, the SMOC will be used to record the intended outcomes and to demonstrate the links between them. There are two distinct levels:
1. Intended long-term effects (induced in part by the project, but with a view that goes beyond the duration of the project).

2. Health-relevant objectives (planned health-relevant outcomes in the target-groups by the end of the project).

Whenever the SMOC is used, these two levels must be strictly differentiated. For a better visual differentiation, the two levels may be coloured differently. Crucially important are the question about the ultimate state of health to be achieved (D) and the health determinants (C) to be influenced by the project, as are the intermediate and more tangible goals deemed to contribute to this end. These questions ought to show up the underlying chains of effect in a project.

When planning an intervention, there is not only a need to justify the chosen interventions, but explanations should also be offered if objectives are missing from some of the categories:

- *Long-term effects*: demonstrate how the project will positively influence the health of the population or a population-group. To which long-term outcomes is the project likely to contribute? By classifying these intended long-term effects, the context in which the project aims to be active will be outlined.

- *Objectives* (made more tangible by mentioning the indicators, if necessary): list and attribute the health-relevant objectives to the SMOC’s categories and sub-categories. Each objective and/or indicator must be attributed to its accurate sub-category. If this seems impossible, the objective needs to be checked and possibly re-formulated (see 'SMART-criteria'). The descriptions of categories and sub-categories and the examples will help to correctly attribute the objectives. If needed, measures can be attributed to the measure categories (level A) at this point.

- *Associations of effects*: show the known or presumed associations between the individual objectives of the project as well as between the objectives and the intended long-term effects (visualization with arrows). In the best case, these associations of effects should be based on empirical data. If no evidence is available (and no theoretical base either), the presumed effects must be plausibly explained.

When planning an intervention, there is not only a need to justify the chosen interventions, but explanations should also be offered if objectives are missing from some of the categories.

**iii. Evaluation**

Evaluation assesses the outcomes and associations of effects (i.e. the proposed SMOC). For the evaluation of a project the actually achieved outcomes will be listed and attributed to the relevant categories and sub-categories.

Based on this, the following reflections are possible:

- Is there a concentration of outcomes in particular categories and sub-categories?
- How do the achieved outcomes correspond to the formulated project objectives?
- Have the presumed associations of effects been confirmed or remained elusive in the project?
- Have new associations of effects been discovered indicating a need to modify the model?
- Have there been positive or negative unplanned effects?

With regard to continuing or improving a project, some of the following questions may also be helpful:

- In the light of experiences made during the project, should the presumed associations of effects be re-thought or revised?
- Are there any reasons why the objectives should be weighted differently in order to achieve the intended long-term effects?
Remarks

Important: The SMOC may be used for intermediate evaluations or at any point of taking stock during a project and not only for evaluations at the end. If used during the project the insights gained from the exercise may be helpful for adjusting the project’s direction.

The SMOC is a tool which may be used for analysis and quality development. In order to exploit its full potential, it should not be used by the project manager or evaluator alone, but should be used collectively e.g. in a meeting of the entire project team, or between the evaluators and key project members, etc.

Literature

http://heapro.oxfordjournals.org/cgi/content/full/23/1/86
Example: Project „fit and healthy at school“

Short description of the project

<table>
<thead>
<tr>
<th>Problem</th>
<th>Increasing overweight in children</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>Schools</td>
</tr>
<tr>
<td>Target group</td>
<td>Teachers, parents and primary school children in canton x</td>
</tr>
<tr>
<td>Vision</td>
<td>More school children with a healthy bodyweight. Schoolchildren eat a healthier diet and have more physical activity</td>
</tr>
</tbody>
</table>
| Objectives       | • All primary schools in canton x participate in the project 'Fit and healthy at school'  
                   • The principle of 'healthy school snacks' is introduced successfully and children only bring healthy snacks to school  
                   • 90% of all teachers are aware of the association between physical activity, diet and health and are able to implement this awareness in their classroom teaching and by organizing health-related school projects  
                   • The parents of at least 60% of the school children have been reached through 'Fit and healthy at school' workshops  
                   • Based on the 'fit and healthy at school' workshops, municipalities have decided to continue activities promoting 'healthy' schools and have started to put them into action  
                   • Parents have participated in the workshops and their children have started to integrate more physical activities and a healthier diet into their daily lives  
                   • 90% of all teachers have participated in a regional training session in preparation for the 'Fit and healthy at school' workshops |

Vision

Thus, when planning an intervention with the help of the SMOC, the vision/long-term effects will first be attributed to the appropriate categories:

<table>
<thead>
<tr>
<th>Vision</th>
<th>More school children have a healthy bodyweight</th>
<th>C3-1</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vision 2</td>
<td>School children eat healthier food</td>
<td>C3-2</td>
</tr>
<tr>
<td>Vision 3</td>
<td>School children have more physical activity</td>
<td>C3-2</td>
</tr>
</tbody>
</table>
Objectives

In a second step, the *health-relevant objectives* of the project are entered into the SMOC. Each objective will be attributed to its appropriate sub-category. If this seems impossible, the objective needs to be checked and possibly re-formulated (see ‘SMART- criteria’). To facilitate correct entries and attributions, descriptions and examples are provided for each of the categories and sub-categories.

<table>
<thead>
<tr>
<th>Objective 1</th>
<th>All primary schools in canton x participate in the project ‘Fit and healthy at school’</th>
<th>B2-2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 2</td>
<td>The principle of ‘healthy school snacks’ is introduced successfully and children only bring healthy snacks to school</td>
<td>C3-2</td>
</tr>
<tr>
<td>Objective 3</td>
<td>90% of all teachers are aware of the association between physical activity, diet and health and are able to implement this awareness in their classroom teaching and by organizing health-related school projects</td>
<td>B1-5</td>
</tr>
<tr>
<td>Objective 4</td>
<td>The parents of at least 60% of the schoolchildren have been reached through ‘Fit and healthy at school’ workshops</td>
<td>B3-2</td>
</tr>
<tr>
<td>Objective 5</td>
<td>Based on the workshops, municipalities have decided to continue activities promoting ‘healthy’ schools and have started to put them into action</td>
<td>B2-2</td>
</tr>
<tr>
<td>Objective 6</td>
<td>Parent participants of the workshops and their children have started to integrate more physical activities and a healthier diet into their daily lives</td>
<td>B4-2</td>
</tr>
<tr>
<td>Objective 7</td>
<td>90% of all teachers have participated in a regional training session in preparation for the ‘Fit and healthy’ workshops</td>
<td>B1-3</td>
</tr>
</tbody>
</table>

Measures

If needed, measures can similarly be attributed to the measure categories (level A):

| Measure 1 | Talks with the department of education and with school principals | A2 |
| Measure 2 | At least 6 regional training sessions for teachers | A1 |
| Measure 3 | At least 2 ‘Fit and healthy’ workshops for children and their parents in each school - in collaboration with the project team and the teachers | A1/A4 |
| Measure 4 | Information for parents | A3 |

The most important associations between the project’s objectives and the long-term effects can now be considered and entered into the model (these chains of effect should be plausible and comprehensible; as far as possible, they should have a theoretical or empirical base). e. g. objective 1 is an important precondition for objective 2 and 7; objective 7 is a precondition for objective 3 and objective 3 is, in turn, a precondition for measure 3, etc..
With the SMOC as a background, these three planning steps could be illustrated in the following way (different colour for visions, objectives and measures):

Such an illustration will help to decide if a planned intervention is consistent and comprehensible. Ask yourself, for example: are there objectives on level C or D which are no longer feasible since the expected chains of effect were not forthcoming? In the given example, this would be the case if we had aimed at a healthier school environment without explicitly showing the way to achieve such an objective, and if we had only planned to offer workshops for parents.

During the evaluation phase, the outcomes actually achieved will be entered into the model in a similar way, and the associations of effects made apparent:

- Should the presumed chains of effect be re-thought or revised in the light of experiences made during the project? Was the assumption correct that workshops could realistically contribute to more physical activity in everyday life?
- Are there any reasons why the weight attributed to the different objectives should be changed in order to achieve the intended long-term effects? Would it be more appropriate, for instance, to put more emphasis on the school structures in order to achieve longer lasting effects?
- Have there been any positive or negative unplanned side effects? Have the parents been stimulated to organize activities independently?