Guidance on intersectoral monitoring for health
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Guidance on intersectoral monitoring for health
Abstract:

Intersectoral action for health is required to tackle health challenges because policies and factors outside of the health sector influence health there effective health promotion is not possible with intersectoral action for health. Routine monitoring and reporting actions by public health authorities can allow these intersectoral actions and policies to be planned on a factual basis. This document summarizes different forms of intersectoral monitoring such as population health monitoring, service provider perspective monitoring and joint intersectoral monitoring. It elaborates the Bergen model of collaborative functioning and concludes by providing indicators, tools, analytical approaches and frameworks for intersectoral monitoring.

Keywords:
PUBLIC HEALTH, HEALTH PROMOTION, POLICY

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Abbreviations

<table>
<thead>
<tr>
<th>Acronym</th>
<th>Description</th>
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<tbody>
<tr>
<td>HIA</td>
<td>Health Impact Assessment</td>
</tr>
<tr>
<td>HiAP</td>
<td>Health in All Policies</td>
</tr>
<tr>
<td>SDG</td>
<td>Sustainable Development Goal</td>
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</table>
1. Intersectoral action for health: rationale and meaning

1.1 Introduction

The ability to live a healthy life is determined not only by individual factors such as gender, age, genetic make-up, lifestyle, and access to and quality of healthcare, but also requires functioning social and community networks, good living and working conditions and supportive socioeconomic, cultural and environmental conditions in general (1).

The implication of this is that health is influenced by conditions which are to a large extent shaped by policies and actions outside the health sector (2). This notion is reflected in the Health in All Policies (HiAP) approach, which is a key public health concept:

HiAP is an approach to public policies across sectors that systematically takes into account the health implications of decisions, seeks synergies and avoids harmful health impacts, in order to improve population health and health equity. (3).

The Health Equity Status Report by the World Health Organization (WHO) Regional Office for Europe (5) showed the relative contributions of five essential conditions for health inequities: (i) health services, (ii) income security and social protection, (iii) living conditions, (iv) social and human capital, and (v) employment and working conditions.

It found that the relative contribution of health services to inequities in self-reported health, mental health and life satisfaction was just 10 to 11%; income security and social protection, as well as living conditions, contributed a far greater share. The report concluded that “to increase equity in health within countries, actions are needed across all five conditions through a combination of targeted and universal policy” (5, 6).

Another study illustrates the impact of different factors on the health outcomes "length of life" and "quality of life": based on community data from the United States of America, the impact of health behaviour is determined as 30%, clinical care 20%, social and economic factors 40% and the physical environment 10% (7). As both health behaviours and the physical environment are also shaped to some extent by social and economic factors, approximately 80% of a population’s health is related to the circumstances in which people are born, grow, live, work and age.

These figures highlight the importance of intersectoral actions and underline the relevance of recommendations made by the WHO Commission on the Social Determinants of Health (8) and the Marmot reviews (9, 10), both of which focus their recommendations on the root causes

1 For more information on the HiAP approach, see the training manual of the World Health Organization (WHO) (4).
of health inequalities. The Marmot reviews highlight six key policy areas that, again, illustrate the need for intersectoral actions:

(i) give every child the best start in life
(ii) enable all children, young people and adults to maximize their capabilities and have control over their lives
(iii) create fair employment and good work for all
(iv) ensure healthy standard of living for all
(v) create and develop healthy and sustainable places and communities
(vi) strengthen the role and impact of ill-health prevention.

Reports and studies like these show clearly that tackling health problems solely from an isolated health perspective is not enough if we wish to promote healthy and prosperous lives; instead, what is needed is a focus on the context in which health problems occur (5, 11, 12). This is the rationale for intersectoral action.

Routine monitoring and reporting actions by public health authorities can enable intersectoral actions and policies to be planned in an evidence-informed way. However, it is important that reporting actions overcome the phenomenon known as “lifestyle drift”. Lifestyle drift describes (i) actions that set out to tackle or monitor health inequalities at a broader scale by taking an upstream approach, but in which, during the course of the action, the focus drifts downstream to individual lifestyle factors and (ii) a general trend to focus on individual behaviour interventions (13, 14). Both can occur in population health monitoring actions. For example, due to limited data availability or to disease- and risk factor-centred monitoring approaches, or due to only individual, lifestyle-centred policy options being developed rather than upstream options which tackle the root causes.

To achieve a broad perspective on health, public health actors should seek to collaborate with stakeholders from other sectors, such as social affairs, urban planning and transport, education, work, and the environment. Table 1 presents four examples selected to show how intersectoral actions can broaden the focus on lifestyle risk factors and the social determinants of health and how they can match with the objectives of two policy sectors. The table shows how an intersectoral perspective can lead to the development of intersectoral actions that are based on a common mission and shared commitments to design healthy public policies (2).
### Table 1: Selected examples of sector and risk factor/social determinant match, with linked mechanism and policy commitments (2).

<table>
<thead>
<tr>
<th>Sector</th>
<th>Examples of Life Style Risk Factors Potential mechanisms to reduce inequalities</th>
<th>Examples of Social Determinants Potential mechanisms to reduce inequalities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban planning and transport</td>
<td>Easy and preferred access to healthy food</td>
<td>Plan for appropriate mix of employment, educational opportunities and residential areas; ensure safe, fast and easy public transport</td>
</tr>
<tr>
<td></td>
<td>Easy and preferred access to physical activity, including for safe walking and cycling</td>
<td>Plan for public services; diversify settlements; provide access to easy public transport and green spaces</td>
</tr>
<tr>
<td></td>
<td>Urban planning and transport</td>
<td>Education</td>
</tr>
<tr>
<td></td>
<td>Educational</td>
<td>Urban planning and transport</td>
</tr>
<tr>
<td></td>
<td>Educate on healthy diet; ban unhealthy food on premises; provide healthy food</td>
<td>Educate on healthy diet; ban unhealthy food on premises; provide healthy food</td>
</tr>
<tr>
<td></td>
<td>Inform, promote, provide opportunities and offer counselling</td>
<td>Inform, promote, provide opportunities and offer counselling</td>
</tr>
<tr>
<td></td>
<td>Provide second-chance education, align education to labour market needs, etc.</td>
<td>Provide second-chance education, align education to labour market needs, etc.</td>
</tr>
<tr>
<td></td>
<td>Closely monitor and act on enrolment coverage, drop-out and completion rates for vulnerable locations and population groups</td>
<td>Closely monitor and act on enrolment coverage, drop-out and completion rates for vulnerable locations and population groups</td>
</tr>
</tbody>
</table>

### Impact
- Reduce burden of disease and reduced health inequity by key equity dimensions e.g. geographic location; wealth; ethnicity/gender

### Outcome
- Reduction in risk factor prevalence and gradient

### Output – physical activity
- Urban planning and transport: All urban areas must provide easy access to physical activity, including safe walking and cycling
- Policy-result indicator: Proportion of urban areas that have easy access to physical activity, including safe walking and cycling

### Output – clustering of disadvantages
- Urban planning and transport: All local urban areas must have adequate public services, with mixed housing opportunities, and provide access to easy public transport
- Policy-result indicator: New mixed housing opportunities available in urban areas with access to public services; increased number of public transport option/lines to local urban areas

### Education
- Policy: All schools at all class levels must provide opportunity for at least 60 minutes of moderate-to vigorous-intensity physical activity daily
- Policy-result indicator: Greater proportion of schools requiring 60 minutes of intense physical activity daily

### Tasks for intersectoral monitoring and reporting: To screen available data for indicator development; to define SMART indicators (that is, Specific, Measurable, Attainable and action-oriented, Relevant and Time-bound); to monitor the progress of these indicators; and to report about their development.

This table is a synopsis of three tables published in Chapter 12 on intersectoral planning for health and health equity, in *Strategizing national health in the 21st century: a handbook* (2).
1.2 Terminology

Some of the terms used in this guide require some clarification, and so are defined below.

1.2.1 Intersectoral actions

"Intersectoral actions" are defined by Harris et al., and can be understood as:

A recognized relationship between part or parts of the health sector and part or parts of another sector that has been formed to take action on an issue or to achieve health outcomes, (or intermediate health outcomes) in a way which is more effective, efficient or sustainable than could be achieved by the health sector working alone (15, 16).

A more recent scoping review developed the following definition, which includes the shared interest of different sectors as an additional element: "Working with more than one sector of society to take action on an area of shared interest to achieve better results than those obtained working in isolation. (…)" (17).

1.2.2 Intersectoral action, policy and governance

When talking about intersectoral approaches it is also helpful to clearly distinguish between intersectoral action, policy and governance (16, 18).

► **intersectoral action**: the operational intervention or act of collaboration

► **intersectoral policy**: the deliberate joint resolution to solve a social problem

► **intersectoral governance**: the system that drives integration and collaboration.

1.2.3 Population (health) monitoring

The term “population (health) monitoring” also requires some clarification. The purpose and primary goal of monitoring is illustrated by the policy cycle. The phases of the policy cycle go from (i) problem definition and agenda setting to (ii) policy formulation and decision making to (iii) policy implementation and (iv) policy evaluation. Population (health) monitoring is primarily linked to the problem definition and agenda setting phase of this cycle (phase 1).

However, it is important to be aware that this policy cycle is a simplification – there is not a default relationship between monitoring or research, the evidence that they generate, and policy formulation. In practice, policy making is influenced by many competing factors, such as different cultures, beliefs, societal interests, or competition between parties.

The term “population health monitoring” is defined by Verschuuren and Van Oers as

(…) the regular and institutionalized production and dissemination of information and knowledge about the health status of a population and its determinants, aimed at informing policy-making (19).

This definition’s reference to information on the “health status of a population and its determinants” opens the way for intersectoral monitoring (19). The organizational elements and actions of population health monitoring are described by the data-information-
knowledge-wisdom hierarchy, also known as the information pyramid. At the base of the pyramid is data (action: data collection), on top of which rests information (action: analysis and contextualization of data), followed by knowledge (action: reporting) and lastly wisdom (action: application of the knowledge for evidence-informed decision-making) (20, 21).

1.3 Aims of this guide
This guide describes options for intersectoral monitoring and illustrates different degrees of intersectoral monitoring that may be considered. The aim of the guide is to support the organization of intersectoral monitoring by explaining the general prerequisites and potential barriers.

In addition to these more theoretical and preparatory elements, the guide includes practical examples in terms of conceptual frameworks, indicator sets and tools that can be used to support an intersectoral monitoring approach.
Guidance on intersectoral monitoring for health
2. Different forms of intersectoral monitoring

This guide differentiates between three different forms of monitoring and reporting which involve varying degrees of intersectoral cooperation. This differentiation is inspired by a German model, which distinguishes eight steps with varying intensities of intersectoral population health monitoring – ranging from a classical health report through to an ideal model in which actors from different sectors cooperate in an integrated monitoring and reporting action (22). However, the main differences can be illustrated by these three forms:

1. A broad population health monitoring and reporting approach (which is probably the most frequently applied approach; see section 2.1).

2. A service provider approach (in which one sector invites another sector to contribute a specific topic to their reporting action; see section 2.2).

3. A joint intersectoral monitoring and reporting structure (see section 2.3).

2.1 Population health monitoring and reporting in its broadest sense

The first approach to intersectoral monitoring is to integrate a broad approach into a classical health information system. A health information system can be understood as “(…) the total of resources, stakeholders, activities and outputs enabling evidence-informed health policy making” (23). In this type of approach, the public health sector compiles data and information drawn from all the relevant sectors and integrates the results in a health report.

In the WHO discussion paper Leveelling up (part 1): a discussion paper on concepts and principles for tackling social inequities in health, Dahlgren and Whitehead stress the importance of selecting appropriate tools (or indicators) to measure both social inequalities in health, and progress towards goals (24). Many of the indicator sets used for population health monitoring, such as the European Core Health Indicators (25), incorporate information about the demographic and socioeconomic situation or include categories such as educational attainment or socioeconomic status as health indicators. This means that they already provide some detail about the social dimension of health inequities. Comparable examples can also be found in Member States of the WHO European Region.

It can also be useful to be aware of statistics routinely gathered in other sectors that may also be useful from a broader, population health monitoring perspective. The data available from statistical offices can provide orientation. Many countries also provide indicators for monitoring the United Nations Sustainable Development Goals (SDGs), which can act as an entry point for the development of a broader perspective on health and its determinants. These comprehensive indicator sets make it possible to contextualize health indicators using
information from other sectors, and to write health reports on topics such as on poverty and health, or environment and health.

In addition to comprehensive indicator sets, population health monitoring and reporting can also make use of other tools or analytical approaches to broaden the perspective on health (see Chapter 4 for some examples).

### 2.2 Service provider perspective: contributing to monitoring and reporting efforts by others

Routine monitoring and reporting efforts also form part of the portfolios of other sectors – focused on poverty, employment, education or the environment, for example. Like the health sector, these sectors can follow an intersectoral monitoring and reporting approach. This means that, in addition to a specific sector’s usual monitoring focus, it aims to put a spotlight on data and information from another sector and invite the relevant actors to contribute to their monitoring and reporting action.

Example scenarios:

- The social affairs department aims to compile a report on poverty and invites colleagues from the health sector to provide a chapter on health inequalities.

- The health department aims to apply a specific focus on green spaces and recreational areas in their health monitoring and reporting action. Therefore, they invite colleagues from the department for environment and the urban planning department to contribute.

- A report on educational opportunities needs a chapter on the health of children and adolescents, and so the health department is invited to contribute.
In these scenarios, the actors invited to contribute are acting as service providers for the department issuing the report. They are not necessarily involved in the conceptualization of the report as a whole or in defining overarching policy options. However, a report of this kind offers the invited sector an opportunity to spread the word among experts that are not their usual target audience and offers opportunities for a broadened assessment of a specific situation.

2.3 A joint intersectoral monitoring and reporting structure

The ideal basis for the establishment of intersectoral monitoring and reporting routines is an intersectoral governance approach that aims for integration and collaboration across sectors. This offers possibilities for the development of a distinct department for integrated actions, or at least a dedicated working group.

This organizational form makes it possible to establish routines for integrated monitoring, which may include, for example:

- definition of a common mission and intersectoral objectives and aims
- detailed analyses and possibilities for data linkage (check data protection requirements)
- the development of context-specific indices or indicator sets that are especially designed for the envisaged purpose
- a common data warehouse or dashboard for joint data analyses
- the publication of joint reports and joint recommendations of policy options.

These structures can be designed as separate side structures, or originate in specific sectors.

To ensure successful cooperation between different sectors there are some key factors that should be considered. These include: the existence of supportive and knowledgeable policy networks that understand the added value of intersectoral cooperation and how each sector can contribute to the overall goal of the action; political support; the institutionalization of intersectoral working principles; and balancing of the political and social goals of the government (26) (see Chapter 3 for more information).

If implemented successfully, the effects of an intersectoral structure could be (27):

- increased understanding by policy-makers of the impact of their work on population health and health equity
- changes in policy direction as a result of the intersectoral monitoring action
- the development and dissemination of policy-relevant research
- greater understanding and stronger partnerships between health and other government departments
- a positive attitude toward employing intersectoral monitoring actions in future work.
3. Organizing intersectoral monitoring processes

Organizing intersectoral actions – such as a joint monitoring and reporting structure – requires understanding the prerequisites that support intersectoral work and partnerships across sectors. This can help overcome the many potential pitfalls and barriers that can arise when establishing and working within an intersectoral structure.

3.1 The Bergen model of collaborative functioning

The Bergen model of collaborative functioning, developed by Corbin and Mittelmark (28, 29), has been tested in the context of intersectoral health promotion campaigns, but it also offers useful insights for other intersectoral actions. This model can be used as an analytical framework for examining collaborative working arrangements, as a guide for practice, and as an evaluation tool (29). In this section, it is used as a practice guide for organizing intersectoral monitoring processes.

The model presents the necessary inputs, the collaborative action as well as the outputs. It focuses on the processes of partnerships and displays both negative and positive interactions (29). Corbin et al. describe the model as follows:

- The inputs include: (i) partnership resources; (ii) mission/purpose; and (iii) financial resources, which motivate recruitment of additional inputs according to various dynamics […]. Once the inputs enter the collaboration (throughput area), they interact positively or negatively with elements of the collaborative process such as leadership, communication, roles and structure (or lack thereof), power, trust and funding/partner balance. The outputs of partnership are: (i) additive results (people do what they would have done anyway); (ii) synergy (the sum of the parts is greater than would have been achieved working in isolation); and (iii) antagony (partners achieve less than if they were working on their own). These outputs then feed back into the collaboration, affecting processes of functioning in both negative and positive ways (29).

The Bergen model illustrates the added value of intersectoral actions, but it also shows the potential for there to be detrimental effects for the intersectoral action if some domains are neglected, not formalized or lacking. Corbin et al. conducted a scoping review to identify partnership processes that have been found to contribute to successful partnership in intersectoral actions. In addition to several illustrative examples for each model domain, they provide nine practice recommendations (29):

i. develop a shared mission aligned to the partners’ individual or institutional goals

ii. include a broad range of participation from diverse partners and a balance of human and financial resources
iii. incorporate leadership that inspires trust, confidence and inclusiveness

iv. monitor how communication is perceived by partners and adjust accordingly

v. balance formal and informal roles/structures depending upon mission

vi. build trust between partners from the beginning and for the duration of the partnership

vii. ensure balance between maintenance and production activities

viii. consider the impact of political, economic, cultural, social and organizational contexts

ix. evaluate partnerships for continuous improvement (29).

Some of these recommendations are also reflected in a study that analysed practical experiences in local intersectoral actions in the Netherlands (30). The analysis revealed that the sectors involved recognized as relevant for their work: good relationships, positive experiences, a common interest in working together and coordinated mechanisms.

3.2 Prerequisites for intersectoral approaches

The WHO Collaborating Centre for Health Promotion Research in Ireland has developed a checklist to guide practitioners more closely in the development (and assessment) of intersectoral partnerships (31). The Partnership Checklist (31) contains nine partnership domains, listed below, and a set of 49 more specific subquestions; it is important to consult the subitems in the Partnership Checklist in order to understand their full content. In addition, this guide enriches some partnership domains with examples of issues relevant to a monitoring and reporting perspective. These are the relevant domains for the development of an intersectoral action:

1. Need for the partnership – the benefits of a partnership approach are clear. 
   Relevant for monitoring and reporting: What is the added value for problem definition and agenda setting in the country, region, or municipality?

2. Mission – refers to the purpose of a partnership and encompasses the idea of a shared vision and aligned goals which draw together the individual, organizational and financial partners.
   Relevant for monitoring and reporting: A shared vision might need a broader focus than just health or health inequities, for example on well-being, sustainable development or identifying unequal chances for societal participation. A decision should be made as to the emphasis of the mission – a positive emphasis by monitoring the assets and chances for health well-being, or a negative emphasis by monitoring ill-health and ill-being.

3. Context – refers to the external environment of the partnership. It includes the individual contexts of all the partners as well as the economic, political, social and cultural context. 
   Relevant for monitoring and reporting: Is it possible to share data or to make data available in a joint data warehouse? Is data linkage possible (including in terms of existing
regulations) and what is the added value? Is it possible to transfer the intersectoral action into a routine task? The writing of a report might be a relatively singular action, whereas the development of a dashboard allows continuous updates but requires continuous maintenance.

4. **Partners’ profile** – refers to the partners’ overall skills and expertise, and willingness to share resources to fulfil the mission.

   *Relevant for monitoring and reporting:* In general it is important to understand the core agenda of each sector in terms of monitoring and reporting. More specifically it can be helpful to identify: What kind of underlying conceptual approaches are used in each sector? What kind of data or indicators are provided by each sector?

5. **Resources** – encompasses financial and other resources, such as time, skills, expertise, reputation, personal networks and connections and so on.

   *Relevant for monitoring and reporting:* What kind of analytical skills, writing skills, communication skills are available in the group? What kind of individual networks and partners could be supportive for the action? Is it possible (and necessary) to go beyond the available data, for example with new/expanded data collections or by using qualitative approaches? Are there experiences with participatory approaches that involve other experts, societal partners or citizens (see also the domain ‘partnership functioning’)?

6. **Leadership** – refers to single leaders, co-leaders, or a team of leaders who provide strategic direction to achieve the partnership’s mission.

7. **Roles and structures** – refer to the level of formalization and working arrangements within the partnership.

8. **Communication** – the ways in which partners (including leadership) convey information both within the partnership and externally.

9. **Partnership functioning** – tasks and activities that maintain the partnership and keep it productive pertaining to the partnership’s mission.
Guidance on intersectoral monitoring for health
This chapter aims to provide some inspiration for intersectoral monitoring practice; note that the goal of the chapter is to provide inspiration, not offer a complete list. The frameworks, indicator sets, tools and approaches showcased here can support intersectoral monitoring actions and initiate discussion about context-specific adaptations.

### 4.1 Conceptual frameworks

Before starting a monitoring action, it is recommended to think about an appropriate conceptual framework to define its scope. Although such frameworks are often rather broad and abstract, they can be useful in guiding the selection of indicators to ensure the included concepts are specific and measurable.

Examples of well-known conceptual frameworks in public health include the health field concept of Lalonde (32) and the framework of health determinants by Dahlgren and Whitehead (1). Fig. 1 shows the social determinants framework by the WHO Commission on Social Determinants (8) and the United Nations 2030 Agenda for Sustainable Development (11), which provides an intersectoral framework that offers orientation for various sectors.
Fig. 1. Different conceptual models:

a) Commission on Social Determinants of Health conceptual framework.

Sources: a) social determinants framework (8); b) sustainable development goals (11).
4.2 Indicators
This section focuses on indicator sets that have a genuine and broad intersectoral perspective. The selection goes beyond classical health indicator sets such as the European Core Health indicators (ECHI) or other international or national health indicator sets because, although these sets may have a focus on the wider determinants of health, they are usually not primarily designed for intersectoral actions.

The indicator sets below can provide guidance and inspiration for the development of intersectoral monitoring actions. International indicator sets can be helpful for enabling cross-country comparisons. It is therefore advisable to ensure that the indicators selected to support the monitoring of the chosen objectives are based on the conceptual framework that was chosen as backbone of the action.

### Indicators

Indicators can be understood as succinct measures that aim to describe as much about a system as possible in as few points as possible. Indicators help us understand a system, compare it and improve it (33).

For more information on topics such as the anatomy of indicators, the relevance of metadata etc. read Pencheon D. The good indicators guide: understanding how to use and choose indicators. Coventry: NHS Institute for Innovation and Improvement; 2007 (33).

#### 4.2.1 SDG indicator framework
The comprehensive indicator framework that has been developed for measurement of the SDGs and their sub-targets (34) offers a good entry point and provides comprehensive information on the selected indicators and their metadata. The European Union has used the United Nations SDG indicator framework and adapted it for the European context (35). In addition, many countries, regions and cities or municipalities have assessed the SDGs in their context, developed SDG dashboards and written national, regional, or local reports.

#### 4.2.2 National and regional indicator sets
There are also examples of regional and national indicator sets that have a genuine intersectoral perspective.

**Health Equity Dataset (WHO Regional Office for Europe)**

This dataset (36) accompanies the WHO European Health Equity Status Report (5) and provides country-specific data on health status, living conditions, social and human capital, employment and working conditions, health services, and income security and social protection.
Wider Determinants of Health tool (United Kingdom)

This tool from Public Health England provides information on data, analysis and possibilities to act for the domains: built and natural environment; work and the labour market; vulnerability; income; crime; and education (37).

Sotkanet: statistical information on welfare and health (Finland)

On its website, Sotkanet, the Finnish Institute for Health and Welfare provides a central entry point for indicators at the municipality level for a broad range of topics – for example, a welfare compass, services and resources, children, young people and families (38).

The County Health Rankings (United States of America)

The University of Wisconsin provides County Health Rankings for counties in the United States. The indicators cover health outcomes, health behaviour, clinical care, social and economic factors, and the physical environment (39). The County Health Rankings website also offers supportive information on how to move from data to action, a database on evidence-based interventions and suitable partners for action.

4.3 Tools and analytical approaches

This chapter provides examples of comprehensive intersectoral monitoring approaches, the integration of the social determinants of health, participatory approaches, the monitoring of policies, health promotion capacities and the commercial determinants of health.

4.3.1 Comprehensive intersectoral approaches

Health Lens Analysis

The Health Lens Analysis was developed in South Australia. It is an intersectoral approach that “examines connections among policy, strategies and health in a systematic manner and aims to deliver evidence-based recommendations that support sound policy and health outcomes” (27). This approach is an example of a joint intersectoral monitoring and reporting structure (see Chapter 2) and consists of five stages (40):

1. Engage: establishing and maintaining strong collaborative relationships with partner agencies.

2. Gather evidence: identifying the relationship between health outcomes and the policy area under focus, and formulating evidence-based solutions or policy options.

3. Generate: producing a set of policy recommendations and a final report that are jointly owned by all agencies with responsibility for the target.

4. Navigate: helping to steer the recommendations through the decision-making process.

5. Evaluate: determining the effectiveness of the analysis.
Case studies on alternative water supplies, regional migrant settlement, active transport, and so on can be found in the report *The South Australian approach to Health in All Policies: background and practical guide* (40).

**Health Impact Assessment**

Health Impact Assessment (HIA) is a specific form of a health assessment. It is defined as:

> [...] a process through which evidence (of different kinds), interests, values and meanings are brought into dialogue between relevant stakeholders (politicians, professionals and citizens) in order imaginatively to understand and anticipate the effects of change on health and health inequalities in a given population (41).

Usually, the HIA approach focuses on the social and wider determinants of health. It assesses the impact of policy plans, programmes or projects that are (planned to be) implemented by the health sector or other sectors; the direction of the assessment can be prospective, concurrent or retrospective. The Welsh practice guide on HIA puts it as follows:

> If we see our health as being shaped by wider social processes, then the policies, programmes and projects that national or local governments develop and support are likely to be important opportunities or threats to the health of individuals, groups, communities and whole populations (42).

Although HIA has an intersectoral perspective, it does not necessarily have to be performed by an intersectoral working group. The Wales Health Impact Assessment Support Unit offers guiding material for conducting a HIA on its website (42).

**Prevention in the district**

The “Prevention in the District” toolkit was developed in the Netherlands. The toolkit comprises district typology for nine typical Dutch districts, a data guide and a prevention guide. The district typology constitutes a starting point for municipalities to get in touch with partners and residents. It is recommended that an intersectoral approach be followed in these dialogues. Depending on the district type (for example, city centres, pre-war working class neighbourhoods), suitable data sources are provided on key characteristics of each district and suitable themes for interventions. Both follow an intersectoral perspective, by including health as well as the physical and social environment. The toolkit shows how to provide information, guidance and tools for practitioners and support the adaptation to the local context (43).

**4.3.2 Integration of the social determinants of health**

Many health reports describe population health in the context of social determinants. Data from Health Interview Surveys are very useful, since these data sets include individual information on health and social conditions. For other aggregated data sources such as cause of death statistics or hospital discharge data, the linkage of health and social data can be difficult. Some countries allow these data sources to be disaggregated and linked with social statistics. However, in other countries disaggregation and data linkage are not possible on a routine basis. In this case, composite measures such as deprivation indices can provide an alternative. These measures can be developed on national, regional or small-area level. They aim to locate areas and the people living in these areas on a scale of deprivation. Usually
these indices cover different dimensions – or domains – of deprivation. Commonly used are data on employment, income, education or housing. Five key stages are necessary to develop a deprivation index. Each stage is described in detail by Allik and colleagues (44):

1. Selection of appropriate data and geographic area.
2. Selection of individual deprivation indicators.
3. Constructing the index: combining and weighting indicators.
4. Validation and sensitivity analysis.
5. Dealing with uncertainty.

A practical illustration of how to use deprivation indices can be found in the United Kingdom’s Office of National Statistics’ "Health state life expectancy by national deprivation deciles, England: 2016 to 2018." (45)

### 4.3.3 Participatory approaches

Participatory approaches can be used to integrate the perspective of citizens in intersectoral monitoring actions. The Scottish Place Standard Tool is an example of such a participatory approach in practice.

**Place Standard Tool**

The Place Standard Tool has a focus on the wider health determinants. It covers 14 place-based aspects, including themes such as moving around, natural space, housing and community, identity and belonging, etc.

The tool involves citizens in the assessment of the quality of a local area, village, city or region. The people who live and work in the selected area are directly involved in the assessment process, which combines quantitative and qualitative data collection. The tool supports a structured discussion about place-based issues both in the assessment phase, and after the data analysis has taken place. Based on the results, the assets of a place as well as priority areas for improvement can be identified and recommendations for further planning can be derived. The tool is widely applied in Scotland, and has already been translated into different languages and adapted by several European countries (46, 47).

### 4.3.4 Policy monitoring

Policies and implemented services shape the context for making healthy decisions (49). For several risk behaviours, effective policies and services outside the health domain are known to support individuals in making healthy choices. Policy monitoring aims to quantify the completeness of implemented policies and services and to support intersectoral monitoring actions as well as the development of policy recommendations.

**Tobacco Control Scale**
The Tobacco Control Scale quantifies tobacco control policies on eight domains: price of tobacco, public place bans, tobacco control budget, bans on tobacco advertising, health warning labels, cessation support, eliminating illicit trade, and tobacco industry interference. The report is published every three years, the 2019 edition presents the results for 36 European countries (49).

Healthy Food Environment Policy Index

The Healthy Food Environment Policy Index monitors and benchmarks public sector policies and actions. The tool consists of two components, a policy and an infrastructure component. The policy component assesses the domains food composition, food labelling, food promotion, food provision, food retail, food prices and food trade and investment. The infrastructure component includes leadership, governance, monitoring and intelligence, funding and resources, platforms for interactions, workforce development and HiAP as assessment domains (50, 51).

4.3.5 Monitoring health promotion capacity

Teavisari

The Finnish tool Teavisari (52) supports municipalities to monitor and benchmark their health promotion capacity. The aim of the tool is to make measures taken by local authorities more visible and to provide information on actions that promote better public health at a local level. This makes it possible to identify strengths and development targets for health promotion in the municipality.

Data collection and reporting are based on a theoretical health promotion capacity building framework that provides comparable, objective indicators for the management, planning and evaluation of health promotion activities in: primary health care; basic education; upper secondary education; vocational education; physical activity and sport; municipal management; and services for older people. The Finnish health promotion capacity building framework consists of seven dimensions, for which data are provided. The following list briefly describes each dimension and provides examples for the assessment area “basic education” to illustrate the scope of the tool (52).

- The commitment of the organization to health promotion, based on strategy documents and the use of national programmes.

  Examples of monitored aspects: school meal arrangements; discussion of health promotion in staff meetings.

- The management describes how health promotion is organized, defined and implemented.

  Examples of monitored aspects: pupil welfare group meetings; monitoring of absences; most recent inspection of working conditions; timing of and participants in most recent inspection of working conditions; members of the pupil welfare group.
The monitoring of health determinants of the population and needs assessment, including reporting the information to the management and elected officials.

*Examples of monitored aspects*: monitoring of bullying; monitoring of disturbances and problem situations; monitoring of smoking, alcohol, and drug use; monitoring of accidental injuries, etc.

† The resources of health promotion, based on skills and staff for example.

*Examples of monitored aspects*: teacher resources; classroom assistant resources, school health nurse resources, etc.

† The common practices or written guidelines in place.

*Examples of monitored aspects*: prevention of smoking, alcohol and drug use; prevention of harassment and violence; school meals, etc.

† The residents’ opportunities for participation in planning and evaluation of activities and services.

*Examples of monitored aspects*: parents association and peer pupil scheme; parents possibilities to influence; pupils possibilities to influence, etc.

† Sector-specific core functions in health promotion which must be in place in every organization.

*Examples of monitored aspects*: measures to promote physical activity during school day; school meals.

All data is gathered biennially by the National Institute for Health and Welfare in cooperation with all relevant actors. All indicators are factual, not based on self-assessments, and describe the processes or the resources of the organization (53).

### 4.3.6 Monitoring of the commercial determinants of health

**CLICK monitoring framework**

The CLICK monitoring framework is used for monitoring the commercial determinants of health; it assists actors in monitoring the marketing of unhealthy products (such as alcoholic drinks, foods high in unsaturated fat, salt, free sugars, and tobacco) to children and adolescents. The monitoring framework consists of five domains (54):

- **C – comprehend the digital ecosystem**: mapping the global, regional and national digital marketing ecosystem and children’s website/app usage; setting up focus groups to gauge children’s and parents/guardians’ experience and awareness of marketing techniques and campaigns.
L – **landscape of campaigns**: assessing campaigns run by leading national brands by collecting information from advertising agencies and sampling whole country social media for relevant content to ascertain what is viewed by different age groups.

I – **investigate exposure**: mapping exposure to some paid-for digital marketing experienced by a panel of children in each age bracket using an installed smartphone app that (with consent) monitors and aggregates data on children’s interaction with advertisements in some websites and social media.

C – **capture on-screen**: using real-time screen capture software on a panel subgroup to assess what a representative sample of children sees online on their devices, in order to better understand wider marketing techniques, including user-generated content and product placement.

K – **knowledge sharing**: creating user-friendly materials from the research data and developing partnerships with young people, parents, policy-makers and civil society, who together can advocate for change, raise awareness and influence policy.

Although the primary focus of the CLICK monitoring framework is on monitoring marketing procedures, it gives also recommendations for the assessment of policy prerequisites. Among those are the topics (i) age verification for online users, (ii) tagging of marketing campaigns to identify material that should be restricted for a young audience, and (iii) regulations that prevent serving of restricted advertisements to underaged audiences (54).

### 4.3.7 Other Manuals and Compendiums

WHO Regional Office for Europe is working on a comprehensive guide around the SDGs. The **E4A guide** aims to provide an overview on tools and resources to accelerate action to achieve the SDGs. E4A stands for engage, assess, align, accelerate and account – especially, the ‘assess’ element aims to support practitioners in determining “the distance to achieve the SDGs and the contextual factors that facilitate or inhibit progress” (55). The assessment of information can support the alignment of policies and processes across sectors, accelerate the identification of policies and programmes that can increase the pace of change and support innovation, and hold governments to account for delivering based on their commitments.

In 2020, WHO European Healthy Cities Network published the **Compendium of tools, resources and networks on Place: WHO European Healthy Cities Network Phase VII (2019-2014) Support Package for Implementation**. Places are defined in this context as “(...) a human habitat whose diverse characteristics combine to create or undermine health and wellbeing.” (56). The compendium includes an overview of assessment tools, such as the AirQ+ software for health risk assessment of air pollution or the health economic assessment tool (HEAT) for walking and cycling. The WHO tools are accompanied by tools from the United Nations and other tools from WHO Europe countries.

The **Health Inequalities Portal** is run by EuroHealthNet and provides information on, among others, tools to measure and address health inequalities. They provide an overview of relevant data and indicators as well as assessment tools (57).
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5. Concluding remarks

Compiling this guide made it clear that:

▶ The public health community is acutely aware that population health is not just shaped by health sector actions and policies.

▶ The development of healthy public policies needs intersectoral actions.

▶ Knowledge is available about the ingredients for successful intersectoral actions.

▶ Conceptual frameworks, indicator sets, tools, analytical approaches and manuals that support intersectoral monitoring actions are available.

The groundwork is prepared for population health monitoring to increase its intersectoral perspective. It is already possible to widen the perspective within classical population health monitoring and reporting actions, thereby potentially creating a solid base for future monitoring actions with colleagues from other sectors.


References


Guidance on intersectoral monitoring for health

THE WHO REGIONAL OFFICE FOR EUROPE

The World Health Organization (WHO) is a specialized agency of the United Nations created in 1948 with the primary responsibility for international health matters and public health. The WHO Regional Office for Europe is one of six regional offices throughout the world, each with its own programme geared to the particular health conditions of the countries it serves.

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