CHAPTER 7

Monitoring and evaluating ‘Health in All Policies’:
A practice-based survey

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Abstract

In local practice, health in all policies (HiAP) takes various forms and has various characteristics, making it hard to monitor and evaluate. A knowledge synthesis of Dutch core publications concerning HiAP was performed to establish what can be concluded about monitoring and evaluation, on the basis of practical experience of using HiAP. For the purpose of this practice-based survey of HiAP characteristics and associated practical tools, three distinct categories are defined: context, processes and impact. Examples of relevant characteristics: HiAP type and setting (context), policy-activity integration (process), inter-sectoral collaboration (process), support and embedding within the organisation (process), and effects on health or the determinants of health (impact). On the basis of current HiAP practice, it appears possible to generate knowledge mainly about context and processes; insight into impact is harder to obtain. Ultimately, it is desirable to arrive at a set of characteristics that can be measured using validated tools as a means of controlling the progress of HiAP. A sounder theoretical basis is therefore required.

Keywords
Health in all policies, Research tools, Monitoring and Evaluation
1. Introduction

In recent years, researchers in the Netherlands have generated a great deal of knowledge about the characteristics that play a part in setting up and implementing health in all policies (HiAP) [1]. In local practice, however, HiAP takes a variety of forms, making its progress difficult to monitor. In its broadest form, health in all policies (HiAP) is policy in which relevant sectors inside and outside the public health domain collaborate to promote or protect health [2, 3]. That means that the policy and associated activities address not only the individual, but also his or her physical and social environment [2]. HiAP can also be more specific, such as a form in which the public health sector seeks to influence the policy of other sectors in a way that benefits health, or a form based on collaboration with companies or organisations [2, 4]. Hence, the various forms of HiAP may differ from each other in terms of their intensity, the approach adopted and the associated characteristics [5].

HiAP is stimulated mainly in connection with complex health problems, such as obesity and health inequalities [2, 3, 6, 7]. In the Netherlands, attention is focused increasingly on the development and implementation of HiAP [3, 6, 8]. Under the Public Health Act (Wpg), municipalities actually have an obligation to use HiAP [8]. In order to further increase support for this policy form at the local level and to optimise its implementation, it is important to demonstrate that HiAP is an effective approach to use when addressing complex problems [1, 9, 10]. However, because it takes various forms, and because of the lack of standardisation in the terminology used for HiAP, it is not always clear what is meant in descriptions of Dutch HiAP practice [11, 12]. That in turn makes the monitoring and evaluation of HiAP difficult. Local practice is in urgent need of a practical set of tools to enhance insight into HiAP and thus facilitate progress monitoring [1, 13].

This article describes the lessons learned in local HiAP practice, which can guide the monitoring and evaluation of HiAP. The aim of the study was (1) to identify and logically categorise the characteristics of HiAP discernible in Dutch HiAP practice, and (2) to identify practical tools that can be used to systematically monitor and evaluate the identified characteristics.

2. Method

2.1 Knowledge synthesis of HiAP studies

In order to obtain an overview of the scope for monitoring or evaluating HiAP in local practice, a knowledge synthesis was performed. The synthesis involved collecting and analysing all Dutch-language core publications on HiAP published between 2008 and 2013. The core publications in question were various completed and ongoing HiAP studies.
in the Netherlands (by National Institute for Public Health and the Environment, RIVM; Council for Public Health and Health Care, RVZ; and others). The year 2008 was taken as the starting point, because that was when more structural research into local HiAP began, in connection with the increasing emphasis being placed on the policy documents (e.g. in the national policy documents *Gezond zijn, gezond blijven* (Being healthy, staying healthy; 2007) [14] and *Naar een weerbarbare samenleving. Beleidsplan aanpak gezondheidsverschillen op basis van sociaal economische achtergronden* (Towards a resilient society. Policy plan for addressing health inequalities with a socioeconomic basis; 2008) [15]. Completed local-level HiAP studies include an RIVM study of sixteen municipalities and a study of examining the development and implementation of inter-sectoral HiAP in nineteen municipalities by the Academic Collaborative Centre for Public Health Limburg (AWPG) [16, 17]. Generally available documents relating to various ongoing studies were also studied, including *Local 50* (an evaluation of the programme Gezonde Slagkracht (Healthy Capability) and CIAO (Consortium for an Integrated Approach to Obesity).

### 2.2 Use of a logic model

Adequate monitoring and evaluation depends on having an overview of the characteristics that play a role in HiAP practice, and of the practical tools that can be used to influence those characteristics. As a basis for defining the characteristics of HiAP identified in Dutch practice, a HiAP categorisation model has been developed. It was decided that such a model needed to be similar to the logic evaluation model developed by Harris and Harris specifically for assessing the effectiveness of Health Impact Assessment (HIA) [18]. Although other logic multi-level models could possibly serve as a basis, including the Saan and De Haas Reference Framework and EPODE model,[19, 20] the HIA model appeared most suitable for the practice-based survey reported here. The HIA model recognises generic categories: context, input (policy, activities), method/output (actors and factors) and outcome (health, determinants). Furthermore, the HIA and HiAP are related research fields. Fig. 1 shows a HiAP classification system based on three generic categories: context, processes and impact. In the illustrated model, the process is divided into input and working method. The same classification system was used for the identification of practical tools.
3. Results

3.1 Overview of HIAP characteristics identified in practice

Forms of HIAP: type, level and theme

The synthesis of publications dealing with HIAP studies shows that initiatives differ greatly in type and that the policy form(s) is/are established and implemented at various levels. Reported types include health in all policies, an integrated approach and public-private collaboration [2, 17, 21]. There are also sectoral policies that can influence health, which may or may not involve explicit collaboration with the public health domain. Examples include the reduction of language and developmental disadvantages in local educational policy, which are associated with health inequalities. Table 1 summarises the various possibilities. Various terms are used for HIAP in the publications, apparently on an interchangeable basis. In the international literature, various concepts and definitions of the comparable ‘Health in All Policies’ are used [4, 22, 23]. One widely used definition is: ‘HiAP is a horizontal complementary policy-related strategy with a high potential for contributing to population health’ [24]. Kickbusch also distinguishes three forms of HIAP, which differ in their level of intensity: Intersectoral Action (IA), Healthy Public Policy (HPP) and Health in All Policies (HiAP) [5]. In theory, the various concepts and defined forms may be regarded as distinct, but local practice is more ad hoc, and various strategies and collaboration forms are referred to as HiAP. In practice, the thrust of HiAP is strongly influenced by the chosen themes or problems addressed [7]. The themes encountered at the local level in Dutch HiAP practice are mainly health themes (such as obesity and health inequalities) or lifestyle themes (such as physical activity, smoking and alcohol) [6, 25].

Relevant characteristics of context therefore include HIAP type (intensity, approach), implementation level (local or regional) or setting (neighbourhood, school or work) and chosen themes (complex problems).
Table 1. Examples of HIAP terminology used in the Netherlands

<table>
<thead>
<tr>
<th>Examples of practical HIAP forms</th>
<th>Theoretical term</th>
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<tbody>
<tr>
<td>Policy within the public health (PH) domain, in connection with a public health problem</td>
<td>Health policy</td>
</tr>
<tr>
<td>Collaboration between multiple policy sectors inside and outside the PH domain, in connection with a public health problem</td>
<td>Health in All Policies (HiAP)</td>
</tr>
<tr>
<td>Collaboration between two policy sectors inside and outside the PH domain, in connection with a public health problem</td>
<td>Intersectoral health policy*</td>
</tr>
<tr>
<td>Working method by which a public health problem is addressed by multiple parties within various settings (school, neighbourhood, care)</td>
<td>Integrated approach (often used interchangeably with the term HiAP)</td>
</tr>
<tr>
<td>Collaboration between policy sectors and various external parties, who may be other public and/or private parties</td>
<td>Public-private collaboration</td>
</tr>
<tr>
<td>Collaboration between multiple policy sectors with a shared goal (where health is not the primary goal)</td>
<td>Integrated policy</td>
</tr>
<tr>
<td>Policy outside the PH domain, with the potential to influence health, but concerning which there is no collaboration with the PH domain</td>
<td>Sectoral policy</td>
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</table>

*International most corresponding with Healthy Public Policy (HPP) or Intersectoral Action (IA)

Policy and activities in practice

The survey also shows that the chosen policy and activities are significant in HiAP. Policy and activities are of course closely related to the chosen themes or problems addressed. A number of conclusions may be drawn from completed studies within municipalities. First, integrated implementation is more common than integrated policy making [1]. That implies that measures and interventions implemented within projects at the local level, such as in a neighbourhood or school, are initiated primarily from the public health domain. In social or health programmes, integrated policy making with multiple sectors is more common, because broad themes such as the ‘Healthy City’ are tackled on an integrated basis [16, 26]. Second, the collaborating actors are often health and welfare organisations. At the municipal level, the social sectors (sport, social affairs) generally collaborate with public health more often than the physical sectors (spatial planning, housing) [16]. Third, HiAP measures and interventions tend to be motivated more by health promotion than by health protection [16]. That means that in HiAP the focus is more likely to be on the individual than on the environment as a means of advancing healthy behaviour and influencing the health of the population [1, 26].

Relevant process characteristics associated with policy and activities therefore include broad themes, policy linkage for the purpose of integrated policy making and the provision of an intervention mix focusing on the individual and the environment.
Actors and factors in practice
Along with policy and activities, actors and factors also play a role [17, 27, 28]. Studies of HiAP show that, within municipal authorities, there is collaboration with numerous different sectors, such as spatial planning, social affairs and education [2, 21]. Such collaboration reflects the interfaces between health and fields such as environmental design, employment and education. At the local level, numerous external parties are involved, including schools, housing corporations, companies and increasingly the public themselves [29]. One example is the ‘integrated healthy neighbourhood approach’, which involves collaboration with various actors on issues such as lifestyle, housing, learning and employment [30]. Within municipalities, policy officials frequently play several roles, including those of connector, director, advisor, encourager and supervisor [1]. Municipal authority personnel usually play a directing role in connection with their statutory responsibilities under the Wpg. However, shortages of staff and time often have a limiting effect. Steenbakkers’ research showed that managers are barely involved with HiAP [3, 17]. Adequate support is needed at the tactical level in order to make use of HiAP at the operational level [31]. Other relevant factors in HiAP practice include the utilisation of shared interests and operation on the basis of general themes (such as participation) [1]. It can be important to tie in with municipal themes, for example, because they command political attention and enjoy support [1, 3]. That may mean that health is not the primary focus and that the strict definition of HiAP (in which health is the shared aim) does not apply. Another important aspect is the embedding of HiAP within the municipal organisation [32]. In the municipalities Gezonde Slagkracht (Healthy Capability) that have experimented with HiAP to address overweight, harmful alcohol consumption, smoking and drug, the main focus is now assurance [32].

Relevant process characteristics associated with actors and factors are therefore, respectively, the involvement of municipal sectors and external parties, and the availability of support and personnel capacity and embedding within the organisation.

Health and the determinants of health
The survey shows that HiAP often involves a palette of measures focused on both the individual member of the public and his/her environment. The complexity is such that there is no linear causality, and it is difficult to ascertain what aspect has had what effect on health [10, 33]. A number of publications report research into the health effects of individual local policy measures outside the public health domain. Such effects are mainly on determinants of health (e.g. exercise, air quality); little evidence is recorded of health improvements or the reduction of health inequalities. That is because such effects have not been investigated or because the information regarding the effects is inconsistent [7, 33]. Nevertheless, some work has been done to determine the health effects of community-based interventions (e.g. Healthy Weight Overvecht) [30]. Furthermore, the demonstration of effects often has
to meet exacting requirements, such as the evidence from reviews or RCTs. The relevant impact-related characteristic is the nature of the outcome (whether the effect is on health, health determinants or ill health).

3.2 Means of monitoring and evaluating HIAP in practice

Appropriate practical tools

From the foregoing, it will be apparent that the various forms, approaches and characteristics of HiAP make HiAP difficult to monitor and evaluate at the local level. With a view to identifying practical means of monitoring and evaluating HiAP, we have investigated what is currently feasible in Dutch practice. In line with the logic evaluation model, the identified monitoring and evaluation options are grouped on the basis of whether they relate to context, processes or impact. Such categorisation makes it easier to package HiAP into discrete elements suitable for monitoring and evaluation.

Context:
Where the context is concerned, it may be desirable to develop a HiAP index for determining position within the continuum of forms, since (to the best of our knowledge) no such tool is currently available. An index would allow an initiative to be classified as an integrated approach, healthy policy or HiAP, possibly drawing on Kickbusch’s classification system [5]. HiAP could then be classified on the basis of level of intensity, as Intersectoral Action, Health Public Policy and Health in All Policies [5]. The inconsistent terminology and the diversity of HiAP forms is continuing to create confusion in policy, research and practice [1].

Processes:
On the basis of what is currently known about HiAP, the most feasible option appears to be helping municipalities to systematically make HiAP processes more transparent. That implies generating knowledge about relevant policy, activities, actors and factors in the field of HiAP. It is also desirable that relevant processes are monitored and evaluated in conjunction, because the processes in question are closely interrelated. One example of a practical tool for use in this context is Storm and Meijer’s spider’s web model for HiAP [12]. For the spider’s web model, twelve relevant processes (HiAP elements) were selected [12]. The HiAP elements described in Table 2 are processes that have often been found to be successful in Dutch HiAP practice [12]. The elements may be traced back to the processes defined in the context of the logic evaluation model and suggested for use in the monitoring of process aspects. In Fig. 2, the twelve HiAP elements are visualised in the form of a spider’s web model.
Table 2. Relevant HIAP elements to process

<table>
<thead>
<tr>
<th>HIAP elements</th>
<th>Details</th>
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<tbody>
<tr>
<td>1 Administrative and political support</td>
<td>Sufficient support at the administrative level (management support) and the political level (agenda setting)</td>
</tr>
<tr>
<td>2 Collaboration with municipal sectors</td>
<td>Network formation and maintenance (particularly physical sectors)</td>
</tr>
<tr>
<td>3 Collaboration with public-private parties</td>
<td>Focus on collaboration with companies, health insurers, housing corporations, etc.</td>
</tr>
<tr>
<td>4 Social marketing</td>
<td>Use of social marketing principles (alignment with the public and partners/administrators)</td>
</tr>
<tr>
<td>5 Problem owner and personnel capacity</td>
<td>Appointment of a problem owner (direction) and availability of sufficient personnel capacity</td>
</tr>
<tr>
<td>6 Vision and culture of integrated working</td>
<td>Shared vision and culture of integrated working to promote and/or protect health</td>
</tr>
<tr>
<td>7 Embedding of HIAP within the organisation</td>
<td>Use of organisational structures and policy processes and funding for HIAP</td>
</tr>
<tr>
<td>8 Use of knowledge and methods</td>
<td>Choice of content relating to the (mix) of effective activities to be undertaken and use of support methods or tools</td>
</tr>
<tr>
<td>9 Definite health objectives</td>
<td>Formulation of definite objectives on health and the determinants of health (in policy documents)</td>
</tr>
<tr>
<td>10 Alignment with municipal themes</td>
<td>Alignment of municipal health activities with general municipal themes</td>
</tr>
<tr>
<td>11 Policy integration</td>
<td>– Specification of other sectors’ activities in the field of health (and associated determinants)</td>
</tr>
<tr>
<td></td>
<td>– Clarification of what health can mean for other sectors (as a medium)</td>
</tr>
<tr>
<td>12 Coherent activity implementation</td>
<td>Undertaking activities in a coherent and coordinated manner (intervention mix)</td>
</tr>
</tbody>
</table>

The model can serve as a useful tool for the coherent presentation of HIAP processes or for studying the status of integrated activities at the local level. For example, it allows the various elements to be scored on a scale of 1 to 5, providing a picture of each element's status [12]. Such information supports policy-makers when considering which processes to invest in and serves as input on the strategic (portfolio-holder) and tactical (manager) levels [3, 12]. Hence, it can support the development and optimisation of HIAP by informing discussion about where need exists and what is required to enhance the implementation of HIAP, in which context it is desirable to make optimal use of the twelve elements. The model can also be used for monitoring developments over time. The spider’s web model has been tested with a number of integrated programmes in order to assess the measurability of such elements. The programmes in question were health programmes that had been labelled as integrated initiatives, such as Jongeren op Gezond Gewicht (Healthy Weight Maintenance for Young People; JOGG), Lokaal Actief (Locally Active), and Gezonde Stad (Healthy City).
Impact:
It is clear that assessing the health impact of a package of measures, particularly their short-term impact, remains too complex a challenge. It does, however, appear feasible to measure the impact of individual measures on health determinants. A good example of that is the use of a target tree, as described in the presentation of the Public Health Status and Forecasts Report 2010. A target tree takes account of the layered nature of targets in fields such as health, health determinants, health problems and ill health, and affords potential focus points for the monitoring and evaluation of effects [34]. To the best of our knowledge, no such tools designed specifically for HIAP are currently available.

4. Discussion

4.1 Monitoring HIAP processes most feasible
Because HIAP takes various forms and has various characteristics, and because inconsistencies persist in the terminology associated with it, HIAP is difficult to monitor and evaluate. A knowledge synthesis of Dutch core publications on HIAP considered what can currently be concluded from HIAP practice regarding the monitoring and evaluation of HIAP. Our practice-based survey of HIAP characteristics and associated practical tools made use of a classification system based on three categories: context, processes and impact.

The survey found that various characteristics both of the design and implementation of HIAP and of the monitoring and evaluation of HIAP can be identified. Where the context
is concerned, the relevant characteristics are: HiAP type, level of implementation and chosen theme. Relevant characteristics of the processes are: policy design (e.g. alignment with general themes and integration of policy), the implementation of activities focused on both the individual and his/her environment (e.g. the intervention mix), the involvement of actors (e.g. administrators, municipal sectors and the public), and the influencing of factors (e.g. problem owner and personnel capacity, embedding within the organisation and use of knowledge). Relevant characteristics of impact are the determination of health effects, health determinants and ill health.

Where the three categories are concerned, the monitoring and evaluation of context and processes appear to be more feasible than the monitoring and evaluation of impact. The monitoring and evaluation of more process-related aspects is also considered advisable for evaluation of the similarly complex multi-level system approach used to tackle obesity, for example [35]. The monitoring and evaluation of HiAP processes is also relevant, because at the local level the various sectors are increasingly reliant on each other for the fulfilment of social tasks [36].

4.2 Development of practical research tools
The survey also found that there are few practical tools suitable for monitoring specific HiAP processes in conjunction. Storm and Meijer’s spider’s web model is one example of a practical tool for assessing such processes in conjunction. However, further development is still required to identify an appropriate set of reliable elements or characteristics [12]. Testing of Storm and Meijer’s spider’s web model with multiple integrated programmes revealed, for example, that there was sometimes confusion regarding the meaning of certain HiAP elements, such as social marketing or administrative and political support. Such concepts are somewhat abstract and making the processes in question measurable on an appropriate level of abstraction is therefore desirable. Where social marketing and administrative and political support are concerned, parties such as the Consortium for an Integrated Approach to Obesity (CIAO) are currently working toward that end [37].

It therefore remains important to consider how HiAP processes should be monitored and evaluated, also where context and impact are concerned. For the monitoring and evaluation of context, it would be advantageous to develop a HiAP index, possibly drawing on Kickbusch’s classification system [5]. The use of a target tree, such as that used for the Public Health Status and Forecasts Report-2010, could help to make health effects more apparent [34]. Where impact measures are concerned, it is important to consider forms of evidence other than evidence provided by reviews or RCTs [1], such as (quantitative or qualitative) observational or quasi-experimental research findings.
4.3  **Complementary set of tools**

The complexity and diversity of HiAP makes it important to have various tools for monitoring and evaluating HiAP characteristics, such as tools specifically for context, processes or impact (outcomes). In other words, HiAP is too wide-ranging to monitor and evaluate all possible aspects of an initiative, making it necessary to focus on discrete elements. The spider’s web model appears to be a viable tool for examining HiAP processes in conjunction, but of course other tools might also be used. It may be desirable to zoom in on a specific process, such as collaboration between sectors. The use of layered tools or methods may therefore be an option. For example, a logic model (such as the HIA logic model) may be regarded as a tool, but within such a model, a tool may focus on all the processes collectively (such as the spider’s web model), and within the component processes, a tool may focus on individual elements (such as collaboration and networking amongst sectors). Such tools have various purposes and levels of abstraction. The aim is continuously advancing insight that is linked to the dynamism and complexity of HiAP, and working with complementary methods and tools is on the research agenda [32].

4.4  **Theoretical framework incomplete**

The survey reported in this article also demonstrates that a great deal of knowledge is available from Dutch practice. What remains largely absent is a theoretical basis for the methods and tools for monitoring and evaluating local HiAP processes and practices. A theoretical basis is also essential for the measurability of the associated HiAP characteristics, and would aid terminological and conceptual clarity. The national government recognises the need for a theoretical basis, and the Netherlands Organisation for Health Research and Development (ZonMw) is currently funding a number of projects intended to make various characteristics measurable, such as the Consortium for an Integrated Approach to Obesity (CIAO) and the Consortium Instruments for Integrated Action (i4i) [38]. Since September 2012, nine Dutch research groups have been working together as the consortium i4i to develop localised research tools for health in all policies (HiAP) and policy-research practice (PRP) collaboration. Various academic disciplines (health sciences, sociology, psychology, management science, et cetera) are cooperating to clarify what constitutes HiAP and enhance control of HiAP processes and practices. In that context, a number of relevant HiAP projects are being used, including Local 50, Urban 40, Beweeg je Buurt (Exercise your Neighbourhood) II and CIAO. In the i4i project, theoretical concepts are being introduced to the monitoring and evaluation research tools under development. Elsewhere around the world, there is considerable interest in the effectiveness of HiAP [9, 39]. The national and international development of knowledge will ultimately lead to greater insight into the various forms of HiAP and their distinctive components or characteristics, which will benefit monitoring and evaluation at the local level. On the basis of such developments, appropriate
research tools can be developed or refined to support HiAP practice. In that context, it will remain important to take account of practical experience and of the administrative and social realities.

5. Conclusion

From our practice-based survey of local HiAP monitoring and evaluation practices, it appears possible to generate knowledge mainly about context and processes; insight into impact on health is harder to obtain. Ultimately, it is desirable to arrive at a set of validated tools for the monitoring and evaluation of HiAP. A sounder theoretical basis is therefore required.
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