Towards guideline implementation for integrated local health policies: evaluation of an experimental implementation strategy in regional health services.

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Abstract

Background: To enhance implementation of a Guideline for integrated local health policy, a draft implementation strategy (DIS) was developed. It was hypothesized that the DIS would be feasible and effective to enhance the use of a Guideline for integrated local health policy. To examine its feasibility and effectiveness, the DIS was pilot tested simultaneously in two Regional Health Services (RHSs) and compared with the 'care as usual' in two other RHSs that did not receive a predefined strategy for Guideline implementation.

Material and methods: The DIS was evaluated in a qualitative way by means of semi-structured individual-and group interviews. We applied the Nutbeam framework for evaluation on: i) program integrity, ii) program reach, iii) program acceptability, and iv) observed change. Comparison of pilot results with the two other RHSs included semi-structured group interviews.

Main findings: Both RHSs conducted implementation largely as planned. The purpose of the Guideline for RHS policy objectives was not discussed at all desired levels. Increased Guideline use was mainly found among health promoters. Comparison with Guideline implementation in the other RHSs revealed information for further evaluation of the DIS.

Conclusion: The feasibility and effectiveness of the DIS applied to building blocks which aimed at alignment of goals and ambitions between RHS management and executive disciplines. Possible implications for future application of the DIS are dealt with in the discussion section of this paper.

Keywords: Guideline use, Implementation strategy, Health policy, Public health.

Background

Regional Public Health Services (RHSs) in the Netherlands are important contributors to the planning and implementation of local health policies. To professionalize the RHSs' advisory task, the Dutch Ministry of Health facilitates the development and use of evidence-based instruments (e.g. guidelines) that encourage a more systematic planning of integrated local health policies (hereafter called 'ILHP'). One of these instruments concerns the national 'Healthy Community Guideline' (hereafter called 'Guideline') which offers interventions to address smoking, obesity, alcohol abuse, depression and sexual health, and recommends tools (e.g. checklists) for developing integrated public health policies [1].

A central premise of the Guideline is that such a health policy preferably addresses multiple determinants of health simultaneously [2]. For this policy, the Guideline uses the term 'integrated policy'. This policy focuses on the health/health behavior of individuals interacting with their physical and social environment, indicating that several municipal sectors can contribute to the success or failure of reaching the intended public health goals. The overall purpose of the Guideline is to stimulate the use of evidence in the ILHP planning process.

However, as the Guideline was insufficiently used by the municipalities and RHSs [3], an investigation was required of the barriers and facilitators to implementation of the Guideline. In a previous study, these barriers/facilitators were identified through literature research and examination of RHS practices [4]. The results led to a draft implementation strategy (hereafter called 'DIS') consisting of four building blocks considered relevant for implementation of the Guideline in RHSs, i.e.: i) guideline introduction and uptake, ii) agreement and alignment of goals, iii) team goals and supervision, and iv) guideline assurance (these elements are described below).

RHSs play a central role in implementing the Guideline in municipalities. Guideline implementation within the RHS must precede, to take on this role successfully.

This study focuses on the feasibility and effectiveness of the DIS for implementation of the Guideline in RHSs. It was hypothesized that the DIS would be feasible and effective for RHS-s to enhance use of a Guideline for ILHPs. To examine this, the DIS was pilot tested simultaneously in two RHS organizations and compared with two other RHS organizations that did not receive a predefined strategy for implementing the Guideline.

Research question

The feasibility and effectiveness of the DIS was explored by addressing the main research question, i.e., Which (if any) of the four building blocks of the predefined strategy are feasible, and to what extent do they enhance implementation of the Guideline for integrated local health policies (ILHP) into the workflow of RHS organizations? The evaluation framework of Nutbeam [5] was used for selection of the outcome criteria (see Methods).

Generation of the building blocks into a draft implementation strategy (DIS)

The following building blocks for the DIS were identified in a previous study [4], which included literature - and field research (interviews).

On the level of the individual (intended) users, diffusion and dissemination theories indicate the following important determinants: professionals' knowledge and attitudes [6], perceived (dis)advantage of use, self-efficacy [7,8], professional views and beliefs [9] and social influence [10,11]. 'Self-efficacy' refers to a professional's faith in his/her ability to perform certain tasks. Therefore, building block 1 of the DIS focuses on the introduction and uptake of the Guideline by RHS professionals.

Harmonization of ambitions and goals at all levels (corporate, team, and individual), as well as cooperating leadership, are conditional for successful task performance. These concepts stress the importance of alignment between management and operational executive levels to reach organizational goals [12-14] and constitute building block 2.

With regard to guideline implementation in public health policy, we used Weicks' concept of 'Sense making' and Hoppe's political policy theory. Sense making is understood as the process by which people add meaning to what they experience. Weick's theory shows how people establish reality by interpreting a problem through what they see and experience in interaction with others [15].

Developing ILHP in a political and administrative context is a social process that is mainly characterized by solving practical problems, while taking into account the perspectives and interests of partner organizations in a policy network [5,16] To facilitate this process, RHS professionals require a learning environment to improve their knowledge and competences (task performance). This environment includes coaching (e.g. by participating team leaders) [17] and peer supervision to develop the desired networking and social management skills [18,19]. Therefore, building block 3 of our DIS is aimed at these learning oriented preconditions for implementation.

Regarding assurance of guideline use in the RHS, we used theories/research on organizational conditions that support implementation of innovations [20]. Implementation is more effective if the Guideline is matched with professionals' current working methods and is incorporated in RHS training/ educational programs [21]. With building block 4, the DIS aims at integrating and securing the (purpose of the) Guideline at crucial decision-making levels of the RHS partner organizations and within the RHS quality management [22].

The implementation strategy (DIS)

The field research of the previous study included interviews with i) RHS managers and professionals in health policy practice, and ii) public health experts outside the RHS. The results of these interviews showed, for instance, that clarity on RHS goals, sharing knowledge between colleagues on methods/tools for municipal advisory, the significance of central guideline perspectives for the RHS, and coaching or training facilities, were considered important constituents for guideline use [23]. These findings were also included in the DIS (Table 1).

Table 1: Details of the draft implementation strategy.

Building blocks	Implementation actions	Implementation goals
1. Introduction and uptake.	Project leader invites RHS professionals to explore the Guideline's content: mastering the Guideline;	All RHS health promotion professionals (manager, team leader, executives) know the Guideline and understand its content and purpose.
	RHS health promoters, policy officers, and team leaders inform civil servants about the Guideline's content and purpose.	
2. Agreement and alignment.	Project leader puts the Guideline on the agenda of management to connect the Guideline's perspectives on integrated local health policy with RHS perspectives;	All RHS health promotion professionals acknowledge the Guideline's purpose and significance;
	Project leader, health promoters, policy officers and team leaders formulate facilitating conditions for use of the Guideline's methods;	Goals for integrated local health policy are set and made clear between manager, team leader and executives;
	Project leader and policy officers invite managers to respond to the proposed requirements and set agreements on coaching and trial period for Guideline use.	Team leaders, policy officers and health promoters agree to use the Guideline.
3. Team goals and supervision.	Project leader encourages teams to formulate guideline ambitions;	Team leaders, policy officers and health promoters consider themselves capable and perform guideline-related tasks;
	Guideline-based team ambitions: tasks and individual goals derived from team ambitions;	A learning environment for guideline application is created.
	Teams evaluate guideline- related tasks by peer supervision and by individual coaching.	
4. Assurance.	Project leader evaluates implementation results and discusses solutions for experienced barriers with RHS teams, civil servants, and RHS management;	Guideline methods are linked to existing RHS working methods;
	Project leader discusses integration of the Guideline in the RHS quality management system.	Guideline methods are included in training and professionals' performance appraisal system.

Materials and Methods

The two RHS project leaders introduced and conducted the DIS in their own organization: policy officers and health promoters were the intended users of the Guideline. The pilot was planned to last for a period of 24 months. To evaluate the feasibility of the DIS for guideline implementation, the strategy applied in the two pilot RHSs was evaluated and results were compared with methods for ILHP in the two RHSs that operated without the DIS, i.e., they conducted their own policies as usual.

Selection of RHSs

The selection of the two pilot RHSs was based on similarity of the following organizational features: both provided services for multiple independent municipalities; had a similar financial governance; had a health promotion department that collaborated with a university; had a R&D unit with epidemiologists, policy officers and health promoters; involved professional and managerial disciplines in municipal health policy and implementation of health promotion; also, they focused on improvement of the policy process for ILHP; and were willing to implement the Guideline.

The two pilot RHSs (RHS regions 1 and 2) that were exposed to the DIS were compared with two RHSs (RHS regions 3 and 4) that were not exposed to the DIS. RHS 3 and 4 were also regional health services for multiple municipalities, had a similar profile, and also focused on improvement of the quality of their municipal advisory concerning ILHP. Before the pilot started, RHS 3 announced their intention to use the Guideline as an advisory tool for ILHP, whereas RHS 4 explicitly stated they did not intend to use the Guideline for the purpose of promoting ILHP. We considered these divergent positions interesting for analysis of the pilot results. For example, if RHS 3 and/or 4 used implementation actions for ILHP that are similar to or different from the DIS, this could support or complement the building blocks and yield additional information for improvement of the DIS.

Facilitating the draft implementation strategy in the two pilot RHSs

The Draft Implementation Strategy was developed by the research team in close collaboration with the two pilot RHSs as described in Kuunders et al. [4]. Therefore the pilot RHSs were already familiar with the DIS to some extent. To further facilitate the execution of the DIS in the two pilot RHSs some extra activities were undertaken. First, in the selection of the pilot RHSs it was provided that the RHSs selected were willing to implement the Guideline. Second, to facilitate the execution of the DIS the pilot RHSs' managers were asked to assign a specific internal project leader who was responsible for the execution of the DIS within the organization. The project leader was assigned (8 h/week) extra time for this task. A description of the DIS was handed over to the project leaders in print. A main part of the DIS was that project leaders implement the Guideline in the way that suited the

organization best and fits the organizational context in the real life setting. Third, the first author (TK) planned several (3-4/ year) consultations with the project leaders about how the organization proceeded with the planned implementation of the DIS, its building blocks and related activities. Besides, the organization could ask for additional external advice if they felt a need for this. This additional support however, was provided on their own expenses.

Evaluation framework

Based on Nutbeam [4], we developed and applied a basic framework to evaluate the implementation activities in RHS 1 and 2. This framework involved for four main aspects: i) program integrity (Was the DIS applied as intended?), ii) program reach (How many people were exposed to the DIS?), iii) program acceptability (Was the DIS accepted by the target group and stakeholders?), and iv) observed change (Did attitudes and beliefs about guideline use change as intended?) [24].

Respondents

The target groups for the DIS were RHS policy officers, health promoters, team leaders and/or managers as facilitators for guideline implementation. In the two pilot RHS (RHS 1/2), the DIS was evaluated in a qualitative way by means of semi-structured individual and group interviews: 8 individual interviews and 4 multidisciplinary group interviews (with in total 9 persons) were conducted. Interview topics with project leaders referred to the planned actions and their role in the performance of these actions, with emphasis on 'program integrity' and 'program reach'. Interview topics (individual/ group interviews) in the intended user group (RHS health promoters, policy officers, epidemiologists and team leaders) addressed questions about experiences with the four building blocks, and focused on 'program acceptability' and 'observed change' of managerial and professional beliefs/attitudes towards guideline implementation. The two RHS outside the pilot regions (RHS 3/4) were evaluated by means of two separate multidisciplinary (semi-structured) group interviews (n=8). In RHS 3 and 4, a group interview was held to explore their specific (RHS) methods for enhancing and implementing ILHP. In both these RHS, participants were policy officers, health promoters and managers.

Outcome measures for effective implementation of the Guideline for ILHP

In RHS 1 and 2, effectiveness of guideline implementation is defined as achievement of implementation goals and actions as planned by the DIS (Table 1). The extent to which goals have been achieved is expressed by Nutbeam's evaluation criteria for integrity, reach, acceptability, and change.

Outcome measures for RHS 3 and 4

Interview topics aimed at the establishment of their advisory role for ILHP, and at their perspectives on implementation of the Healthy Community Guideline. For the components of the building blocks of the DIS, we examined similarities/ differences between the pilot RHS 1/2 (with DIS) and RHS 3/4 (with no predefined policies). These components concerned: i) guideline uptake (building block 1), ii) the extent of alignment of ILHP ambitions and goals between RHS managers, team leaders, policy officers and health promoters (building block 2), and iii) the presence of supervision and coaching for implementation of the instruments for ILHP (building block 3). In addition, factors that determined effective implementation or non-implementation of the Guideline within their RHS workflow could provide insights for evaluation of our DIS. For example, RHS 3/4 might have used components similar to our building blocks but without listing them as such. On the other hand, RHS 3/4 might provide different approaches to ILHP that have some significance for our DIS.

Data collection and analysis

In RHS 1 and 2, interview data included face-to-face individual and group interviews. Telephone interviews were held with two civil servants involved in the pilot implementation of RHS 2. We also used logs of the implementation process provided by the project leaders, and reports of section meetings from management, policy officers and health promoters that contained information (experiences, clues) on the implementation process of the Guideline. In RHS 3/4, data were collected via two group interviews. Questions for the group interviews of RHS 3/4 included, e.g. How have professionals and managers taken notice of the Guideline? How have professionals and managers assessed the significance of the Guideline? (Building block 1); What role did managers and/or team leaders have in the implementation of guideline/methods for ILHP? (Building blocks 2 and 3); can you describe the decision-making process of the RHS on guideline implementation? Did the RHS facilitate guideline implementation by professionals and which disciplines were involved? (Building block 4). Finally, respondents in RHS 3 and 4 were informed about the DIS and were asked to give their opinion/ideas on its feasibility for their own RHSs.

After participants had provided informed consent, all interviews were tape recorded and subsequently fully transcribed. The respondents' statements and experiences were coded and analyzed manually, based on the interview topics derived from the evaluation framework and the building blocks of the DIS; then, all statements were grouped based on their content [25].

Prior to participation in the interviews, respondents were informed that all contributions would be anonymized and results would not be traceable to individuals or individual organizations. No ethical approval from a medical ethics committee was required as this study was not subject to the Medical Research Involving Human Subjects Act in the Netherlands.

Main Findings

Findings related to the building blocks of the DIS in RHS 1 and 2 are presented in Table 2. Below, we describe the main results from the implementation process, with reference to the

building blocks of the DIS. The findings are illustrated with quotes from evaluation interviews in both RHSs. Then, results are presented of the interviews with RHS 3 and 4. Their methods for implementation of ILHP are compared with the results of the pilot implementations. Finally, we describe similarities and differences between the applied practices and the DIS.

Evaluation of the DIS in RHS 1 and 2

Program integrity

With regard to building block 1 ('Introduction and uptake') of the DIS, both RHS performed the planned actions. During execution of building block 2 ('Agreement and alignment'), RHS 2 adjusted the program by appointing a second project leader for additional support, and the initial manager was temporarily replaced by a colleague who was not familiar with the pilot. These changes delayed the execution of the DIS within their RHS. The deputy manager decided not to discuss alignment of guideline goals due to other urgent activities. In RHS, project leaders and policy officers formulated facilitating conditions for guideline use, which were discussed with managers in RHS 1 and postponed in RHS 2. For the execution of building block 3 ('Team goals and supervision'), the project leaders in RHS 1 and 2 chose different approaches. In RHS 1, evaluation of guideline-related tasks was carried out only in general section meetings and on an individual basis, due to the absence of regular peer supervision. RHS 2 evaluated guideline-related tasks in section meetings and in multidisciplinary teams. In line with building block 4 of the DIS, the project leaders evaluated the planned activities with coordinators of professional groups (health promoters, policy officers, epidemiologists) and both RHS addressed quality officials for assurance of the Guideline in their quality management system.

Concerning overall integrity, the DIS was carried out as planned in both RHS 1 and 2, but deviated on certain points. The appointment of a second project leader and deputy manager delayed the process in RHS 2. In both RHSs the status and importance of the Guideline for policy objectives were not discussed as planned, and supervision facilities were not clearly established.

Program reach

In the 'introduction and uptake' phase of the DIS, RHS 1 reached 82 stakeholders (including representatives of partner organizations for the concept map and 19 civil servants) and RHS 2 reached 41 stakeholders (including 20 civil servants). In RHS 1, involvement of RHS units outside Health Promotion (Youth Healthcare; Infectious Disease Control) was limited to knowledge exchange on the purpose of the Guideline. In both RHS, no other RHS units were involved in the subsequent alignment of guideline goals with RHS goals for ILHP.

For building block 2, 'agreement and alignment' (of goals), the project leader in RHS 1 used individual consultations with 6 health promoters and 3 (of 8) policy officers to formulate goals for implementation of ILHP. Project leaders of RHS 2 conducted an internal survey among all health promoters, epidemiologists, policy officers and the manager initially involved, to define implementation goals.

For building block 3, 'team goals and supervision', in both RHS, managers were informed about facilitating conditions (e.g. a trial period) for guideline use by the project leaders. In RHS 1, all (20) team leaders were informed about the Guideline's purpose and 3 team leaders were involved through consultation in evaluation of guideline use. Health Promotion staff of RHS 2 included multidisciplinary teams instead of team leaders.

For the purpose of building block 4, 'assurance', in both RHS, quality management assistants received updates on the implementation process from the project leaders, and were consulted to provide practical links between current policy instruments, work instruction tools and the Guideline for ILHP.

Overall reach was in line with the targets of the DIS in RHS 2. In RHS 1, the initial targets aimed at external parties were postponed until internal implementation goals were achieved.

Program acceptability

Regarding guideline introduction and uptake, in RHS 1 most health promoters found the project leader's instructions for the Guideline useful. They also welcomed the practical usability of the Guideline's examples for execution of health promotion interventions. Four (of 8) policy officers were not willing to accept the Guideline as a preferred tool for municipal advisory; their reluctance was due to the lack of clear RHS goals for ILHP.

(Quote policy officer RHS 1: 'As an independent health organization (RHS) you need to have main goals. You should stand for specific themes. This is not the case, in my opinion').

The same 4 policy officers found explicit guideline use incompatible with a demand-driven approach to municipalities. The other 4 policy officers in RHS 1 confirmed the value of the Guideline and agreed with setting common ILHP aims. Policy officers in RHS 2 considered internal guideline implementation important, but also stressed its relevance for municipalities. Their acceptance of the Guideline and focus on external implementation was partly due to the fact that RHS 2 had made contributions to the guidelines content.

With reference to 'agreement and alignment', in both RHSs the Guideline was viewed as a professional standard for developing ILHP. However, managers considered its actual use to be primarily an autonomous professional responsibility. Management in both RHS would not accept a role in directing professionals, based on the Guideline.

Regarding building block 3, encouragement to translate guideline goals into team goals for ILHP was considered a team leader's responsibility by the board of RHS 1. However, team leaders did not confirm this task because they considered themselves responsible for management control and were insufficiently familiar with the main issues of ILHP.

For building block 4, RHS quality assistants and epidemiologists were prepared to support the uptake of the Guideline into the RHS knowledge management systems.

Program acceptance as a whole was not sufficient to achieve the targets of the DIS in building blocks 2 and 3 for both RHS. The perceptions of managers and professionals on task responsibilities for guideline implementation were not in line.

Change

The dissemination of knowledge of the Guideline in the introduction phase led to increased use in RHS 1 (especially among health promoters), and in RHS 2 among health promoters and policy officers. RHS 2 reported guideline use by civil servants for public health departments of two urban communities after its introduction in civil servant meetings, and after recommendations made by RHS policy officers. The concept map meeting in RHS 1 yielded implementation targets for both the RHS and partner organizations [23]. However, RHS 1 prioritized internal implementation of the Guideline, whereby no further appeal was made for external support for implementation goals.

Regarding building block 2, alignment of guideline goals among managers, team leaders and professionals was discussed, but not actually reached. Therefore, this building block did not lead to common or widely supported agreements in either of the RHS, and no changes were achieved in attitudes/beliefs about the Guideline's goals. Although the RHS director and managers in RHS 1 viewed the Guideline as a standard for ILHP, an explicit connection between guideline goals and concrete policy advice was not achieved at organizational level.

(Quote: manager RHS 1: 'I think we (managers) lack that shared ambition, and we haven't set the frames for common policy goals').

In RHS 2, the health promotion manager confirmed guideline relevance for the RHS advisory on a large scale. However, responsibility for actual use was also considered a matter for the individual professional. In addition, a majority of policy officers in RHS 2 reported that their current RHS methods already corresponded with the Guideline's main objectives. In contrast with RHS1, all policy officers in RHS 2 showed easier acceptance of the Guideline. RHS 2 reported that one individual health promoter had made extensive use of the Guideline to develop an obesity prevention plan.

In both RHS, internal organizational changes were considered a hindrance for guideline uptake by all RHS departments. At the time of the implementation, because RHS 1 expected a change of management and a redesign of teams, decisions on more comprehensive policies were postponed. In RHS 2, current issues of the youth healthcare department outvoted paying attention to guideline uptake.

Both RHSs experienced a lack of attention for important issues related to integrated local health on an organizational level. Internal RHS policies were dominated by management and control issues. In both RHSs, managers of the health promotion department saw no opportunity to discuss guideline goals with Youth and Infections departments. Municipal reorganizations (e.g. of Youth Health services) forced RHS to remain fully alert to preserving current services within this field of care.

(Quote: manager RHS 2: 'You know, you have to look very carefully what the guideline has to offer for the Youth and General Health departments. At the moment, they see no need to work with the guideline').

Concerning building block 3, setting team goals and the creation of a learning environment were carried out on an individual basis, (e.g. the project leader supervised the health promoters) and did not lead to structural adjustments for training programs or peer supervision. According to policy officers in RHS 1, collaboration between policy officers, epidemiologist and team leaders could help to strengthen relationships with civil servants and aldermen. However, when they were asked, policy officers did not confirm the need for additional training or coaching to use the Guideline as a team. In RHS 1, guideline recommendations for integrated health were acknowledged by managers, but did not lead to formulating specific skills for an advisory on ILHP.

(Quote: project leader RHS 1: 'Policy officers mostly work by themselves; there is no cross-policy process for integrated local health and advisory').

Regarding building block 4, for both RHS, linking guideline methods to current methods and RHS quality management system did not succeed at the planned scale. Digital links were established in both RHSs between the Guideline and current RHS tools (e.g. 'regional Public Health Status and Forecasts reports'), methods and working instructions for health policy advisory. However, neither structural training of skills related to guideline use, nor professional education programs for ILHP development, were realized. Both RHSs included the Guideline as teaching material in the introduction program for new policy officers, health promoters and epidemiologists. A manager in RHS 1 stated that the best chance to develop an integrated policy is related to the personal commitment and ambitions of the department manager.

(Quote manager RHS 1: 'Do you know what it is, it's all about ownership! If ownership is not developed, they (managers) will not accept the instrument as something of themselves').

In conclusion, the aim of the DIS to have the Guideline acknowledged as the primary management tool by the RHS for ILHP did not produce the desired results.

Methods for ILHP in RHS 3 and 4

In RHS 3/4, we focused on factors that determined implementation or non-implementation of the Guideline within the RHS workflow. The main topics were: the establishment of their advisory role for ILHP, and their perspectives on implementation of the Guideline. Our main goal was to examine whether RHS 3 and 4 (without a DIS) had used implementation activities similar to or different from the DIS of the pilot RHS. Their methods for enhancing ILHP might support or complement the building blocks, and yield additional information for enhancement of the DIS.

Implementation of methods for ILHP in RHS 3

RHS 3 reported extensive use of the Guideline for their advisory on local health policies. This RHS focused on translation of the 'regional Public Health Status and Forecasts reports' [26] into concrete plans and actions for municipalities. For this purpose, interdisciplinary teams (epidemiologists, health promoters, policy officers) jointly wrote operational reports for their municipalities, so that civil servants could derive concrete health promotion programs and actions.

(Quote: manager Health Promotion RHS 3: 'At that time we had the regional Public Health Status and Forecast report as the main stimulator for the whole local health policy process, and the guideline provided a perfect match; that's why it was such a good combination...').

Management of RHS 3 decided to involve 15 RHS employees (policy officers, health promoters, epidemiologists) in the process of writing the municipal reports. With these teams, the HP department aimed at stronger connections between research, practice and policies in order to provide the municipalities with better quality advice.

Prior to this method, RHS management had to decide on the internal budget, as it was anticipated that this process would require considerable time and labor investment. By combining the Guideline with regional reports, the health promotion department designed intervention charts (containing regional and local examples) for their own municipalities. In RHS 3, management and professionals had to align their views on ILHP to reach common goals and ambitions. The process was considered necessary to reach a strong position as knowledge provider for municipalities.

(Quote manager RHS 3: 'We ourselves, as management, had the belief: as a knowledge organization for care and health, you're supposed to know this. Otherwise, you can't discuss with municipalities which problems should be addressed and what still needs to be done').

The whole process took 2.5 years. The Health Promotion manager and project leader provided coaching for the professionals involved. The need for coaching was clearly stated by professionals, who experienced some difficulty in writing the reports and in their subsequent advisory tasks.

The Guideline provided new tools for the RHS to work on ILHP; these tools were used in the intervention charts. Internal alignment between RHS departments of Health Promotion, Youth Health, and General Health, did not receive serious attention. The Youth department focused mainly on executive tasks, and paid less attention to policy development.

Comparison between RHS 3 methods and the DIS building blocks

In RHS 3, the strategy's building block 2 ('alignment of the guideline's purpose between management, as a facilitating and steering discipline, and professionals as experienced practitioners of health policy') and building block 3 ('translation of guideline goals into team goals') were recognized as important preconditions. RHS 3 also stressed the role of close interaction with municipal professionals. The respondents stated that when municipal needs and questions are taken seriously by the RHS, the use of the Guideline follows as a logical choice.

(Quote: policy officer RHS 3: 'I can't imagine that one would totally ignore the guideline, this would not be a professional attitude').

In addition, RHS 3 highlights the process-oriented tools of the Guideline, which apply health issues within an integrated framework. These tools were considered important for the quality of RHS advisory on ILHP for municipalities.

Perspectives on the DIS by RHS 3

RHS 3 respondents viewed the DIS (used in the pilot RHS) as too formal and characterized it as a 'top-down strategy'. They assumed that a formal strategy would fit less well in their working methods, which reflects more bottom-up characteristics. The respondents thought that health promotion professionals and managers have to acknowledge the advantage of the Guideline. Management support and facilitating conditions were considered to be preconditions. The respondents also confirmed the importance of clear guidance and commitment from team managers/colleagues during the process of guideline implementation. In addition, the respondents did not perceive the Guideline to be very different from their current methods/skills for health policy advisory.

Implementation of methods for ILHP in RHS 4

RHS 4 had already stated that the Guideline would not be their preferred instrument for ILHP. Their main criticism of the Guideline was its exclusive approach to ILHP from a health perspective. The Guideline was thoroughly read by policy officers, but substantial connections to current municipal priorities seemed too remote. However, all respondents acknowledged the relevance of the Guideline for new colleagues. Experienced policy officers used the Guideline mainly for inspiration, or used its background information to prepare for a meeting with the municipality. According to the Health Promotion manager, the strength of the Guideline is its completeness. It offers concrete ideas to approach specific health issues. Its weakness lies in its general nature, which fails to meet the various local dynamics of the municipal policies.

However, a major reason for less attention paid to the Guideline came from the development of their own regional program for cross-sectional policies within the RHS region. Their program aimed at reaching a political and administrative support base for ILHP at a regional level. The program was already accepted by most of their municipalities (before publication of the Guideline) and had started to succeed. With this program, the RHS had made a major effort to create their own instrument for ILHP.

(Quote: manager RHS 4: 'When you look at what works, it's what you have made yourself; it makes you proud when you see that it works, and this inspires you; it's like your own child that makes you feel warm inside').

Nevertheless, professionals in RHS 4 were required to be familiar with the overall content of the Guideline, but were not forced to use its tools.

(Quote: manager RHS 4: 'I think that the guideline is one of the tools that must be part of the professionals' knowledge base. Our Head of Department also supports the use of evidence-based knowledge. But, professionals are free to decide what they need for successful job performance. Using the guideline should not be a goal in itself').

Comparison between RHS 4 methods and the DIS building blocks

In RHS 4, implementation of their own instrument for ILHP showed the following characteristics. Policy officers, managers and health promoters were involved in the development process of the program. By focusing on local (municipal) debate, all three RHS disciplines reached alignment on goals for ILHP. For this process, the manager encouraged employees to develop the desired communication and relational skills.

Although no specific attention was paid to the Guideline, this process in RHS 4 seems (again) largely consistent with the objectives of building blocks 2 and 3 of the DIS. The development and execution of their program for ILHP required internal collaboration between managers, policy officers and health promoters, and collaboration of RHS disciplines with administrative, management and civil servants of municipalities.

Building blocks 1 and 4 of the DIS were specifically related to the Guideline and, in that sense, are less comparable with the implementation process of the program for ILHP in RHS 4. The program was developed over several years and led to gradual changes in the quality management system and in the professional competences required.

Perspectives on the DIS by RHS 4

RHS 4 respondents confirm the relevance of close interaction on goals/ambitions between RHS disciplines, but see the interactions with the municipalities as equally important. Opinions differ regarding a targeted strategy for guideline implementation. Policy officers confirm the value of the Guideline, especially for beginners in the field of health policy advisory. However, a more experienced policy officer rejected imposed usage:

(Quote policy officer RHS 4: 'I would feel very uncomfortable if my team leader forced me to use the guideline; I would think: that's easy for you to say, but local circumstances confront me with other issues, which I need to connect to by other means').

The manager states that the use of evidence-based knowledge and tools remains important for the quality of RHS services.

(Quote: manager RHS 4: 'But to use the right models and the best practices, I would say that is preconditional, isn't it.').

Table 2: Evaluation (by Nutbeam model) of the draft implementation strategy for integrated local health policy (ILHP) in pilot RHSs.

Integrity		
Building blocks (1-4) and Planned Actions (A-H)	**Pilot**	
1. Introduction and uptake	RHS 1	RHS 2
A. Project leader (PL) invites RHS professionals to take notice of guidelines content;	A. PL informed HP1, PO, M, EP in section meetings on guideline purpose through online presentation of content.	A. PL informed HP, PO, M, EP and CS in 2 meetings on guideline purpose by means of ppt. presentation of content.
B. RHS health promoters, policy officers and team leaders inform civil servants about guideline content and purpose.	B. PL conducted a concept map-meeting with CS, HP, PO, TL, and external public health partners 2 for support based implementation targets. PL informed CS in regular CS meeting.	B. PL conducted a concept map-meeting with RHS HP, PO, EP, M to discuss guideline implementation targets. PL informed CS in regular CS meeting and local Public Health partners in a separate meeting.
2. Agreement and Alignment (on guideline purpose and goals for RHS (M, PO, EP, HP)		
C. PL puts the guideline on the agenda of RHS management, team leaders' and health promoters' meetings.	C. Action carried out as planned.	C. HP, EP, PO agenda gave attention to the guideline. No attention on M agenda.
D. PL, health promoters, policy officers and team leaders formulate facilitating conditions for use of guideline methods.	D. Action carried out as planned.	D. RHS manager appoints a 2nd project leader (PO), to facilitate implementation process.
E. PL and policy officers invite managers to respond to the proposed requirements and set agreements with team leaders and health promoters on coaching and trial period for guideline use.	E. Action carried out as planned.	E. Initially involved RHS manager is replaced by deputy manager during the implementation process.
3. Team goals and supervision		
F. PL encourages teams to formulate: Guideline-based team ambitions; Tasks and individual goals are derived from team ambitions.	F. Action carried out as planned in section meetings and in individual consultations by PL with HP.	F. Action carried out as planned in section meetings and by internal RHS survey.

G. Teams (team leader, health promoters and policy officers) evaluate guideline related tasks by peer supervision and by individual coaching.	G. Action carried out in HP section. 4 PO evaluated guideline.	G. PO, HP, EP evaluated guideline in teams.
4. Assurance		
H. PL evaluates implementation results and discusses solutions for experienced barriers and preconditions for guideline implementation with RHS teams, civil servants, and RHS management.	H. Action carried out as planned. PL involved RHS quality manager for uptake of the guideline in standard procedures.	H. Action not feasible due to time constraints. PLs needed another 6 months to perform action as planned. PL involved RHS quality manager for uptake of the guideline in standard procedures.

1 HP (Health Promoters); PL (Project Leader); PO (Policy Officers); EP (Epidemiologists; PA (Project Assistants); TL (Team Leaders); M (Managers); CS (Civil Servants); 2 Mental Health; Substance Use; Home Care; Primary Care Consultancy

Reach

Building blocks (1-4) and Planned Actions (A-H)	Pilot	
1. Introduction and uptake	RHS 1 (N=82)	RHS 2 (N=41)
A. Project leader (PL) invites RHS professionals to take notice of guidelines content;	A. HP: 22; PO:8; EP: 1; PA: 9; TL: 20; M: 3;	A. HP: 13; PO: 3; EP: 4; M: 1;
B. RHS health promoters, policy officers and team leaders inform civil servants about guideline content and purpose.	B. 1 CS participated in the concept map meeting. CS: 19	CS: 20
2. Agreement and Alignment (on guideline purpose and goals for RHS (M, PO, EP, HP)		
C. PL puts the guideline on the agenda of RHS management, team leaders' and health promoters' meetings.	C. All sections' (HP, Youth Health Department, Infections Department) agenda's gave attention to the guideline.	C. RHS managers Youth Health and Infections were not involved.
D. PL, health promoters, policy officers and team leaders formulate facilitating conditions for use of guideline methods.	D. 3 (of 8) PO's formulate facilitating conditions on behalf of colleagues. HP, TL were involved through consultation.	D. All 41 RHS employees were addressed by survey to explore facilitating conditions.
E. PL and policy officers invite managers to respond to the proposed requirements and set agreements with team leaders and health promoters on coaching and trial period for guideline use.	E. M was informed on facilitating conditions by PO and PL.	E. Deputy manager HP was notified on pilot goals and activities and on facilitating conditions for guideline implementation by PL.
3. Team goals and supervision		
F. PL encourages teams to formulate: Guideline-based team ambitions; Tasks and individual goals are derived from team ambitions	F. 17 RHS HP and 8 PO were asked to discuss guideline use and team ambitions in section meetings.	F. PO, HP chose goals for local health advisory and prevention on individual basis.
G. Teams (team leader, health promoters and policy officers) evaluate guideline related tasks by peer supervision and by individual coaching.	G. HP evaluates guideline use in section meetings. No direct involvement of TL in evaluation. All HP, PO, EP were invited for individual coaching at their discretion. Coaching was also offered to teams and individual HP.	G. All HP, PO, EP were invited for individual coaching. Coaching was also offered to multi-disciplinary teams.
4. Assurance		
H. PL evaluates implementation results and discusses solutions for experienced barriers and preconditions for guideline implementation with RHS teams, civil servants and RHS management.	H. sections of PO, HP, M were involved in evaluation.	H. EP, PO, HP were involved in evaluation.

Acceptability

Building blocks (1-4) and Planned Actions (A-H)	Pilot	
1. Introduction and uptake	RHS 1	RHS 2
A. Project leader (PL) invites RHS professionals to take notice of guidelines content;	A. All HP show a positive attitude towards the guideline; 4 PO's think that they will not use the guideline extensively, due to absence of specific RHS policy goals and perceived lack of management support.	A. M, PO, EP, HP acknowledge guideline purpose and trust the guidelines' professional quality.

B. RHS health promoters, policy officers, and team leaders inform civil servants about guideline content and purpose.	B. The method of concept mapping was well received, taking all participants' perspectives into account. CS view guideline as useful, not as mandatory for RHS or municipality.	B. The method of concept mapping clarified application targets for municipal advisory by PO, HP. CS view guideline as useful.
2. Agreement and Alignment (on guideline purpose and goals for RHS (M, PO, EP, HP)		
C. PL puts the guideline on the agenda of RHS management, team leaders' and health promoters' meetings.	C. All HP welcomes the guidelines structured practical examples and interventions. HP coordinator secures guideline as topic for agenda.	C. Deputy M of HP Dept. indicates other urgencies for agenda;
D. PL, health promoters, policy officers and team leaders formulate facilitating conditions for use of guideline methods.	D. To decide on its status, M ask PO to clarify consequences of guideline use differing opinions among PO on guideline rigor.	D. M postponed discussion on facilitating conditions and alignment on guideline goals with RHS policy goals.
E. PL and policy officers invite managers to respond to the proposed requirements and set agreements with team leaders and health promoters on coaching and trial period for guideline use.	E. 4 (of 8) PO view alignment of goals for integrated local health as important for guideline use. M. postpones decision on additional time, training, for guideline use. RHS board confirms importance of ILHP, and states this must be addressed by TL.	E. Information on conditions for guideline use did not lead to additional interdisciplinary agreements on goals for ILHP.
3. Team goals and supervision		
F. PL encourages teams to formulate: Guideline-based team ambitions; Tasks and individual goals are derived from team ambitions.	F. M and TL (except 1 TL) do not provide leadership for reaching substantive goals or ambitions for health topics, nor for guideline use on team and individual levels.	F. PO, HP, EP discussed use with guideline developers.
G. Teams (team leader, health promoters and policy officers) evaluate guideline related tasks by peer supervision and by individual coaching.	G. PO majority does not confirm need for additional competences for guideline use. HP discuss issues with guideline use in section meetings and individually with PL.	G. In section meetings, HP, PO confirms practical value of guideline recommendations and examples for health promotion interventions. PO, HP perceive current methods as similar to central guideline recommendations and do not require individual coaching.
4. Assurance		
H. PL evaluates implementation results and discusses solutions for experienced barriers and preconditions for guideline implementation with RHS teams, civil servants and RHS management.	H. RHS quality manager, PO intends to include the guideline in introduction program of new employees. PL finds that overall RHS working instructions are not often used by PO and HP.	H. M, PO intends to include the guideline in introduction program of new employees.
Change		
Building blocks (1-4) and Planned Actions (A-H)	Pilot	
1. Introduction and uptake	RHS 1	RHS 2
A. Project leader (PL) invites RHS professionals to take notice of guidelines content;	A. HP, PO, EP, RA, TL, M can find the guideline, understand its purpose. HP acknowledge guideline applicability and want to tailor interventions for local alignment;	A. PO, EP, HP can find the guideline, understand its purpose; 3 EP did not read the content.
B. RHS health promoters, policy officers, and team leaders inform civil servants about guideline content and purpose.	B. Specific implementation targets were formulated and prioritized with RHS members and public health partners. CS view guideline as method for RHS professionals, and as not primarily applicable to CS.	B. specific implementation targets for municipalities were formulated and prioritized with RHS members only. 2 CS of municipal Health Dept. read the guideline to obtain ideas for policy development.
2. Agreement and Alignment (on guideline purpose and goals for RHS (M, PO, EP, HP)		
C. PL puts the guideline on the agenda of RHS management, team leaders' and health promoters' meetings.	C. HP use guideline interventions and practical examples in execution of health promotion activities. 3 PO's use the guideline for their local advisory.	C. EP, PO and HP set targets for use in local policy advisory by internal RHS survey.
D. PL, health promoters, policy officers and team leaders formulate facilitating conditions for use of guideline methods.	D. PO awareness of conditions for guideline use. (Time; information exchange; peer supervision; training; common goals).	D. facilitating conditions were not discussed. Individual PO, EP, HP decide to use guideline for interventions and local health policy advisory.

E. PL and policy officers invite managers to respond to the proposed requirements and set agreements with team leaders and health promoters on coaching and trial period for guideline use.	E. 1 TL confirms guideline applicability for a regional prevention program and encourages use by the team. M. views guideline as a standard method and recommends use by professionals at their own discretion. No agreement on facilitating conditions for guideline use.	E. initial RHS M. views guideline as a standard instrument and recommends use by professionals at their own discretion. Arrangements on facilitating conditions for guideline use were not made.
3. Team goals and supervision		
F. PL encourages teams to formulate: Guideline-based team ambitions; Tasks and individual goals are derived from team ambitions.	F. formulation of guideline based RHS policy goals and team ambitions did not take place.	F. formulation of guideline based RHS policy goals and team ambitions did not take place. M indicated RHS goals are in accordance with guideline.
G. Teams (team leader, health promoters and policy officers) evaluate guideline related tasks by peer supervision and by individual coaching.	G. HP asks guidance from PL to use guidelines' interventions.	G. HP, PO use guideline in relation to CS, mentions guideline advantages.
4. Assurance		
H. PL evaluates implementation results and discusses solutions for experienced barriers and preconditions for guideline implementation with RHS teams, civil servants, and RHS management.	H. guideline was linked to a toolbox for project based methods and to digital knowledge bases for public health policy. Organizational RHS policy goals were not explicitly linked to, or confronted with guideline goals on ILHP.	H. guideline was linked to existing methods. HP, PO, EP focus on guideline implementation in municipalities. Several CS are informed about the guideline. Organizational RHS policy goals were not explicitly linked to or confronted with guideline goals on ILHP.

Discussion

The main objective of the present study was to examine the feasibility and effectiveness of four building blocks of a draft implementation strategy DIS. It was hypothesized that the DIS would be feasible and effective to enhance implementation of a Guideline for an integrated local health policy by a Regional Health Service. The purpose of the Guideline was to improve the use of evidence-based knowledge for ILHP by Regional Health Services and the municipalities in their region. Our primary focus concerned implementation of the Guideline into the workflow of RHS organizations.

Feasibility of the building blocks of the DIS in the pilot RHSs

With regard to the impact of the DIS on guideline use, we address the following aspects of the internal/external validity of the program (the building blocks). The main questions (in line with Nutbeam's evaluation model) are: Can the results be attributed to the DIS (internal validity)? Why were some of the desired results (not) achieved? Can we define the most active program elements of the DIS (effect explanation)? Would it be possible to implement the strategy in another (real-life) RHS setting (applicability)? Would the strategy yield similar results in other (real-life) RHS settings (external validity)? [24].

Results that can be attributed to the DIS

Evaluation of the building blocks of the DIS showed different results in RHS 1 and 2 regarding the introduction and uptake phase of the Guideline. Not all policy officers in RHS 1 were prepared to accept the Guideline as a method for municipal advisory, while RHS 2 health promotion professionals and their initial manager showed overall adoption. RHS 1 health promoters accepted the Guideline more easily due to its practical applicability for the planning of preventive interventions; this result can be attributed to the DIS. In both RHS, health promoters who joined the introduction of the guideline and who received coaching for specific guideline use were positive about the information and the implementation support. Some policy officers in RHS 1 perceived the Guideline's tools for developing ILHP (e.g. checklists) as being too complex and, therefore, as less ready-made for their advisory task. For these policy officers, mastering skills for municipal advisory on ILHP was not a priority, partly because they had not studied the Guideline, but mainly because they felt a lack of managerial commitment to ILHP goals. On the other hand, overall, policy officers had a high margin of discretion, which may have complicated their acceptation of the Guideline [27].

In RHS 2, teams of policy officers, epidemiologists and health promoters focused on guideline use by civil servants. Prior to this focus, the teams had already acknowledged the advantages of guideline use. This result (acceptance) was partly due to contributions to the Guideline's content by their own RHS (such as: examples for ILHP approach). Within the teams, goals for policy advisory and goals for guideline use were discussed. Therefore, for RHS 2, the estimated impact of the DIS on the acceptance of the Guideline is biased. However, despite their involvement in the development of the Guideline, the attempts of the project leaders to extend support for the Guideline to other RHS departments were not successful.

Reasons for (non-) achievement of desired results

The desired effect of building blocks 2 and 3, alignment of goals between the main RHS departments (Health Promotion, Youth Healthcare, Infectious Diseases) and executive disciplines, was not reached in the pilot RHS. To expect a change at RHS management level regarding acceptance of the

Guideline's goals for ILHP, seems to have been too high an ambition for the DIS.

Nevertheless, the building blocks 2 and 3 for the alignment of goals appear to include significant elements for adoption of the Guideline. Although the alignment of goals for ILHP between organizational and operational levels did not succeed in the pilot RHS, similar elements to building blocks 2 and 3 seemed to have worked for this alignment in RHS 3 and 4. These elements concerned the multidisciplinary process of common goal setting for municipal policy advisory in the RHS, reaching commitment to team goals, and creating a learning environment in which coaching of professionals proved an essential facilitating condition. This observation calls for consideration of possible reasons why building blocks 2 and 3 yielded less success in the pilot RHSs. This might be because the preparation among RHS managers/policy officers for broad acceptance of the pilot implementation in the two RHSs was insufficient. Support for implementation was assumed based on the commitment of the two RHS managers and their estimation of the internal need for RHS professionals' guidance for ILHP. In contrast, RHS 3 (respondents in the comparison arm) described a broad, multidisciplinary support base and preparation prior to the introduction and uptake of the Guideline in their organization. Professionals and managers (team leaders) were eager to use the Guideline and had clear expectations on how the innovation could help them improve their health services. This type of anticipation was not found in the pilot RHSs. However, executive health promoters in both pilot RHSs showed stronger acceptance of the Guideline. This indicates that elements of building block 1 (e.g. providing knowledge) influenced (to some extent) acceptability of building blocks 2 and 3 for health promoters. For instance, on an executive level, the Guideline offered clear examples/ instructions for planned health interventions. Alignment of goals with health promoters contributed to their knowledge and to their perceived advantage of guideline use. Although these single findings are insufficient for inductive inference, implementation efforts for the Guideline regarding practical interventions at an executive level seem to be more successful elements of an implementation strategy than efforts to influence (or change) the RHS policy-oriented approaches at an organizational level.

In RHS 1, the unsatisfactory results in guideline uptake for policy approaches might be due to differing perceptions on task responsibilities among managers, team leaders and policy makers. In the execution of planned actions for building blocks 2 and 3, most team leaders and managers in RHS 1 viewed guideline use as a professional's responsibility. The manager who was initially involved in RHS 2 also thought that professionals should use tools that best suited their jobs. Despite the apparent reasonableness (referring to principles of professional autonomy), these positions also reveal a certain disorientation at an organizational level in terms of disconnection between management and operational disciplines for substantive orientation on ILHP. Due to this disconnection, some policy officers in RHS 1 experienced lack of guidance on common RHS aims for ILHP. This call for 'the right direction' was not addressed by managers. Subsequently, the uncertainty about major RHS aims resulted in professionals doubting the feasibility of guideline goals for ILHP. The management theory of Lawler [28], as well as the views of Mintzberg [12] and Weggeman [13,14], addresses possible solutions for the problem of 'disharmony' regarding substantive direction in knowledge organizations and attribute an important key role to collaborating team leaders as liaison officers between management and executive disciplines.

Other reasons for non-achievement of the goals in building blocks 2 and 3 are based on the criticisms of the DIS reported by RHS 3 and 4. The respondents mentioned the problem of implementation by means of a more or less imposed (top-down) approach. Although we used a participative approach (concept mapping in building block 1) to reach shared implementation targets for the Guideline, our DIS might have been too prescriptive to fit in with the current organizational workflows of the pilot RHSs. In this respect, the ambition of the DIS was too high. If this was a pitfall of the DIS, a solution for future attempts could be to place more emphasis on the adoption phase through application of methods such as concept mapping (for goal identification among the various disciplines involved), and methods for analysis of specific targets/ hindrances to reach support-based adoption of an innovation (e.g. the Concerns Based Adoption Model [29]). Recent research highlighted the need for additional research into effective dissemination instructions and tools for local guideline implementation in public health, with specific emphasis on identification of organizational factors to meet the needs of individual participants, organizations and knowledge providers [30-33].

Defining the most active elements of the DIS

Knowledge exchange on the Guideline's purpose and content, and support for guideline use for health promoters, showed the desired effect.

In the comparisons, both RHS 3 and 4 stressed the importance of interdisciplinary collaboration to address policy change for ILHP. In these RHSs, effective elements mentioned by respondents correspond to building blocks 2 and 3 of the DIS; however, the desired effects of these building blocks did not occur in the pilots. Therefore, we cannot claim that building blocks 3 and 4 are essential in the applied DIS. Nevertheless, these elements appear to have some significance for successful implementation of the Guideline in RHSs, e.g. RHS 3 and 4 criticized the top-down character of the DIS, which would not fit into their horizontal communication structures.

This criticism may be an indication for modifying the sequence of phases in the DIS. To achieve a better effect, the position of building blocks 2 and 3 in the strategy would have to be at the beginning, so that more emphasis can be placed on preconditions for broad adoption of the Guideline and its central purpose of integrated local health policies. At this point we refer to Hall's change principle: "Although both top-down and bottom-up change can work, a horizontal perspective is best" [34]. Support for this principle is also found in the 'Replicating effective programs framework' for health care interventions [35].

Applicability of the strategy in another (real-life) RHS setting

As the applied strategy does not seem promising for effective implementation in other RHSs, the external validity of the DIS seems limited. In a modified sequence, as discussed, the building blocks may have a better chance to match individual RHS conditions. To determine opportunities for the implementation of the Guideline and select a suitable approach, a preliminary assessment of the RHS communications infrastructure is necessary. This assessment could indicate at which level in the RHS organization (executive, middle or higher management) implementation activities should be addressed, and on what scale changes can be expected [28].

Limitations

The choice of a trial implementation in two RHSs and the design for comparison with two other RHSs has provided few insights; therefore, the results cannot be generalized and no external validity can be claimed. By focusing on the RHS internal organizations, we selected activities in our DIS that seek solutions for adoption/implementation problems on an individual level of employees and single organizations. The needs of external stakeholders were addressed at the start of the pilots, but were not included in the subsequent execution of the implementation program. The inclusion of external perspectives could have influenced the required RHS perspectives on ILHP and might have affected the results of the DIS. Although this question remains unanswered, it is relevant for implementation of the guideline. Further exploration of conditions for successful implementation should take these external perspectives into account.

Conclusion

This study shows that, if the methods used by RHSs for integrated local health policy are to be effective, they require the strong commitment of the various stakeholders involved. The DIS for an ILHP guideline, as applied in this study, seems to have missed its potential effectiveness due to an unsuccessful match with current organizational levels of decision-making. RHSs need to know the concerns of their municipalities. However, as a professional municipal contractor, the RHS board and management have to make substantiated choices for organizational goals on ILHP. This study indicates the relevance of agreement and alignment on organizational goals, and of an engaged leadership to support professional operationalization of these goals, as vital components of a final implementation strategy. In the attempt to enhance guideline use for ILHP, professional autonomy and solid managerial directives from collective goals/aspirations should not present any contradictions in the RHS organization. Collective goals for ILHP, when including the perspectives of municipal and public health partners, can provide an important basis for RHS commitment at all desired levels [23,36,37].

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