

JA-CHRODIS

Work Package 7

Diabetes: a case study on strengthening health care for people with chronic diseases

SWOT ANALYSIS

Overview of national or sub national policies and programs on prevention and management of diabetes



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Abbreviations

COPD	Chronic Obstructive Pulmonary Disease
CVD	Cardio Vascular Disease
DFD	Diabetic Foot Disease
DFU	Diabetic Foot Ulcer
GP	General Practitioner
NCD	Non Communicable Disease
NGO	Non Governmental Organization
NDP	National Diabetes Plan
SWOT	Strenghts Weaknesses Opportunities Threats
IT	Information Technology
ICT	Information Communication Technology

Executive Summary

In the frame of the JA-CHRODIS, diabetes is considered a case study on strengthening health care for people with chronic diseases. To provide an overview on practices for prevention and management of type 2 diabetes, the WP7 team conducted a survey to provide a structured overview about current programs (interventions, initiatives, approaches or equivalents) that focus on the various aspects of diabetes. The results of the survey are presented in the Report "Survey on practices for prevention and management of diabetes" (www.chrodis.eu/wp-content/uploads/2016/01/Report-prevention-and-management-diabetes-Final.pdf). To complement this quantitative analysis, a SWOT analysis was conducted to give a qualitative overview of the current policies and programs, by Country, including successful strategies. Those partners who represent associations/organizations conducted the SWOT considering policies on specific topics.

The SWOT analysis is a strategic planning tool used to evaluate the Strengths, Weaknesses, Opportunities, and Threats of a policy, a program, a project or an intervention. The aim is to offer insights on what makes a policy/program applicable, sustainable, and effective from a public health and from the stakeholders' perspectives, what are the necessary preconditions for its implementation and what are the lessons learnt from the experience.

A total of fifty-three stakeholders in 12 Countries contributed to the SWOT reporting and analysing 39 policies. The texts of the SWOTs, have been coded inductively, building up an interpretative model based on emerging categories.

Strengths and successful strategies

To be successful, a policy or a program needs to be dynamic, bottom up, flexible, integrated, multi-intersectoral, and equity oriented. External communication and dissemination is a key point for success, and the partnership among stakeholders should be kept active throughout the process.

According to the responders, a strong scientific background is considered a key point. Strategies should be comprehensive and address the most common risk factors of the main NCDs. A clear description of the care pathways is needed, supported by an information system at national, sub national and local level. Planning and definition of sound objectives on Integrated Care, is a leading starting point. Regular monitoring and evaluation, with a defined and shared set of outcomes and indicators, are important drivers for programs implementation. A strong and efficient leadership is needed.

Capacity building is intended as the development and strengthening of human resources, focusing on people with diabetes and professionals. Good educational models and care strategies are essential and need to be shared with the persons with diabetes.

Weaknesses

The weaknesses of a policy/program are internal characteristics that might be under control and addressed within the program.

Policies and programs seems to be built mostly for single-disease treatment whereas there is a growing need of a cross-disease prevention and treatment approach. The NCD strategy at national level needs an action plan about how to reach the goals, that was not always provided.

Specific action and treatment options to prevent diabetic complications are not always provided within the national strategies and may be underestimated.

There is not enough attention on how diabetes specifically affects women and no specific action is provided. Stakeholders' involvement can be a challenge: the coordination by patients organizations was not always welcomed by health care operators.

Discontinuous, suboptimal or no funding to support the policies/programs/strategy implementation has been reported.

There is a limited availability of data at national level, diabetes registers are not established in all countries, national assessment and evaluation is problematic.

Educational programs tend to be disease-specific rather than addressed to persons with multimorbidity and lack of an integrated care approach.

Opportunities

Opportunities are external conditions that are not under the direct control of the policy/program, and may facilitate its implementation.

There is an increasing awareness across European institutions and health care systems that actions must be taken to address chronic conditions prevention and health promotion. The economic crisis induces a health system reform momentum, where cost-effectiveness and ethical considerations are taken into account.

Sharing and exchange of best practices of chronic care management and integrated care at European level is acting as a motivator; some programs have been used as a model outside the original Country of implementation.

The society is becoming increasingly sensitive to the prevention of diabetes as a health problem and a social issue. New communication technologies and social media may facilitate the dissemination of the preventive strategies.

The existence of established policies or programs within the health system and from different sectors (e.g. social sector, education), allows harmonized and target-oriented interventions. A broad participatory approach during the development of policies and programs is considered a starting point for stakeholders involvement and effective multi and transectoral collaboration.

Threats

Threats are external conditions that are outside the direct control of the program and may stand in the way of its implementation.

The prevalence of NCDs, diabetes and pre-diabetes in the general population is growing, as well as obesity in children, with a persistence of social inequalities in health. Industry and economic lobbies in general affect political decisions and do not always support healthy lifestyle.

In countries with strong federal systems, one of the threats is fragmentation of activities, with scarce ownership and a definition of competences and responsibilities that is not always clear. To be effectively implemented, policies and programs need a clear political commitment that might be challenged by political changes and absence of long-term endorsement, particularly at sub-national level.

The current economic crisis is challenging the public health systems across Europe, leading to large reforms and uncertainty about e.g. prevention and health promotion.

University curricula and health professionals' pre-service education are still not dealing with the changing needs of the ageing population.

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Introduction

The challenge facing decision-makers and leaders in health care, is how to strengthen chronic disease prevention and control efforts, and how to re-design health care system to better meet complex needs of persons with chronic diseases like diabetes. In 2011, the General Assembly of the United Nations, with EU support, adopted a political declaration on the Prevention and control of non-communicable diseases. World leaders committed themselves to strengthen international cooperation, including collaborative partnerships in support of national, regional, and global plans for the prevention and control of non-communicable diseases, through the exchange of best practices in the areas of health promotion, legislation, regulation and health systems strengthening, training of health personnel, and development of appropriate health-care infrastructure.

The European Summit on chronic diseases (Brussels, 2014) stressed the need for joint efforts, at European level, to optimize resources and energy to address major chronic diseases acknowledging the need for a coalition across society to prevent chronic diseases, preserving the best state of health and sustainability of a modern health system, with the aim of maximizing the years of healthy life of European citizens. (ec.europa.eu/health/major_chronic_diseases/events/ev_20140403_en.htm).

The launch, in 2014, of the European Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS), is a response to the objectives set by the United Nations and the European Commission. The goal of the JA-CHRODIS is to promote and facilitate a process of exchange and transfer of good practices among countries and regions, for effective action against chronic diseases, with a specific focus on health promotion and chronic disease prevention, on co-morbidity and diabetes.

In the frame of the JA-CHRODIS, diabetes is considered a case study on strengthening health care for people with chronic diseases. The work package on diabetes (WP7) focuses on all the major aspects of a serious disease like diabetes: identification of people at high risk, prevention and early diagnosis, health promotion in people with diabetes, comprehensive multifactorial care, prevention of complications, educational strategies for people with diabetes and training for health professionals. JA-CHRODIS is not a research project, thus its main objective is to use the already available knowledge, to improve coordination and cooperation among countries to act on diabetes, including the exchange of good practices, and to create ground for innovative approaches to reduce the burden of chronic diseases. Special emphasis is also given to support the development and implementation of National Diabetes Plans.

To provide an overview on practices for prevention and management of type 2 diabetes, the WP7 team conducted a survey to provide a structured overview about current programs (interventions, initiatives, approaches or equivalents) that focus on the various aspects of diabetes. The results of the survey are presented in the Report "Survey on practices for

prevention and management of diabetes" (www.chrodis.eu/wp-content/uploads/2016/01/Report-prevention-and-management-diabetes-Final.pdf).

To complement this quantitative analysis, a SWOT analysis was conducted to give a qualitative overview of the current policies and programs, by Country, including successful strategies. The aim is to offer insights, partners point of view, on what makes a policy/program applicable, sustainable, and effective from a public health and from the stakeholders' perspectives, what are the necessary preconditions for its implementation and what are the lessons learnt from the experience. It also provides a background perspective of the setting where good practices are developed.

The SWOT analysis

The SWOT analysis is a strategic planning tool used to evaluate the Strengths, Weaknesses, Opportunities, and Threats of a policy, a program, a project or an intervention. Although the method has been developed in the area of business and industry, it has been extensively used in community development programs, health and education. The strengths of this method are its simplicity and applicability to different contexts and levels of analysis, including policies and programs implementation and evaluation.

The purpose of performing a SWOT is to reveal positive forces that work together, and potential problems that need to be recognized and possibly addressed. It also enables participants to make a judgment and share their vision in a structured way, in order to enrich the common perception.

The SWOT analysis also offers a simple way of communicating in a glance about initiatives or programs. In a SWOT analysis (Fig.1) both internal attributes and external conditions are described:

- *Strengths* are internal attributes of the policy that make it work;
- *Weaknesses* are internal attributes of the policy that need to be addressed
- *Opportunities* are external conditions that may facilitate the policy implementation
- *Threats* are external conditions that may stand in the way of the policy implementation.

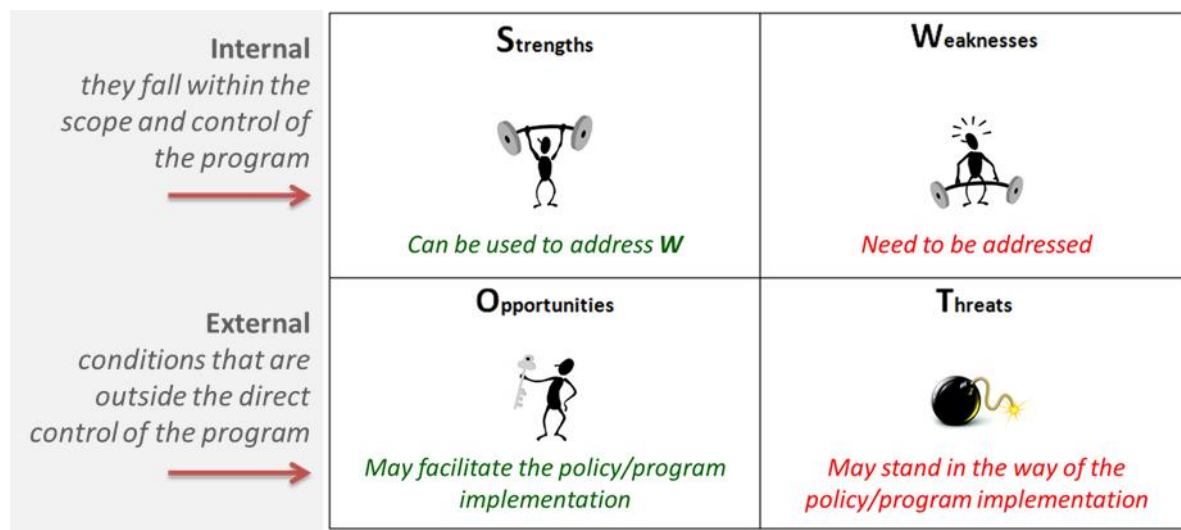
The analysis addresses and highlights all the characteristics, relationships and synergies among internal and with external variables of a phenomenon (i.e. policy or program). For this reason, the stakeholders involved in the analysis must have a specific knowledge of the topic and have an overview of the context. The analysis can be performed according to two different approaches: based on the single experts' points of view, collected by a researcher, or in a participatory way, e.g. through focus groups, metaplan or other methods. This second approach provides shared scenarios, taking into account the expert as well as other stakeholders' perspective (i.e. specific population groups, associations).

The timing of the SWOT varies depending on the objectives. The analysis can be:

- *ex-ante*, to improve planning and integration of a program in its context, i.e. to evaluate the preconditions for the program implementation;
- *intermediate*, to determine whether, in relation to the changes in the context, the line of actions identified are still relevant; in this phase, it can provide elements to decide changes in the program;
- *ex-post*, for evaluation purpose.

Once the internal (S&W) and external (O&T) attributes of the topic have been described in depth, some strategic actions, that can leverage on S&O in order to address W&T, can be identified by making a cross analysis of internal and external factors with the micro and macro environments of the program. It is also possible to set lines of actions to be implemented (intermediate), to describe the story of success and to produce recommendations based on lesson learnt (final). Furthermore, the methodology allows to make a cross analysis of internal and external factors with the micro and macro environments of the program.

Figure 1. Structure of a SWOT analysis



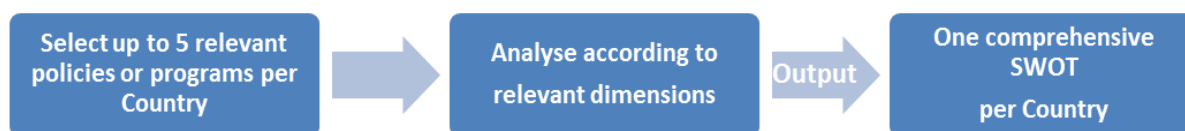
Methods

The methodology was presented, discussed and agreed during the 3rd meeting of the WP7, held in Rome on July 2-3, 2015. The partners were asked to include in the analysis five main current policies/programs on prevention and care of diabetes as standalone policies/programs or as part of a more comprehensive national plan (chronic diseases program, ...)(Fig. 2).. In the context of this analysis, we considered as a policy the stated principles that guide the actions of government. A public policy is a purposive and consistent course of action produced as a response to a perceived problem of a constituency, formulated by a specific political process, and adopted, implemented, and enforced by a public agency. A National Program usually, but not always, follows and translates into action a National Policy. The partners, and participating experts, were also asked to describe the successful strategies and the lessons learnt.

Those partners who represent associations/organizations conducted the SWOT considering policies on specific topics. The level of analysis has been national/federal or sub national. If no policies were available in a Country, the analysis addressed the external factors that could make the policy/program feasible and sustainable or that might be considered as external threats.

In the JA-Chrodis SWOT analysis different dimensions could be explored, including different aspects of the policies and programs that were deemed relevant such as: planning, endorsement by policy makers and stakeholders, implementation, organizational changes, partnerships, multi, inter or transectorality, management, aspects relating to human resources, technology and information systems, coordination of care (i.e. multi or interdisciplinarity), funding, integration with other policies/programs, supported by laws or regulations, leadership, empowerment, capacity building, monitoring and evaluation, internal and external communication. According to the different phase of planning or implementation in the different countries, the SWOT could be ex-ante, intermediate or ex post.

All the texts of the SWOTs, have been coded building up an interpretative model based on the categories, as described by the partners. The steps for the data analysis were: qualitative content analysis, deductive application of predefined categories and inductive development of new emerging categories [1-3]. The analysis was conducted using NVivo 10.0 software for qualitative data analysis.

Figure 2. SWOT analysis: the process

Results

By November 2015, 14 SWOT analyses were conducted (Appendix 1). Eleven country's SWOT with policies and programs analysis were conducted by: Austria, Finland, France, Germany, Greece, Italy, Lithuania, Norway, Portugal, Slovenia, Spain. In addition to the Country analyses, EWMA, EIWH and EPF/IDF Europe made analysis of policies on different topics:

- EPF/IDF Europe → Patients' perspective of national policies in Belgium
- EIWH (European Institute of Women Health) → Gender perspective of national policies and programs on prevention and management of diabetes
- EWMA (European Wound Management Association) → Management of the diabetic foot and education of professionals: a general overview across the EU.

A total of 53 stakeholders in 12 Countries contributed to the SWOT, reporting and analysing 39 policies (Tab.1, Fig. 3).

Table 1. Stakeholders and policies

N. stakeholders involved	57
mean per SWOT	4.07 (1-10)
N. policies included	44
mean per SWOT	3.14 (0-6)
Methods of participation	
email	10/22
meeting	9/22
group video call	2/22
individual call	1/22

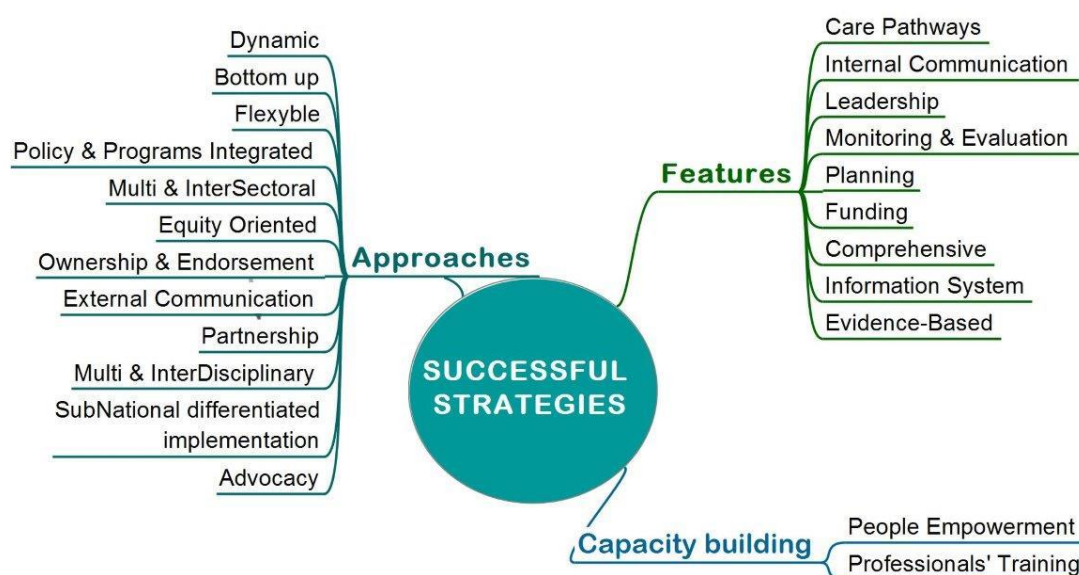
Figure 3. Countries contributing to the SWOT

STRENGTHS AND SUCCESSFUL STRATEGIES

The strengths are internal attributes of the policy that make it work, and the successful strategies were those considered as such by the participants, according to their experience.

The categories emerging from the SWOT analysis have been classified in three themes: approaches, features and capacity building (Fig.4).

Figure 4. Mind map of successful strategies representing the emerging themes and categories



Approaches

To be successful, a policy or a program need to be built on a bottom up approach and the process should be dynamic, being adapted on a regular basis, with the constant input and feedback by the stakeholders and involved organizations. The programs should also be flexible enough to give a general framework for activities, which facilitates relatively free conduction of the project by different partners. As a result, new models and practices are developed bottom up, based on local needs, resources and initiatives. In the same way, a national scale disease management program can provide a general frame, while the sub-national levels can develop their own structured diabetes programs, which take into account regional differences, geographic distances in some less populated regions, and other specific characteristics of the local context.

The integration of different policies and programs is a key point, cited by 9 partners. Diabetes prevention and treatment can be successfully integrated within other chronic diseases and health promotion programs, comprising primary, occupational, specialized health care and cross-sectional interventions. Moreover, the consistency between the different National Health Programs and Plans produces a synergy of actions at sub-national level, where actions and interventions are to be locally developed. Beyond the health sector, a participatory "health in all policies" approach supports the implementation of a strategy, assists in intersectoral cooperation and therefore leads to win-win solutions for complex problems.

According to the partners, an intersectoral approach: maximizes the health co-benefits of other sectors (i.e. municipalities, NGOs, national and local scale patients' associations, education and social sector, private sector, food, drug and equipment industry, marketing, media, universities and research institutes, political decision makers); enhances the networking and the concerted action; supports shared commitment and ownership, reducing the solo-thinking that is distinctive of the mono-sectoral approach. All partners and stakeholders, both nationally and locally, should be involved and engaged already from the very beginning of the planning, and the partnership should be kept active throughout the process.

Within the health sector, particularly important is the partnership of the regional and national medical associations. The active engagement of NGOs and Associations is deemed fundamental to improve the general awareness on specific topics, i.e. the gender perspective and the complex diabetic foot disease. When the collaboration among different partners from different sectors becomes systematic, the networking may continue even after the end of the project. In order to promote a successful intersectoral approach, it is important to demonstrate how the goals of the program promote and complement the enforcement of the mission of every stakeholder/organization.

All partners have highlighted the key role of the Associations of people with chronic conditions, whose actions and advocacy are described as strong and proactive. In one case, the program was enabled by the initiative of a strong patient organization and further facilitated by support of national authorities and local decision makers.

The multi and interdisciplinary approach is another successful strategy, aimed to an integration of skills and knowledge at all levels of the health sector, and seems to improve quality of prevention and treatment without necessarily increasing its total cost.

Health equity is often referred to low socio-economic and minority groups. The issue of gender should be considered on both national and EU levels of policies and programs. Partners refer a favourable reimbursement system of diabetes treatment, and the universal accessibility of care, as a successful strategy to address health equity.

External communication and dissemination is another key point for success to create general public awareness, media visibility, and to increase the knowledge and the participation in the programs. Communication experts should work in close collaboration

with the health care professionals in the program; a specific communication unit should be established to define the communication plans and to coordinate the activities: media campaigns, press conferences, newsletters to partners and media, press releases. The same group should coordinate the production of reports, information sheets, counselling materials and other materials for internal purposes.

Features

According to the responders, a strong scientific background is considered a key point. The guidance supporting the national and local programs must be evidence-based, providing data on the expected health outcomes (i.e. reduction of incidence of ulcers or amputation rates), diabetes prevention possibilities and risk scores. Evidence-based guidelines and specific prescription criteria and protocols for the management of diabetes are also provided. In some cases, the guideline embraces type 2 diabetes prevention, early detection and care, type 1 diabetes in childhood and adolescence, gestational diabetes and diabetes prevention in childhood and adolescence. It is highlighted that the strategy is not only evidence-based, but also a result of a consensus between all the parties.

The strategies should be comprehensive and address the most common risk factors of the four main NCDs (cancer, COPD, CVD and diabetes), as most of the persons with chronic diseases suffer from multiple comorbidity and will benefit from disease prevention initiatives cut across the specific diseases. Thus, strategies should be both disease specific and unspecific. Diabetes programs should be proactive rather than reactive. Attention has to be paid to prevention, promotion of healthy lifestyles and early detection of new cases, as well as prevention of complications.

From the organizational point of view, a successful strategy includes the definition of the needed positions (e.g. diabetes nurses, podiatrists, psychologists, dieticians) and a strategic continuity of care at all levels of the system of care. A clear description of the care pathways is needed, addressing specific groups (different ages, pregnancy), and the areas of health promotion, diabetes prevention and treatment, included specialist and intra-hospital referral. In some cases, the care pathways are defined at national level and supported by an information system at national, sub national and local level. Remote consultation and shared medical electronic record facilitate access to the individual data by the person themselves and by the health care professionals working on different healthcare levels. Early detection of new cases of patient decompensations may be handled through an automatic alarm system implemented through the integrated electronic medical record. A performant information system and the offer of e-services can reduce the attendance in outpatient clinics, decrease the average response time for hospital referral and reduce the hospital consultation.

Regular monitoring and evaluation, with a defined and shared set of outcomes and indicators, are important drivers for further programs implementation. Both quantitative - what happened - and qualitative - why and how it happened - evaluation methods can be fruitfully applied. Successful strategies include also population-level evaluation and a

systematic media follow-up, including population awareness on diabetes and other chronic conditions. An efficient monitoring system makes it possible to measure patients' outcomes, quality, effectiveness and cost of the interventions on primary care and hospital level.

From the planning point of view, dividing the program into sub-programs has facilitated the efficient and coordinated conduct of the whole task. The definition of sound objectives on integrated care, shared among national and subnational level has been a leading starting point. A strong and efficient leadership is needed, at governmental level (for policy action) as well as subnational and local level. The key elements of the leadership described are: shared values as the basis of the program, multidiscipline and multisector, centralized and shared coordination, at national, sub-national and local level, efficient planning, reporting and communicating, experienced group, political support, support and ownership by professionals, adequate funding, proactive communication, social demand for the action.

Internal communication is another key point, including the active involvement of doctors in their own practice, especially during the implementation phase. Practice outreach visit of GPs by the diabetes teams seems to be a successful strategy. Internal communication can be based on marketing strategies, in order to enrol in the program a large number of physicians. Emails, newsletters, reports, as well as face-to-face meetings and seminars can ensure efficient internal communication. Information and communication technologies are reported as determinant for an effective internal communication.

Although a structured and continued funding is difficult, different sources can be involved. In some cases, the municipalities and organizations invested also their own funds, engaging them into the program. Financial incentives for good practices of diabetes follow up by GPs have been undertaken in some cases. In any case, budget allocations are needed for an effective implementation of the programs.

Capacity building

In this analysis, capacity building is intended as the development and strengthening of human resources, focusing on people with diabetes and professionals. Good educational models and care strategies are essential and need to be shared with the persons with diabetes, to ensure successful management of the illness and a good quality of life. The theoretical knowledge necessary to develop consistent, up-to-date education already exists as well as structured curricula, basic and advanced courses and other educational initiatives (e.g. people at high risk, newly diagnosed people, management of the diabetic foot), included individual and group models and peer groups. Different educational models have been tested and evaluated and can be effectively used and adapted to specific needs and contexts. Still, the specific educational needs have to be identified and the demand answered, developing tools to raise awareness and health literacy, to support self-efficacy, self-management and patient-centred care, and to promote individual and group empowerment.

In the same way, effective, up-to-date and evidence-based training for the professionals is important. Starting from the identification of the training needs, the demand is answered and this increases the knowledge of health care professionals and improves their engagement. A successful strategy in the training of the health care professionals is the change of the education paradigm and shift towards coaching, instead of teaching, and the improving awareness of the importance of counselling skills and self-management education and the understanding of the change process, its characteristics and challenges. Thus, new tools and techniques in prevention and care are adopted, such as solution-centred counselling, motivational interviewing, empowerment-based approaches and the health care professionals training curricula are changed according to the new educational needs.

WEAKNESSES

The weaknesses of a policy/program are internal characteristics that might be under control and addressed within the program. The vision of a policy or a program is the capacity to envisage a future scenario and plan accordingly. The goal setting reflects the values and aspirations of the Public Health system, and encourages action.

It seems that, despite the efforts, medical paradigm and operational culture still prevailed during planning; furthermore, there might be a different understanding about national diabetes policies by government, health professionals and patient's associations. Policies and programs seems to be built mostly for single-disease treatment (i.e. type 2 diabetes only), whereas there is a growing need of a cross-disease prevention and treatment approach, i.e. in consideration of the complexity and comorbidity of people with DFU and people with multimorbidity.

The NCD strategy at national level needs an action plan about how to reach the goals, that was not always provided. The process ahead of, and during the development of the strategy needs to be transparent, including the analysis of needs and resources.

From a gender perspective, apart from pregnancy, there is not enough attention on how diabetes specifically affects women and no specific action is provided. Attention on groups at disproportional risk from diabetes (low socio-economic groups, specific minorities) without including women specifically, obscures the issue; women are subsumed into the assumption that being male is the norm and that there are no different approaches needed. The broad perspective on public health issues and primary prevention, may lead to less attention to high risk groups.

The stakeholders' involvement can be a challenge: the coordination by patients' organizations was not always welcomed by health care operators; in some cases, the stakeholders had their own priorities which could distort the actions. The role of the different stakeholders has not always been clearly defined and the level of participation has not been consistent with the program's needs. In some cases, the collaboration relied too

much on few motivated individuals and it has partially ceased during the program, lacking of long-term broader sustainability. As a multiple sector involvement was not systematic, in some cases, some important actors in the society were not included (e.g. social and employment services). When partners from different sectors participated to the policy making and programs planning, they had different strategies, operational cultures, decision-making systems, planning and reporting schedules which consumed a lot of resources. Also the paradigms and conceptual systems might differ, and it takes a long time to agree and build a common ground and terminology.

NCD strategies are mainly multisectoral¹, in some cases intersectoral² but still lack in transectoral³ approach (e.g. transport, urban planning, agriculture, marketing and trade). A binding transectoral approach is however necessary to battle the underlying risk factors of poverty, lack of education and unhealthy environmental conditions.

From an evidence-based practice perspective, the integration of results from health/care/translational research could in some cases be quicker (e.g. delays in updating the guidelines). Specific action and treatment options to prevent diabetic complications are not always provided within the national strategies and may be underestimated.

The reported challenges related to the management of the programs included:

- complex administrative rules on management procedures;
- poor coordination between local, regional and central authorities within the Ministry of Health;
- organizational, strategic and personnel changes, that affected the partner's contribution;
- fragmentation of the existing diabetes prevention and care/cure programs and clinical activities;
- limited service coverage, especially in rural and remote areas;
- not clear definition of care pathways at sub-national and local level;
- models of care not defined in detail (i.e. education, diabetic foot, gender perspective);
- beyond the basic framework defined by the strategy, the treatment need to be individualized, customized based on risks, age, needs, complications, etc;
- difficulties to involve GPs into the program activities;
- allocation of human resources is in some cases inadequate; implementing the programs adds to the workload of the healthcare professionals, whose time is

¹ *multisectoral*, when different sectors work together but stay within the boundaries of their areas of action

² *intersectoral*, when actions are undertaken by sectors outside the health sector, possibly, but not necessarily, in collaboration with the health sector, on health or health equity outcomes, or on the determinants of health or health equity; different sectors work together to create links between their different areas toward a coordinated and coherent action

³ *transectoral*, when different sectors work together to integrate their different fields of action, transcending each of their traditional boundaries, creating a unity of frameworks, beyond the different sectors' perspectives

- already limited; other healthcare professionals may fear that the policy/program implies a greater control over their work and may be resistant to change;
- talented healthcare professionals who have an institutional vision get demotivated when they have to fight organizational obstacles while providing care, or when the success of the program depends on a change in patient's thinking and actions; there is an increased demand for care, but the results are not apparent in real time;
 - part of the specializations/professions (i.e. podiatrists, specialized diabetes nurses, dietitian) that is required to establish a full multidisciplinary team is not existing, formalized or reimbursed in many countries;
 - new care paradigm, multi and inter-disciplinary, patient-centered approach, takes long time to be adopted;
 - primary and secondary care integration and referral system for different conditions (i.e. complications, diabetic foot) need to be strengthened;
 - inclusion of private patients, that do not formally have access to the public Disease Management programs.

Effective management of NCDs requires a comprehensive and integrated approach. Today's care is not organized in multi or interdisciplinary health-care teams and patients are not linked to community resources. Integrated and holistic care requires increased collaboration between health-care workers and patients to ensure that patients and their families have the knowledge, tools and skills needed for self-management of chronic conditions.

A critical issue is the hospital treatment of the diabetic foot disease: the treatment reimbursement systems are based on payment by item rather than by results. The DFU care is complex and expensive and is not rewarded and recognized as an entity in the ICD 9 code. As a consequence, there seems to be a tendency to refuse diabetic foot patients in hospitals or to inappropriately reduce the length of the hospitalization.

Discontinuous, suboptimal or no funding to support the policies/programs/strategy implementation has been reported. Budgetary constraints were due to unexpected cuts in the general health budget, leading to severe cuts in well-established prevention projects. Some of the goals were not realized due to shortage of funding. Some specific activities, i.e. patient education, DFU prevention, did not have a dedicated budget.

There is a limited availability of data at national level, diabetes registers are not established in all countries or there is a lack of consistency in different sub-national levels; due to these constraints, national assessment and evaluation and comparison among different sub-national levels is problematic. In addition, due to their broad scope, it is rather difficult to evaluate the defined goals of the strategies; IT systems are rigid, not specifically tailored on the programs needs, and do not facilitate follow up of preventive interventions nor process, cost-effectiveness and outcome evaluation (e.g. lifestyle follow-up), comparison between different interventions or critical revision and subsequent action. They are also lacking of medical records. In some cases, the evaluation process of the strategy is not described or planned or the stakeholders have been unable to agree on a set of indicators. Baseline data

and quality measures are scarce concerning the targets and goals set in the strategy, and the targets are not connected to care pathways, which would make it more close-to-practice.

Educational programs tend to be disease-specific rather than addressed to persons with multimorbidity and lack of an integrated care approach e.g. from hospital to home care), addressing diabetes management and lifestyle interventions. . The programs are in some cases "overwhelmingly hospital based", do not include a closest knowledge of the person, including family members and caregivers, and do not address specific needs of the person after hospitalization (e.g. prevention and treatment of DFU care at home). The biomedical paradigm is still predominant (e.g. emphasizing drug treatment); thus, entrenching "empowerment" can be a huge task. In context where educational programs are not supported by a dedicated budget, they are less valued than other more "clinical" aspects of the care pathway. In order to improve patients' awareness and commitment to self-care, in addition to conventional lifestyle counselling, information and communication technologies should be used with the goal of improving adherence to treatment plan. Nevertheless, as the government are increasingly promoting electronic services, attention must be paid to maintain the expert services and personal contacts to health care providers.

The resourcing of the communication does not always match the need and the long and multi-faceted program. External communication has been weak, with suboptimal media coverage. In some cases, internal communication has not supported adequate visibility of the program among members of the stakeholders' organizations.

OPPORTUNITIES

Opportunities are external conditions that are not under the direct control of the policy/program, and may facilitate its implementation.

There is an increasing awareness across European institutions and health care systems that actions must be taken to address chronic conditions prevention and health promotion. Governmental support and general political commitment is indeed an opportunity, supporting the "health in all policies" paradigm, NCD care, prevention and health promotion. It is also essential to guarantee a strategic continuity and funding. Having a NDP is considered a key factor in the definition of the country's health priorities.

Current health care reform process around Europe uses diabetes as a case study to analyze programs' design. The economic crisis induces a health system reform momentum, where cost-effectiveness and ethical considerations are taken into account, moving towards a patient centered, integrated and coordinated health and care approach.

Sharing and exchange of best practices of chronic care management and integrated care at European level is acting as a motivator; some programs have been used as a model outside the original Country of implementation.

The society is becoming increasingly sensitive to the prevention of diabetes as a health problem and a social issue, in parallel to the increasing prevalence and social impact, resulting in a reduction of the social stigma of persons with diabetes. The increasing awareness of the patients facilitates an active participation in their own care and promoting healthy lifestyle having a positive effect on their immediate environment. Among the opportunities, media visibility of the policies and programs improves awareness of professionals, patients, general population, and political decision-makers. New communication technologies and social media may facilitate the dissemination of the preventive strategies.

There is a full range of chronic disease prevention and control initiatives that have been proven effectual and cost-effective at both the subnational and national levels. The strategy gives an opportunity to explore, systematise and scale up initiatives proven to be effective. Where organizational and clinical national guidelines are available, implementation, monitoring and modification to fit local context and endorsement by local professional societies is made easier.

The development of ICT tools in the everyday clinical practice (e.g. e-records, e-prescription, e-protocols) will be a boost to the potential of monitoring and evaluation. There are best practice examples available on cross-sectoral collaboration and data sharing (e.g. DFU education), and an easier access of patients to electronic platforms allows for continuous monitoring and support.

Although still limited, prevention is now emphasized in the university training curricula for health care professionals, in the Continuous Education Program, and new competence-based curricula are being developed for integrated chronic disease management and care.

The existence of established policies or programs within the health system and from different sectors (e.g. social sector, education), allows harmonized and target-oriented interventions. In countries where health care reforms are going on, integrated care, health literacy and the primary care sector are important areas of action.

A broad participatory approach during the development of policies and programs is considered a starting point for stakeholders involvement and effective multi and transectoral collaboration. Moreover, there is a huge unexploited potential in transectoral interaction and cooperation between governments, local policy makers, organizations and manufacturing and commercial industry to build infrastructures that promotes healthy living. Workplace environment offers opportunities for prevention, early detection and management of chronic diseases that we have not yet exploited to the fullest as well as curricular health promotion and prevention education programs in schools. The strong role of patients' organizations as well as proactive health professional societies (GPs, diabetologists, nurses, dieticians, other specialists for diabetes complications, etc.) facilitates the multi-sectorial and multi-professional collaboration.

New partnerships, e.g. the collaboration between pharmacies and health care in preventive activities, open new scenarios. Redefining collaborations and traditional roles according to

validated care models, leads to improvements in efficiency and quality of care, e.g. establishment of integrated care and interdisciplinary teams, change in the traditional roles of health professionals and patients towards a more symmetrical relationship.

Many methods, tools, and outlooks fostered by the program have been integrated by the system and become part of the “basic structure” in health care. New programs and initiatives that derives or further develop the original program in some cases grant sustainability. Sustainability is improved by strengthening the leadership between the different parties involved and, at the same time, by promoting the role of the programs as “forum” where these parties can meet. In addition, there is an increased awareness of the national insurance systems for the “preventive and meaningful care” and more effective reimbursement schemes are available.

THREATS

Threats are external conditions that are outside the direct control of the program and may stand in the way of its implementation.

Despite being improving, the culture of disease prevention and health promotion is still low; on the other hand, from the science perspective, we still have gaps in our knowledge of diabetes and NCDs in general.

The prevalence of NCDs, diabetes and pre-diabetes in the general population is growing, as well as obesity in children, with a persistence of social inequalities in health. In European modern lifestyles there is a widespread of sedentary, use of alcohol and tobacco; the culture of eating and drinking is difficult to change, as it is to maintain healthy lifestyle changes. New habits might be more difficult to implement in some particular regions, due to geographical, cultural and demographic characteristics.

Specific laws promoting healthy lifestyles are scarce across Europe. Industry and economic lobbies in general affect political decisions and do not always support healthy lifestyle.

In countries with strong federal systems, one of the threats is fragmentation of activities, with scarce ownership and a definition of competences and responsibilities that is not always clear. This is critical in countries where Primary Care organization is under the responsibility of municipalities, where fragmentation might be extreme. The fragmentation affects the implementation, management, assessment and evaluation of the programs. Policies themselves might be different in different areas of the Country. For this reason, there is a variable uptake of guidelines, variable use of dedicated funds among levels of care and geographical regions; national monitoring and evaluation may be rarely performed. In some cases, the national policy/program is a recommendation and partners can choose how much to invest on it or how they follow the plan. This leads to a lot of variability between

different areas and municipalities. Again, the national strategy does not always include "examples of how initiatives can be implemented locally, according to regional needs and features".

To be effectively implemented, policies and programs need a clear political commitment that might be challenged by political changes and absence of long-term endorsement, particularly at sub-national level. At local level, decision makers do not always have knowledge or comprehension to make health policy decisions that have a multifold and long-term effect. Changes in the health authorities' priorities may also relegate the application of the strategies. In some cases, despite being adopted by the government, no transectoral support is felt. The political priorities shift too fast, before the strategies become fully entrenched; and if the strategies are not actively maintained, they will lose prestige in the eyes of the healthcare professionals and become "just another document that does not evolve". The political influence on the managers of healthcare organization is strong and primes over the technical point of view. In addition, the primary care professionals and the healthcare system itself are overwhelmed by the confluence of numerous health priorities at the same time.

Different care paradigms coexist and sometimes conflict with one another. Prevention and care are still seen as "competitors" of resources, workforce, facilities, as programs and projects may compete over same funding and same personnel. A narrow, medicine-based conception of health care is still common among professionals and decision-makers. Within the health system itself, there is a fragmentation of responsibilities and competencies among prevention and health care; health services are mainly addressed to acute care rather than prevention and health promotion. Thus, there are still barriers to implement an integrated care model in hospitals.

Despite some successful experiences there is not, at the moment, a systematic integration of national policies or programs embracing different sectors. Inter and transectorality are part of the policies and programs, but there is poor connection with sectors covered by other Ministries. In some cases, budgeting practices at local level do not support cross-sectoral collaboration.

Initiatives that has been proven effectual and cost-effective at subnational and local levels, does not necessarily have the same effect in another local context. We lack experience and knowledge of which factors affect the extent of local implementation and transferability of successful practices is uncertain.

The current economic crisis is challenging the public health systems across Europe, leading to large reforms and uncertainty about e.g. prevention and health promotion. The aging population will have increasing demand for health services, yet the available resources will get smaller. In times of limited resources (finance, personnel), budgeting practices do not support the activities that are not strictly related to care (e.g. cross-sectional collaborations) and are destined more towards the treatment than prevention of diabetes or other NCDs. When budgets get more and more tight, different sectors and professions may try to protect

their own status. This can impede multi-professional teamwork and prioritize clinical treatment while preventive activities may be omitted. In some cases, the National insurance institution does not reimburse preventive activities, education or lifestyle intervention. Irregular long term funding is also a threat for sustainability. The debate about public-private health services continues. If private companies will sell their services to the municipalities, with cheapest bid winning the tender, how much value will quality of care and preventive services have?

The economic constraints, health care reforms and independence of sub-national and local levels in budget allocation raise the question of accessibility (diagnostic tests, treatment, drugs and devices) and equity.

The legislation on data security and privacy may hinder the assessment and evaluation process (e.g. the evaluation of health care practices).

University curricula and health professionals' pre-service education are still not dealing with the changing needs of the ageing population (e.g. NCD integrated care, diabetes clinical care and management, DFU, prevention, empowerment, team working). Physicians and patients are not sufficiently taught in the importance and practical principles of working together as a team and there is not enough exchange of skills and knowledge.

As media attention and communication on NCDs is growing, it is sometimes claimed that people have the right to be and behave as they wish, and constant pressure from the authorities, e.g. to reduce obesity rates in the population, is a threat to people autonomy. On the other side, thanks to social media lay people are more actively than ever before taking part in discussions about lifestyle (e.g. healthy diet), questioning the authority of "experts". Social media do not make difference between experts with research-based knowledge and lay people with personal experience-based opinions. This creates confusion among the patients and general public ("recommendations change all the time").

Lessons learnt

Some lessons learnt have been collected during the SWOT process, summarised as follows:

- Define the legislation before implementing a strategy.
- Define the standards in care.
- Pay great attention to issues of disadvantage, recognizing that diabetes does not affect everyone in our society equally (e.g. women).
- Expect strong resistance towards system change from systems and professionals who are not accustomed to multidisciplinary team approaches to DFU management.

- In case the change is realized on regional level or even on a national level, support of the Ministry of Health and the reimbursement system is of utmost importance (e.g. DFU care).
- Continuous lobbying of decision-makers/politicians is mandatory.
- The implementation of integrated care systems needs both strong political engagement and middle/long term funding. The policy/program reduces its impact and credibility when there is no budget linked to it.
- All changes take time and resources (more than anticipated).
- The dominance of medical paradigm vs a more comprehensive view of health promotion and patient-centered care is a challenge.
- Rigid organizations, traditional distribution and mode of work, and general resistance to change need to be overcome.
- IT systems need to be reformed to facilitate the evaluation of quality and cost-effectiveness of care, health-promotion and prevention.
- National Registries and National Surveillance System are needed.
- Before launching a strategy, baseline data of prevalence, incidence, comorbidities and complication rates it is necessary to draw attention to the right problem areas and be able to evaluate the effects of the initiatives.
- The evaluation process should be planned and described in the strategy and there should have been executed a cost analysis of what is required to fulfill the goals set in the strategy.
- Health-care professionals want to do their best – give them an opportunity to improve and they will grasp it.
- The investments in training of health professionals is cost-effective provided that, at the same time, the necessary organizational changes are promoted.
- Complex organizational changes, including multi-professional team work and integration of primary and secondary care, cannot be delegated to the responsibility of the individual, although properly trained and motivated.
- Proactive professionals and patients' organizations may lead the process.
- In addition to working at national level, focus should go down to local/regional level, energising the local stakeholders, showing them the benefits of working together, identifying the same general goals – the same process as happened at national level.
- Integration at local level will need many champions, facilitators – NDP should develop its mobilizing power.

- New people on board are needed, and may not have the same background of experience like those who co-created the NDP, and that will bring opportunities as well as threads.
- Go out from healthcare system.
- The success of the program depends on the motivation of the professionals; the health administration merely provides means and resources.
- The diabetes programs need to take into account and work with all the risk factors at once. Peer education provides extra value to the patients; they feel accompanied in their disease. The patient truly needs to be the center of the care. The healthcare professionals need to increase their empathy and be aware of the real needs of the patients.
- We need to be aware that 98% of the daily decisions in relation to treatment are made by the patients at home, and focus our efforts accordingly. Diabetes is a complex and multifactorial disease that requires a series of strategies in order to prevent complication. These interventions must be coordinated and integrated across all levels of healthcare.

Conclusions

The SWOT analyses have been developed across Europe, in countries that vary in political, administrative, social and health care organization. These differences, as well as the different levels of cultural and organizational preparedness to face the NCDs burden, lead some to identify as a weakness or threat what for others is a strength or opportunity. The whole of these considerations, thoughts, experiences and insights draws an overall picture of the complexity, challenges and potentials (Fig 3) when designing and implementing good policies and programs. These results may apply to any context and may be used by decision makers, managers, professionals and other stakeholders to focus on key-issues, recognizing areas for attention.

References

1. Pope C, Mays N. Qualitative Research: Reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services research. *BMJ* 1995;311:42.
2. Pope C, Ziebland S, Mays N. Analysing qualitative data. *BMJ: British Medical Journal*. 2000;320(7227):114-116.
3. Pope C, Mays N. Qualitative research in health care. July 2006, *BMJ Books*.
4. *Adapted from:* Choi BC, Pak AW. Multidisciplinarity, interdisciplinarity and transdisciplinarity in health research, services, education and policy: 1. Definitions, objectives, and evidence of effectiveness. *Clin Invest Med*. 2006 Dec;29(6):351-64.
5. World Health Organization. Public Health Agency of Canada. Health equity through

Appendix

Partners SWOT Analyses

AUSTRIA

Country: Austria (AUT)

Date: 8th October 2015

Partner: Gesundheit Österreich GmbH (GOEG)

Name of responder: Brigitte Domittner und Sabine Weissenhofer

Partners/Stakeholders involved in the analysis:

- 10 Rahmen-Gesundheitsziele (10 Health Targets for Austria) - Mag. Ilana Ventura - *Ministry of Health*
- Nationaler Aktionsplan Bewegung (NAP b.) - Robert Moschitz, BA - Ministry of Sport
- Nationaler Aktionsplan Ernährung (NAP e.)- Mag. Petra Lehner - *Ministry of Health*
- Vorsorgeuntersuchung - Stephanie Stürzenbecher, MA - *Austrian social security organization*
- Disease Management Programm Therapie Aktiv (DMP Therapie Aktiv)- Mag. Gerhard Hofer - *Austrian social security organization*

Review: Eva-Maria Kernstock, Robert Griebler (GOEG)

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. 10 Rahmen-Gesundheitsziele (10 Health Targets for Austria)
2. Nationaler Aktionsplan Bewegung - NAP b. (National Actionplan on Physical Activity)
3. Nationaler Aktionsplan Ernährung – NAP e. (Austrian Nutrition Action Plan)
4. Vorsorgeuntersuchung (preventive medical check up)
5. Disease Management Programm Therapie Aktiv (DMP Therapie Aktiv)

Please note: A SWOT analysis across the very heterogeneous strategies and programs in Austria are very problematic. Particularly because the focus of the strategies and programs are quite different - for instance the Health Targets for Austria mainly deal with health promotion and therefore are not focusing directly on diabetes in comparison to the DMP Therapie Aktiv. Therefore the following analyses has limited validity.

Positive ↓

Negative ↓

internal ↓

Strengths	Weaknesses
<i>(Strengths are internal attributes of the policy)</i>	<i>(are internal attributes of the policy that need to be addressed)</i>
<ul style="list-style-type: none"> - Strategies are often developed with a participatory “health in all policies“ approach (it supports a shared commitment/ownership and silo-thinking is reduced) - Strategies support health promotion, diabetes prevention and treatment - Strategies take vulnerable or certain target groups in consideration (health equity) - one of the key aspects is equality of opportunities for all social groups - Strategies support a multi-/inter-sectorial and/or a multidisciplinary approach (it supports a shared commitment/ownership and silo-thinking is reduced) - Social determinants are taken into account - Definition of goals / measures as well as indicators (evaluation, monitoring) - <i>NAP e.</i>: Nutrition measures (actions to improve the nutritional status of Austrians) are harmonized – the Austrian Nutrition Action Plan is the rolling, regularly adopted strategy for all nutrition measures - <i>NAP e., NAP b., 10 health targets:</i> Intersectoral approach and interdisciplinary cooperation, enhanced networking and concerted action - <i>NAP b.</i>: Not a static strategy, more like a rolling strategy it aims to be adapted regularly - <i>10 health targets:</i> 10 health targets is a dynamic process with the constant input and feedback by 40 different stakeholders/involved organizations - <i>DMP Therapie Aktiv:</i> Recent program evaluation (e.g. positiv effects on mortality and cost reduction) → driver for further implementation - <i>DMP Therapie Aktiv:</i> The recent evaluation of the program “DMP Therapie Aktiv“ (spring 2015/Medical University of Graz provides scientific documentation of the benefits of the program, therefore increased enrollment in the program - both doctors and patients - is expected. 	<ul style="list-style-type: none"> - Due to the federalism in Austria programs as well as data and statistics are often only regionally available, there is rarely a nationwide evaluation - Limited (long-term) data/statistics (no diabetes register) → aspects are partly available, but not nationwide (<i>not applicable for 10 health targets since focus on health promotion and not on diseases such as diabetes</i>) - Partly limited evaluation and/or only monitoring of the strategies / programs (<i>not applicable for 10 health targets: there is a comprehensive monitoring concept for the 10 health targets including their measures</i>) - Constraints due to budgetary cuts. <i>NAP e.</i>: well established prevention projects lost funding and could only be continued with severe cuts - Due to their broad scope it is rather difficult to evaluate the defined goals of the strategies - Political will and commitment across all sectors need further strengthening - The degree of stakeholder involvement can be a challenge (involve partners and intersectoral cooperation while at the same time staying operational) - <i>DMP Therapie Aktiv:</i> Level of commitment among providers is expandable - <i>DMP Therapie Aktiv:</i> Regional projects with separate contracts (not a national program) - <i>DMP Therapie Aktiv:</i> Prevention and early identification of people with diabetes is not connected to the DMP Therapie Aktiv - <i>DMP Therapie Aktiv:</i> DMP Therapie Aktiv provides care only for type 2 diabetes evolves mostly GPs and partly diabetes counselors - <i>DMP Therapie Aktiv:</i> Only a small percentage of people with diabetes receive care within the DMP Therapie Aktiv

external ↓

Opportunities	Threats
<p><i>(are external conditions that may facilitate the policy implementation)</i></p> <ul style="list-style-type: none"> - Governmental support and general political commitment – HiAP - Identify windows of opportunities - Recent national policies were developed - <i>NAP e.</i>: Austria has a official nutrition policy since 2011, this allows harmonized and target-oriented measures - Health care reform (Zielsteuerung Gesundheit): integrated care, health literacy as well as the redesign of the primary care sector are important areas of action - A comprehensive national diabetes strategy is currently being developed with a broad participatory approach and will be available early in 2017 - Financial pressure and expected positive effects of prevention (morbidity and economic effects) have the potential to enforce the focus on prevention - Foundation for action → challenges are well known (Diabetes-Report 2013) 	<p><i>(are external conditions that may stand in the way of the policy implementation)</i></p> <ul style="list-style-type: none"> - Limited resources (finance, personnel) - Sometimes lacking cooperation and motivation of stakeholders - Federalism – competences and responsibilities are not always clear - Fragmentation of responsibilities and competencies within prevention and healthcare - Lack of political support due to political changes - Lack of legislation (e.g. to allow/enforce data sharing among care providers or to allow different forms of primary care provision including prevention) - Care structures in Austria are mainly addressed to acute care, further attention to chronic diseases is needed - Structures for prevention are not as well developed as those for care - So far lack of a comprehensive diabetes strategy - the former diabetes plan 2005 was not implemented

Successful strategies:

- participatory “health in all policies“ approach supports the implementation of a strategy, assists in intersectoral cooperation and therefore leads to win-win solutions for often complex problems
- Health co-benefits are integrated in projects and activities of other sectors
- *NAP e.*: Common intersectional approach, enhanced networking, concerted action – successful measures in prevention could be implemented (“Richtig Essen von Anfang an” – Eating well from the beginning” and “Unser Schulbuffet” – Our school buffet”). Although funding is difficult they were continued.
- *DMP Therapie Aktiv*: For a successful implementation the support of doctors in own practices (GPs and specialists) and their representative bodies (regional and national medical associations) is particularly important. In recent years practice visits by the DMP-Team have been undertaken to convince doctors of the benefits of the DMP Therapie Aktiv – in some regions (e.g. Styria, Salzburg) with good results.
- *DMP Therapie Aktiv*: National marketing activities are attempting to get more doctors (currently doctors in own practice) interested in the program DMP "Therapie Aktiv.

Lessons learnt:

- Definition of legislation before implementing a strategy
- *NAP e.*: Constraints due to budgetary cuts
- The right mindset is needed in order to actively work with HIAP
- Windows of opportunities assist in implementation and operation

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BELGIUM

Country: Belgium

Date: 7th October 2015

Partner: EPF/ IDF Europe

Name of responder: Viviane de Laveleye and Stijn de Ceukelier

Partners/Stakeholders involved in the analysis:

1. French and Flemish Diabetes Associations
2. L'Association Belge Du Diabete and Diabetes Liga respectively

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. Diabetes convention for treatment (official name: revalidation contract)
2. Flemish prevention program on gestational diabetes + pilot program
3. Sub-regional prevention program (for French speaking community)
4. Aspirational national diabetes plan
5. And others...

	Positive ↓	Negative ↓
internal ↓	<p style="text-align: center;">Strengths</p> <p style="text-align: center;"><i>(Strengths are internal attributes of the policy)</i></p> <ul style="list-style-type: none"> - Equal access for treatment - High quality of treatments - Good cooperation with GP and endocrinologist, gyno (in case of gestational diabetes) - Patient education and follow up (no break in the continuation of the service) - Informed consent for data exchange - Multi-disciplinary care team - Prevention programmes based on internationally recognised standards (IDF, ADA, EASD). 	<p style="text-align: center;">Weaknesses</p> <p style="text-align: center;"><i>(are internal attributes of the policy that need to be addressed)</i></p> <ul style="list-style-type: none"> - Onus on the patient to seek medical care - The high quality treatments may turn into a weakness, leading to consider diabetes treatment a lesser priority for the healthcare system. - No flexibility of educational plans and care programs (in terms of age of the patient etc) with consequent waste of resources and lack of them when they are needed - Lack of general awareness on risks connected to diabetes (not only among civil society but also people in close contact with diabetes patients). - No National diabetes framework bringing all diabetes programs together. All the necessary programs across the diabetes continuum exist, there is just no vertical framework
external ↓	<p style="text-align: center;">Opportunities</p> <p style="text-align: center;"><i>(are external conditions that may facilitate the policy implementation)</i></p> <ul style="list-style-type: none"> - Reimbursement scheme can be improved to allow, for example, more educational sessions - Opportunity for the Belgian government to cooperate with other MS, such as on Health Technology Assessment - Technology to further integrate multidisciplinary teams of HCPs - Personal medical records to keep track of patient journey – currently only available within the social security equivalents. - Accessible data to patients over potential treatments and trends – valuable research 	<p style="text-align: center;">Threats</p> <p style="text-align: center;"><i>(are external conditions that may stand in the way of the policy implementation)</i></p> <ul style="list-style-type: none"> - Pressure from other chronic conditions to distribute resources - Small market for pharma companies (it is somehow mitigated by the fact Benelux negotiates as whole with pharma) - Due to good treatment, diabetes make drop down in priority - This means it COULD lead to less investments for innovative treatments and keep a status quo, with potential side effects in the long run - Low level of education and skill development of HCPs (some tend to keep patients even though they are not skilled, for economic benefit reasons) - Too much data freely available – threat to patient - Fragmentation of the system: only mutualities have the full picture - Free access – choice of HCPs – status quo

Successful strategies:

Treatment is very well viewed for diabetes in Belgium. It is a federal competence, and thus there is equal access to facilities and treatment options across Belgium. Systems are in place for the patient to receive the right kind of treatment, and this is monitored through signing a 'contract' with the HCP on what the patient is required to do in order to receive all the benefits from social security and reimbursement. One successful strategy is that in the Flemish region for gestational diabetes, where women are followed-up and monitored over a given period. This is made possible due to good collaboration between different HCPs and Diabetes Liga is coordinating this project

Lessons learnt:

The same system has been adapted from the top down, using the conventions, *trajets de soins* and diabetes passports. It is clear that all the necessary options for people with diabetes are available, from prevention/screening to education and treatment. It is important to carry on with the programmes that are working, be it on a local, sub-regional, regional or sub-national level. However, it is highly unlikely that there will be a National Diabetes Plan. The main reason is the political and administrative fragmentation of Belgium, across geographical locations as well as populations. In theory, such a national plan would cost very little, because all the major elements are already in place.

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GENDER PERSPECTIVES IN POLICY

Country: Gender perspectives in policy

Date: 7th October 2015

Partner: EIWH

Name of responder: Vanessa Moore

Partners/Stakeholders involved in the analysis:

1. Peggy Maguire EIWH
2. Maeve Cusack EIWH

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify : Email discussion and meeting

Included policies and programs:

1. English National Service Framework for Diabetes: Standards

Rationale

Our initial plan was to find a policy which focused on gender and diabetes in general (and not just on gestational diabetes), preferably on an European level. However we could not find anything like this, and therefore began to look for something less gender-specific but more developed than what exists in Ireland. For that reason, we decided to look at the diabetes standards that exist in England created by the NHS. We felt that these was more practical and "hands-on" standards as opposed to general European standards. We chose the NHS document as the English health system will be familiar to anyone living in Ireland (as well as for ease of access as it is in English) and we could therefore analyse it more in-depth.

Positive ↓

Negative ↓

internal ↓

Strengths	Weaknesses
<i>(Strengths are internal attributes of the policy)</i>	<i>(are internal attributes of the policy that need to be addressed)</i>
<ul style="list-style-type: none"> - Awareness of the problems diabetes causes for low socioeconomic and minority groups and the complexity of this is a good nod towards an intersectional view of issue - Focus on CVD mentions women (albeit briefly) – refers to the National Service framework for Coronary Heart Disease at a number of occasions, showing good integration with other policies - Good attention on diabetes and pregnancy, and gestational diabetes - Emphasis on lifestyle behaviour programmes - Excellent awareness of and sensitivity to patient empowerment and individual patient needs 	<ul style="list-style-type: none"> - Not enough attention and discussion on how diabetes affects women in particular - States that “women with diabetes are at relatively greater risk of dying than men. This may be because gender compounds other aspects of inequality” but does not develop this in any way throughout the document

external ↓

Opportunities	Threats
<i>(are external conditions that may facilitate the policy implementation)</i>	<i>(are external conditions that may stand in the way of the policy implementation)</i>
<ul style="list-style-type: none"> - Expand equity perspective to more specifically focus on women - Emphasise and expand issues of CVD and women with diabetes - Older people are mentioned throughout the Framework – the inclusion of older women’s issues with diabetes is an opportunity to further help older people 	<ul style="list-style-type: none"> - Attention on groups at disproportional risk from diabetes (low socioeconomic groups, specific minorities) without including women specifically, obscures the issue - Women are subsumed into the assumption that being male is the norm and that there are no different approaches needed

Successful strategies:

The English National Service Framework from Diabetes: Standards continuously emphasises the importance of the quality of care and the importance of good education and care strategies to exist between health care services and the diabetes patient, to ensure successful management of the illness and a good quality of life for the person. However, from a gender point of view it falls short on emphasising issues that are unique for women, apart from pregnancy. It alludes twice to the specific issues that confront women, namely CVD and that women are more likely to die from diabetes. However, it does not discuss or develop this in any way throughout the Framework, leaving it short of its self-defined goal of improving diabetes care for all. The issues of gender should be considered on both a national and EU level.

Lessons learnt:

Standards in care are crucial. While paying great attention to issues of disadvantage and other problems facing people with diabetes, and recognising that “diabetes does not affect everyone in our society equally”, it is key to include women, as many issues of deprivation, socially excluded communities and hard to reach groups disproportionately affects women. This is necessary on both a national level, as well as on EU level to ensure that a gender perspective is included across the board. An increased focus on women’s health issues in diabetes, as well as an intersectional approach to these issues would greatly aid the further development of the standards.

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EUROPEAN WOUND MANAGEMENT ASSOCIATION

Country: N/A (European level)

Date: 13th October 2015

Partner: European Wound Management Association (EWMA)

Name of responders:

- Prof. Dr Alberto Piaggese (EWMA Honorary Secretary)
- Dr. Jan Apelqvist (EWMA Past President)
- Dr. Kristien van Acker (Chair of the International Working Group on the Diabetic Foot (IWGDF))

Partners/Stakeholders involved in the analysis:

The International Working Group on the Diabetic Foot (IWGDF) (www.iwgdf.org) with European network and regional and national representatives (see website)

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. The 2015 IWGDF guidance documents on prevention and management of foot problems in diabetes: Development of an evidence-based global consensus
2. NICE guidelines (August 2015): Diabetic foot problems: Prevention and management

Best practices:

Belgium:

- National level certification of diabetic foot centres with benchmarking system
- Collaboration with Germany regarding establishment of DFU registers
- Collaboration on a national registration program with the reimbursement systems on amputation rates with Germany

Europe (mainly directed towards countries in eastern part of Europe)

- European train the foot trainers programme (<http://www.tfft.org/ehome/index.php?eventid=97488&>) in cooperation with FEND, DESG, EWMA, DFG, FEND, UNMF, EASD, IDF Europe and IDF global

Germany:

- Collaboration with Belgium regarding establishment of DFU registers
- German diabetic foot certification programme (peer to peer certification of diabetic wound centres)
- International course on the Neuropathic Osteoarthropathic Foot (Charcot Foot). The course consists of theoretical lectures and practical sessions in small groups to train the diagnostic and treatment skills necessary for the interdisciplinary treatment of Charcot patients (<http://www.charcotfootcourses.org/>)

Italy:

- Tuscany diabetic foot networking (official network of 3 DFU referral centres, 20 regional centres and General Practitioners (GP), established and backed by legislation.
- Pisa Diabetic Foot Courses: Annual 3-day course combining lectures of different specialists and individual training in the clinic, allowing course participants to gain insight in both the theory of the field and the practical methods used in the clinic (www.diabeticfootcourses.org)

Nordic Countries

- Nordic Diabetic Foot collaboration (<http://nordicdiabeticfoot.com/ndf-task-force.html>)

	Positive ↓	Negative ↓
internal ↓	<p>Strengths</p> <p><i>(Strengths are internal attributes of the policy)</i></p>	<p>Weaknesses</p> <p><i>(are internal attributes of the policy that need to be addressed)</i></p>
Management	<p>International consensus guidance regarding prevention and treatment principles of Diabetic Foot Ulcers (DFU) globally available at www.iwgdf.org (updated in 2015)</p> <p>Increased awareness across European health care systems that DFU is a major complication to diabetes (of type 1 as well as 2).</p> <p>Integration of skills and knowledge from different disciplines through a multi- or interdisciplinary team approach improves prevention and treatment without necessarily increasing its total cost (See EWMA document: “Managing wounds as a team”, http://ewma.org/...managing-wounds-as-a-team.html)</p> <p>Centres of Excellence have shown a significant reduction of incidence of ulcers or amputation rates of 25-43 % and at the same time providing treatment in a cost-effective way.</p> <p>Initiatives are taken by organisations (EWMA, IWGDF, DFSG amongst others) to ameliorate the network for healthcare providers and to improve the awareness of the complex diabetic foot disease.</p>	<p>All European health care systems are basically built for single-disease treatment whereas DFU patients do need a cross-disease prevention and treatment approach related to the complexity and comorbidity of this condition</p> <p>Diabetic Foot units on 3 levels are needed: minimal, intermediate and referral level, what is far from optimally implemented in the EU-countries.</p> <p>The subsequent and so needed referral and contra-referral pathways are most of the time not described between healthcare providers and in the systems, and totally not existing with the following consequences:</p> <ol style="list-style-type: none"> 1. The fast track for urgent care in case of severe ulcers is not well established, with an important delay of referral as a consequence and extremely difficult interventions, long hospitalisation and very high costs. 2. The urgency services are not adapted to the concept of foot attack in 24 hours as it exists in stroke- and cardiac units. 3. Too long hospitalization as the primary care is not organized for immediate post-hospitalization follow-up. Patients are transferred from hospitals to home care and GP attendance without sufficiently well educated support being available at these levels. 4. This is also true once revalidation is needed. <p>The duration of hospitalization is long and expensive as the complex related care is not rewarded and recognized as an entity in the ICD 9 code. As a consequence of this there is a trend that managers of hospitals try to refuse diabetic foot patients in their hospitals or put the doctors under tension to incorrectly reduce hospitalization stay.</p>

internal ↘

	Strengths <i>(Strengths are internal attributes of the policy)</i>	Weaknesses <i>(are internal attributes of the policy that need to be addressed)</i>
Management		<p>Part of the specialisations/professions (i.e. podiatrists) that is required to establish a full multidisciplinary team is not existing, having no recognized/protected profession or are not adequately reimbursed in many countries.</p> <p>Treatment reimbursement systems are based on payment by item rather than by end result.</p> <p>Patients are transferred from hospitals to home care and GP attendance without sufficiently well educated support being available at these levels.</p>
Education	<p>The theoretical knowledge necessary to develop consistent, up-to-date education and implementation already exists.</p> <p>Basic and advanced courses and treatment initiatives of the management of the diabetic foot exist since many years at a European level.</p>	<p>The initiatives and systematic approaches to education of clinical staff preventing and treating DFU patients beyond the existing teams and the other hospital services (urgency, intensive care) are not sufficient to fill the gap.</p> <p>The education level of clinical staff in home care and GP settings is generally too low to handle the complexity of DFU patients.</p> <p>Part of the specialisations (i.e. podiatrists) that is required to establish a full multidisciplinary team do not exist in countries in the (eastern) part of Europe. Podiatry educational institutions are needed.</p> <p>Lack of competence and knowledge closest to the patient, including family members and the patient him- / herself.</p>

external ↓

	Opportunities <i>(are external conditions that may facilitate the policy implementation)</i>	Threats <i>(are external conditions that may stand in the way of the policy implementation)</i>
Management	<p>A change is possible and new opportunities to improve outcomes are really existing as a consequence of:</p> <ul style="list-style-type: none"> - Increased awareness across European health care systems that something must be done to improve the prevention and treatment of DFU. - Awareness that DFU-related costs represents approx. 25 % of the annual health care budget for diabetes of any European country. - Existing robust documentation demonstrating that the incidence of DFU-related major amputations can be significantly reduced by using the prevention and treatment guidance of the IWGDF. <p>Best practice examples available on cross-sectorial collaboration and sharing of data collected by public health institutions to benefit the education of diabetic foot care centre's personnel. Increased availability of new technologies and easier access to electronic platform which allows for continuous monitoring and support of patients.</p>	<p>The generally strict production-focused and silo-based organisation of European health care systems results in fragmented care and lack of coordination of care resulting in a threat of having significant barriers to implementation of the consensus guidance of the IWGDF.</p> <p>Lack of will and, in some countries, existence of legal constraints to the establishment of multi- and interdisciplinary teams with the threat that motivated instigators in our actual networking get demotivated.</p> <p>Bad standards lead to bad treatment. Not preparing for the best is condemning us to do the worst. The number of amputations will get higher and the costs will be overwhelming, what is a threat for the socio-economical systems of the EU.</p>
Education	<p>A general acceptance exists across European health care systems of the threats and challenges listed.</p> <p>Continue and strengthen current EU initiatives to push for significant changes to move away from silo-based health care systems and towards patient-focused, holistic systems and approaches.</p>	<p>Physicians (in particular) and patients are not sufficiently taught in the importance and practical principles of working together as a team with the threat that there is not enough exchange of skills and knowledge.</p> <p>Education and re-education of healthcare staff has in some countries been cut back due to budget restrictions, and because the "complex characteristics" of competence and knowledge needed makes it difficult to measure and document.</p> <p>DFU is not addressed in general medical and nurse education. If this is not changed, for instance by integrating DFU in postgraduate teaching, the quality of care will not improve in the future and the number of amputations will go up.</p>

Successful strategies:

- Creating a guidance document
- Translating the document in local languages
- Using the network of national champions who are enforced by mentorship centres and empowered by organisations where diabetic foot disease is put central.

Lessons learnt:

- You must expect strong resistance towards system change from systems and professionals who are not accustomed to multidisciplinary team approaches to DFU management.
- In case the change is realised on regional level or even on a national level support of the ministry of health and the reimbursement system is of outmost importance. Good diabetic foot care must also be sustained by the national patient organisations, which is the model used in countries such as the UK, Germany and Belgium.

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FINLAND

Country: Finland

Date: 2nd October 2015

Partner: THL

Name of responder: Jaana Lindström

Partners/Stakeholders involved in the analysis:

1. Auli Pölönen (Pirkanmaa Hospital District)
2. Heikki Oksa (Pirkanmaa Hospital District)
3. Katja Wikström (THL)

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. The Development Programme for the Prevention and Care of Diabetes (DEHKO 2000- 2010)
2. The Programme for the Prevention of Type 2 Diabetes in Finland: FIN-D2D Project (2003-2008) as part of DEHKO

Positive ↓

Negative ↓

internal ↓

	Strengths <i>(Strengths are internal attributes of the policy)</i>	Weaknesses <i>(are internal attributes of the policy that need to be addressed)</i>
Planning	<ul style="list-style-type: none"> - Strong scientific background (diabetes prevention possibilities; FINDRISC diabetes risk score) - National statistics on diabetes trend and experience from previous prevention initiatives (e.g. North Karelia project) as promoters - Multi-professional framework from the beginning, including social and behavioral sciences. - Strong emphasis on communications and political engagement. - Dividing the program into sub-programs facilitated the efficient and coordinated conduct of the whole task. 	<ul style="list-style-type: none"> - Despite the effort, medical paradigm and operational culture still prevailed during the planning. - As the goals were wide and various, it was not always possible to prioritize the development processes.
Endorsement by policy makers and stakeholders	<ul style="list-style-type: none"> - Public sector, primary health care, specialized health care, third sector (NGOs), private companies (drug, food, equipment), research institutes, universities, political decision makers both nationally and locally were involved and engaged already from the very beginning of the planning. Relationships were kept active throughout the process. - Active and participation by media. 	<ul style="list-style-type: none"> - Municipal decision makers typically are "laymen" and do not always have knowledge or comprehension to make health policy decisions that have a multifold and long-term effects. - The coordination by a patient organization was not always welcomed by health care operators. - The stakeholders had their own priorities which could distort the actions. - It was not always clear who "owned" the results and products of the program
Implementation	<ul style="list-style-type: none"> - The program gave general framework for activities which facilitated relatively free conduct of the project by different partners. As a result, new models and practices were developed "bottom-up" based on local needs, resources and initiative. - Needs for education and training were identified and the demand was answered. This increased the health care personnel knowledge level and engagement. - Responsibilities and work distribution and task description of different actors and professions became central, were defined, and also described in the treatment paths. - As the program proceeded, the importance of counselling skills and self-management education as well as the understanding of the change process was recognized, with a shift towards "coaching" instead of "teaching". 	<ul style="list-style-type: none"> - The program was a <i>recommendation</i> by nature and partners could choose how much they invested on it or how they followed the plan. There was a lot of variation between areas and municipalities. - How to involve physicians into the program activities was a challenge. - New, multi-disciplinary, patient-centered approach took long time to be adopted. - The traditional (physician/nurse) appointment based health care service system was very strong and e.g. group counselling was not adopted as well as anticipated.

Organizational changes	<ul style="list-style-type: none"> - Multi-professional project groups were established to guide the work locally - Some new positions were established (e.g. diabetes nurses, podiatrists, psychologists, dieticians). 	
Partnerships	<ul style="list-style-type: none"> - The consortium of 5 hospital districts, the Finnish Diabetes Association, the Finnish Heart Association, and National Institute for Health and Welfare (THL) was the basis of success in D2D. The collaborative work has continued even after the project. - The collaboration between primary health care, occupational health care, and specialized care has improved. - The collaboration between health care sector and NGOs became systematic (in some areas). Also collaboration between NGOs increased. - A new collaboration between the Finnish Diabetes Association and pharmacies as well as communal services and pharmacies (in diabetes prevention and management) was created. - New services were created in collaboration, e.g. Suomi Mies seikkailee (FinnMan Explores) www.suomimies.fi which is specifically targeted at health promotion among working-aged men 	<ul style="list-style-type: none"> - Part of the collaboration that was built during the program has ceased. Collaboration relied too much on few enthusiastic individuals. - The political system, with municipal decision makers changing every 4 years, does not facilitate long-term strategic planning of health care and health promotion.
Intersectorality	<ul style="list-style-type: none"> - The program was probably the largest intersectoral project (so far) in Finland. This was the primary determinant of its effectiveness on national and sub-national level, on policies (e.g. Health in All Policies), programs, guidelines, curriculums etc. 	<ul style="list-style-type: none"> - The participating organizations had differing strategies, operational cultures, decision-making systems, planning and reporting schedules which consumed a lot of resources. - Also the paradigms and conceptual systems differed – it took a long time to agree e.g. on common terminology
Management	<ul style="list-style-type: none"> - The program was enabled by the initiative by a strong and distinguished patient organization and further facilitated by strong support by national authorities and local decision makers - The consortium of proved to be wide and strong enough to carry out the comprehensive program. - Financial management of such large program is demanding and was facilitated by professional s assigned for the duty by the coordinating hospital district 	<ul style="list-style-type: none"> - Organizational, strategic, and personnel changes affected the partners' possibilities to contribute to the program

Aspects relating to human resources, technology and information systems	<ul style="list-style-type: none"> - Multidisciplinary approach, including social and communication sciences. - Efficient fund-raising, knowledge on financial administration - Electronic communication (e.g. web pages early on) 	<ul style="list-style-type: none"> - National diabetes register, which was originally set as one of the goals of the program, was not fulfilled. - IT systems were rigid and typically did not facilitate follow-up of preventive interventions nor process evaluation.
Coordination of care (i.e. inter-disciplinarity)	<ul style="list-style-type: none"> - National, sub-national, and local multi-disciplinary development groups and steering committees were established 	
Funding	<ul style="list-style-type: none"> - The funding was collected from different sources, which in part engaged the funders into the program. The municipalities and organizations invested also their own funds, which also engaged them. - The funding was substantial, as compared with the funding typically allotted to this kind of development initiatives. 	<ul style="list-style-type: none"> - Funding was granted for one year at a time and new fund applications took a lot of time and resources. - Some of the goals were not realized due to shortage of funding.
Integration with other policies/programs	<ul style="list-style-type: none"> - DEHKO operated together and collaborated with several other health promotion programs as well as programs aiming at improving health services. 	
Leadership	<ul style="list-style-type: none"> - Important elements of efficient leadership were: <ul style="list-style-type: none"> • shared values as the basis of the program • multi-disciplinarity • centralized coordination by the patient association and the coordinating hospital district • efficient planning and reporting • experienced group • political support • support and appreciation by professionals • adequate funding • active communication • a social demand for the action 	<ul style="list-style-type: none"> - Leading a consortium of different organizations and very different management systems was a challenge.
Empowerment and capacity building	<ul style="list-style-type: none"> - Recognized demands for training and education were answered. Knowledge and skills of the health care professionals were improved during the program. - The training of the health care professionals emphasized the adoption of new tools and techniques in prevention and care, such as solution-centered counselling, motivational interviewing, empowerment. The approach has thereafter been adopted also by the health care professionals training curriculums. - Tools to support self-efficacy, self-management and patient-centered care were developed. 	<ul style="list-style-type: none"> - Medical paradigm (e.g. emphasizing drug treatment) was predominant – entrenching “empowerment” was a huge task

Monitoring and evaluation	<ul style="list-style-type: none"> - The program was evaluated regularly by funders, by the program group itself, in workshops, by scientific community (already 60 peer-reviewed scientific papers have been published) and by the ministry. - Both quantitative (“what happened”) and qualitative (“why and how it happened”) evaluation methods were applied. - Also population-level evaluation and a systematic media follow-up were completed. 	<ul style="list-style-type: none"> - IT systems were varied and not supporting the program.
Internal and external communication	<ul style="list-style-type: none"> - Communication and dissemination were selected as priority areas in the project. Communication experts worked in close collaboration with the health care professionals in the program. - A specific communications unit was established, which was responsible of and coordinated communication activities. - Detailed communication plans were written. - Newsletters to partners and media, press releases, reports, supplements, research papers, counselling materials etc. were produced regularly in print and in electronic format. - Media campaigns and press conferences were organized. - Important were also peer meetings, training workshops, symposiums, and other national events. - Efficient internal communication was ensured by email, newsletters, reports, as well as face-to-face meetings and seminars. - National and local media were important in creating media visibility and in that way increased the knowledge of and participation in the program. - The population-level recognition of the obesity epidemic can be considered as one of the results of the program. 	<ul style="list-style-type: none"> - The resourcing of the communications did not match the long and many-sided program.

external ↓

	Opportunities <i>(are external conditions that may facilitate the policy implementation)</i>	Threats <i>(are external conditions that may stand in the way of the policy implementation)</i>
Planning	<ul style="list-style-type: none"> - Strong role of patient organization facilitated multi-sectorial collaboration. 	
Endorsement by policy makers and stakeholders	<ul style="list-style-type: none"> - The support of the Ministry of Health and Social Affairs at different phases of the program was vital for the success. - Engagement of political decision makers and other authorities was important. 	
Implementation	<ul style="list-style-type: none"> - Evaluation of the program was conducted by outside organizations (ministry, National Institute for Health and Welfare THL) - Many methods, tools, and outlooks fostered by the program are today part of “basic structure” in health care. - The program revealed large differences in access and quality of care, which are today acknowledged and taken into consideration while planning services. - The program has been used as a model also outside of Finland. - Prevention is now more emphasized in the training curriculums for health care professionals. - Training services soon adopted the themes raised in the program and created e.g. continuous education courses. 	<ul style="list-style-type: none"> - Still at the moment some parties see prevention and care as “competitors” (of resources, workforce, facilities) and feel that one or the other should be the primary focus.

Organizational changes	<ul style="list-style-type: none"> - Some hospital districts have established a prevention unit with dedicated staff. 	<ul style="list-style-type: none"> - The health care system in Finland is currently under the largest reform in history – we do not know what the result will be, who will be in charge and what will be the role e.g. of prevention. The current recession also takes its toll. Furthermore, the aging population will have increasing demand for health services, yet the available resources will get smaller. - The debate about public-private health services continues. If private companies will sell their “product” to the municipalities, with cheapest bid winning the tender, how much value will quality of care and preventive services have? - Cross-sectorial collaboration is still difficult for health-care services. The traditional, physician-lead, medically oriented mode of work is still the prevailing way of how services are arranged
Partnerships	<ul style="list-style-type: none"> - Whole new partnerships were created e.g. the collaboration between pharmacies and health care in preventive activities. - Private service providers have developed new products and services, especially as regards to prevention of type 2 diabetes. 	<ul style="list-style-type: none"> - Occupational health care services may not consider health promotion as their responsibility. Yet, they are the primary care provider for the majority of working-aged people in Finland. - The “project nature” of the DEHKO impeded the collaboration, as projects typically have a beginning and an end. - There are some important actors in the society that were not included into DEHKO. Social and employment services typically are in contact with people that might be at high diabetes risk (or already have unidentified diabetes) but at the same time do not have access to e.g. occupational health services. Collaboration with them is so far a neglected possibility.
Intersectorality		<ul style="list-style-type: none"> - Budgeting practices in municipalities do not support cross-sectorial collaboration.
Management		<ul style="list-style-type: none"> - A narrow, medicine-based conception of health care is common among decision-makers.

Aspects relating to human resources, technology and information systems		<ul style="list-style-type: none"> - National data on health care quality indicators as well as cost-effectiveness of different interventions and treatment modalities are not available, which does not facilitate the critical revision of the work of primary health care. - IT-systems do not support preventive interventions (e.g. lifestyle follow-up and evaluation) - When budgets get more and more tight, different sectors and professions may try to protect their own status. This can impede multi-professional team work.
Coordination of care (i.e. inter-disciplinarity)		<ul style="list-style-type: none"> - Coordination of activities is highly needed in order to make the most use of reducing resources; however, the position of coordinator may be first in line when budget cuts are made and all professions are defending their own turf.
Funding	<ul style="list-style-type: none"> - The prerequisite of own funding proved to be a way to commit partners in a development program. 	<ul style="list-style-type: none"> - Especially when resources are scarce, people that are already sick may be prioritized and preventive activities may be omitted. - The National Insurance Institution does not support (=reimburse) preventive activities or lifestyle intervention.
Integration with other policies/ programs	<ul style="list-style-type: none"> - The program was in line with the "Health in all policies" program that was ongoing nationally. - After the program several new programs and initiatives have continued the work. 	<ul style="list-style-type: none"> - Programs and projects may compete over same funding and same personnel.

Laws or regulations		<ul style="list-style-type: none"> - The municipalities at the moment are very independent in how they arrange the health care (as long as they follow the laws) and there are questions of equality. The system is presently under reform and we do not know who in the future will be responsible for the services and how the funding will be arranged. What will be the role of prevention of chronic diseases in the new system? Will unified chronic care models be created and adopted? What will be the measure of effectiveness? Today the common marker of efficiency is how long (days-weeks-months) a (non-emergency) patient has to wait to get a doctor's appointment; what happens during these appointments and most importantly, do they create "better health" is not an issue. - Lobbying by industry and economics in general affect political decisions and do not always support healthy lifestyle (e.g. the sweet tax rise was cancelled). - Legislation on data security and privacy may hinder e.g. the evaluation of health care practices.
Leadership		
Empowerment and capacity building	<ul style="list-style-type: none"> - The good practices (models of care, training of personnel, etc.) developed during the program have been sustained by the hospital districts 	<ul style="list-style-type: none"> - The government is increasingly promoting electronic services. This may be an opportunity, but also a threat, if it leads to reducing the expert services and personal contacts to health care providers.
Monitoring and evaluation		

Internal and external communication	<ul style="list-style-type: none"> - The program achieved excellent media visibility and was well known among the professionals, patients, general population, and political decision-makers. 	<ul style="list-style-type: none"> - It is sometimes claimed that people have a right to be and behave as they wish, and constant pressure from the authorities e.g. to reduce obesity rates in the population is a threat to peoples' autonomy. - Lay people are more actively than ever before taking part in discussions about e.g. healthy diet and the authority of "experts" is questioned. Media does not differentiate between experts with research-based knowledge and lay people with personal experience-based opinions. This creates an atmosphere that "even experts disagree" which causes ("recommendations change all the time") confusion among the patients and general public ("recommendations change all the time") and hampers e.g. the nutrition therapy of diabetes.
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Successful strategies:

- Evidence-based approach
- Coordination by a distinguished patient organization supported by national authorities
- Multi-sectoral, multidisciplinary program encompassing all stakeholders in the society
- Demonstration of how the goals of the program promote and complement the enforcement of the mission of the stakeholder/organization
- Active, organized, professionally created and conducted communications strategy
- Bottom-up approach
- Need-based training of personnel
- Quantitative and qualitative evaluation at all levels

Lessons learnt:

- Continuous lobbying of decision-makers/politicians is mandatory
- All changes take time and resources (more than anticipated)
- The dominance of medical paradigm vs. a more comprehensive view of health promotion and patient-centered care is a challenge
- Rigid organizations, traditional distribution and mode of work, and general resistance to change need to be overcome
- IT systems need to be reformed to facilitate the evaluation of quality and cost-effectiveness of care and, furthermore, the follow-up and evaluation also of health-promotion and prevention (e.g. lifestyle counselling and monitoring of behavioral changes)
- Health-care professionals want to do their best – give them an opportunity to improve and they will grasp it

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FRANCE

Country: France

Date: 16th October 2015

Partner: Ministry of Health

Name of responder: ALAIN BRUNOT, General Directorate for Health, Department for population health and prevention of NCD

Partners/Stakeholders involved in the analysis:

Fédération française des diabétiques

Société francophone du diabète

National health insurer

Agence régionale de santé Ile de France

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. National strategy for health
2. National program for nutrition and health
3. Therapeutic education of patients (national framework for chronic diseases)
4. A disease management program for diabetes: the "Sophia " program

	Positive ↓	Negative ↓
internal ↓	<p style="text-align: center;">Strengths</p> <p style="text-align: center;"><i>(Strengths are internal attributes of the policy)</i></p> <ul style="list-style-type: none"> - National program for nutrition, physical activity and health, with stable steering team - Commitment to patient education, with different models tested and evaluated - Nation scale disease management program - Nation scale stakeholders organisations : patients association, diabetes association - Financial incentives for good practices of diabetes follow up by GPs (pay for performance) - Fair access to care and treatment for the whole populations - Surveillance data for diabetes care is available 	<p style="text-align: center;">Weaknesses</p> <p style="text-align: center;"><i>(are internal attributes of the policy that need to be addressed)</i></p> <ul style="list-style-type: none"> - Prevention strategy for high risk groups - High level of diabetes screening without targeting high risk groups or patients - Stakeholders alliance to be built with explicit goals - Patients education programs overwhelmingly hospital-based - Training for health professionals for diabetes management including lifestyle intervention (educational skills) - Missing information system from GP medical records

	Positive ↓	Negative ↓
external ↓	<p style="text-align: center;">Opportunities</p> <p style="text-align: center;"><i>(are external conditions that may facilitate the policy implementation)</i></p> <ul style="list-style-type: none"> - National strategy for health giving clear priority to prevention, and chronic disease management - Health bill (passed : January 16th, 2016) - Political commitment to health in all policies - Inter-sectoral support for development for physical activity (primary, secondary and tertiary prevention of chronic disease) - New organisations for integrated non communicable disease management and care - Government instruction for regulating out-patient hospital care for diabetic patients with complex needs (in progress) - Single health insurer: aggregated data - Regional strategies for health under regional health authorities 	<p style="text-align: center;">Threats</p> <p style="text-align: center;"><i>(are external conditions that may stand in the way of the policy implementation)</i></p> <ul style="list-style-type: none"> - Financial constraints - Increasing prevalence of diabetes - Rising costs for diabetes care - Persistent social inequalities in health

Successful strategies:
 Intersectoral, multilevel health promotion policy for was effective for nutrition in the general population

Experimental design of pluri-professional organization was validated in primary health care, for patients with diabetes (non communicable diseases)

Lessons learnt:

Despite progress in the general population, health inequalities in diabetes prevalence and diabetes risk (obesity) are still important. Strategies for active screening are required for high risk groups, with special attention to vulnerable people and low health care users .

For diabetes management, clinical pathways and incentives must be adjusted for patient profiles.

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GERMANY

Country: Germany (National perspective)

Date: 9th December 2015

Partner: _____

Name of responder: Dr. Karen Budewig (National perspective)

Partners/Stakeholders involved in the analysis:

Method of participation (National perspective):

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. Disease-specific and disease unspecific diabetes prevention and control policies in Germany from the national perspective

Country: Germany, Saxony (Regional perspective)

Partner: TUD

Name of responder: Ulrike Rothe, Ulf Manuwald (Regional perspective)

Partners/Stakeholders involved in the analysis:

Prof. Jan Schulze SLÄK, Dresden, Dr. Stephan Mager KVS, Prof. Andreas Birkenfeld TUD

Method of participation (Regional perspective):

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

German Disease Management Program (DMP) Diabetes Type 2 (regional physicians view)

	Positive ↓	Negative ↓	
	Strengths <i>(Strengths are internal attributes of the policy)</i>	Weaknesses <i>(are internal attributes of the policy that need to be addressed)</i>	
internal →	<p>National perspective</p> <ul style="list-style-type: none"> - Encompassing activities in the areas of epidemiology, primary and secondary prevention, provision of care and research - Includes regulations at a legal and sub-legal level - Implemented on a national, regional and local level - Evidence based and quality assured (e.g. treatment in Disease Management Programs offered by statutory health insurances with voluntary participation of patients) - Disease specific and disease unspecific - Activities target populations of all ages - Cross-sectoral and multi-disciplinary - Involvement of stakeholders at all levels (technical and political) - On-going and open ended <p>Regional perspective</p> <ul style="list-style-type: none"> - Nation-wide program - Voluntary - Incentives - Objective: to reduce the costs and to improve the diabetes care 	<p>National perspective</p> <ul style="list-style-type: none"> - Not all activities are fully evaluated - Integration of results from health care/translational research could in some cases be quicker; e.g. Disease Management Programs: Not all opportunities are used in order to improve access for all interested patients. Also it is a challenge to make the programs suitable for all diabetes patients by adapting the programs in terms of education and training of self-management skills in order to address better the individual needs of patients. <p>Regional perspective</p> <ul style="list-style-type: none"> - Despite the implementation of programs still fragmentation of health care structures in practice - Insufficient control of the validity of the quite overloaded documentations - Nevertheless or therefore, effectiveness and efficiency has not been reliably evaluated - Success has been measured mostly process- (and structure-)oriented, not sufficiently outcome-oriented - Need for patients to sign up into the program - National accreditation by one national office (BVA) at the start of the program 	
external →	Opportunities <i>(are external conditions that may facilitate the policy implementation)</i>	Threats <i>(are external conditions that may stand in the way of the policy implementation)</i>	
	<p>National perspective</p> <ul style="list-style-type: none"> - Flexible, allows for tackling cross-sectional issues (structural challenges, multi-morbidity etc.) <p>Regional perspective</p> <ul style="list-style-type: none"> - National Ministry of Health supports the program - Big Insurers support the program - Funding by the insurers - The program has the chance to collect big (medical) data, which could be soundly evaluated 	<p>National perspective</p> <ul style="list-style-type: none"> - Germany has a strongly federal health care system. One of the threats is fragmentation of activities, lack of ownership <p>Regional perspective</p> <ul style="list-style-type: none"> - No regional adaptations and modifications of the program would be possible - Program still not flexible enough (many regulations, still too much bureaucracy) - No adequate benchmarking of GPs is possible, which helps directly in every-day-practice - Not all the regional GPs and the majority of patients are involved (only about 25 – 50%) - No proof, that the outcome of patients has been really improved - No registry (for T2DM) 	

Successful strategies:**National perspective**

- Successful in taking a flexible multi-dimensional policy approach in the prevention and control of diabetes.
- Successful care models, such as Disease Management Programs with coordinated, evidence-based, quality assured care for diabetes patients (already over 50% of diabetics are participating in Disease Management Programs).

Regional perspective

- DMP has been implemented nationwide in Germany with a coverage of about 50% with regional varying grades

Lessons learnt:**National perspective**

- Further strengthening of the database on the epidemiology and provision of care/quality of diabetes care with a view to establishing a National Diabetes Surveillance System in Germany.
- Further developing care models such as Disease Management Programs: There is scope to optimize Disease Management Programs further and thereby to increase participation rates (providing better access for interested patients).

Regional perspective

- the nationwide top-down implementation shall be substituted or at least complemented by regional bottom-up adaptations (to regional conditions)
- the administrative and documentation workload should be reduced by focussing on the outcome (quality) of care (not primarily on the processes)
- valid feedback reports and peer-review-methods (e.g. quality-circles) as well as an outcome-evaluation are necessary
- standards (not only minimal standards) and therapeutic targets should conform to the state of the art at any time
- more concrete criteria for in time referral to the specialized care level are needed an integrated and innovative chronic care management, respectively with a longitudinal patient monitoring is needed

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GREECE

Country: Greece

Date: 7th October 2015

Partner: YPE (1st Regional Health Authority of Attica)

Name of responder: Th. Vondetsianos MD

Partners/Stakeholders involved in the analysis:

Clinical Diabetes Centers

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify: Discussions with the relevant stakeholders

Included policies and programs:

1. National Strategic Plan (2007-2013)
2. National Action Plan for Public Health (2007-2013)
3. National Plan for prevention and management of Diabetes and Diabetes Complications
4. Diabetes Clinical Centers clinical activities
5. Small-scale initiatives and programs for DM
6. Projects and publications

	Positive ↓	Negative ↓
internal ↓	<p style="text-align: center;">Strengths</p> <p style="text-align: center;"><i>(Strengths are internal attributes of the policy)</i></p> <ul style="list-style-type: none"> - Strong and wide spread expertise of MDs in the prevention and management of DM - High expertise of health care professionals (nurses, health visitors, dieticians etc) in the management of DM and the prevention of its complications - Guidelines and specific prescription criteria for the management of DM (therapeutic protocols incorporated in the national e-prescription system) - High level educational programs for health care professionals (workshops, seminars etc) - Activated patients' representative bodies and associations - Extensive awareness and alert in the mass media 	<p style="text-align: center;">Weaknesses</p> <p style="text-align: center;"><i>(are internal attributes of the policy that need to be addressed)</i></p> <ul style="list-style-type: none"> - Lack of official epidemiologic data regarding diabetes complications in Greece. - Lack of adequate number of personnel (nurses, dieticians etc) in the public health facilities - Limited number of Clinical Centers for Diabetes, especially in rural and remote areas - Fragmentation of all the existing diabetes prevention and care/cure programs and clinical activities - Lack of structured educational programs for multimorbid patients and absence of the integrated care approach.
external ↓	<p style="text-align: center;">Opportunities</p> <p style="text-align: center;"><i>(are external conditions that may facilitate the policy implementation)</i></p> <ul style="list-style-type: none"> - Crisis induced health and system reform momentum - Movement to a patient centered and coordinated care approach - Implementation of ICT tools in the everyday clinical practice (e-records, e-prescription, e-protocols etc) - Alignment with the European best practices of chronic care management and integrated care - Increased awareness of the national insurance system for the "preventive and meaningful care" and more effective reimbursement schemes - The active role of the social sector (local communities/municipalities) in health and diabetes prevention, through awareness raising and empowering citizens to effective behavioral modification - The changing role of Pharma companies 	<p style="text-align: center;">Threats</p> <p style="text-align: center;"><i>(are external conditions that may stand in the way of the policy implementation)</i></p> <ul style="list-style-type: none"> - The effect of austerity measures on healthcare services - The emerging main barrier of access to treatment (medicines, diagnostic tests, devices) due to the impact of the economic crisis to people suffering from DM - A very high level of obesity in children and high levels of un-healthy behaviors (smoking, physical inactivity, diet, etc)

Successful strategies:

Several promising initiatives (clinical activities, programs, projects) and approaches, complementary to NDP, are presented.

- The DE-PLAN study and interventions in Greece provided encouraging results in the fields of Diabetes Health Promotion, Management, Prevention of complications and Education⁽¹⁻⁴⁾
- Clinical Centers for Outpatient Diabetes Management provided valuable clinical outcomes (early diagnose of high risk population, avoidance of complications, reduction of hospitalizations and emergency visits, etc).
- Clinical small-scale programs targeting at patients' education and self management illustrated this essential element for improved control of diabetes⁽⁵⁾
- Clinical practices in primary care aiming to control blood glucose levels within 'glycaemic goals' shown that apart from the clinical consequences this can also have a significant financial impact⁽⁶⁾
- Guidelines, publications and instructions for patients from Scientific bodies (<http://www.ede.gr>) and patients associations aiming to raise awareness and health literacy.

⁽¹⁾ Makrilakis K, Liatis S, Grammatikou S, Perrea D, Katsilambros N. **Implementation and effectiveness of the first community lifestyle intervention programme to prevent type 2 diabetes in Greece. The DE-PLAN study.** *Diabet Med* 2010;27:459-65.

⁽²⁾ Makrilakis K, Grammatikou S, Liatis S, Kontogianni M, Perrea D, Dimosthenopoulos C, Poulika KA, Katsilambros N. **The effect of a non-intensive community-based lifestyle intervention on the prevalence of metabolic syndrome. The DEPLAN study in Greece.** *Hormones (Athens)*. 2012 Jul-Sep;11(3):316-24

⁽³⁾ Kontogianni MD, Liatis S, Grammatikou S, Perrea D, Katsilambros N, Makrilakis K. **Changes in dietary habits and their association with metabolic markers after a non-intensive, community-based lifestyle intervention to prevent type 2 diabetes, in Greece. The DEPLAN study.** *Diabetes Res Clin Pract.* 2012 Feb;95(2):207-14.

⁽⁴⁾ Kalantzi S, Kostagiolas P, Kechagias G, Niakas D, Makrilakis K. **Information seeking behavior of patients with diabetes mellitus: a cross-sectional study in an outpatient clinic of a university-affiliated hospital in Athens, Greece.** *BMC Res Notes.* 2015 Feb 20;8:48

⁽⁵⁾ Merakou K, Knithaki A, Karageorgos G, Theodoridis D, Barbouni A. **Group-based education for people with type 2 diabetes mellitus in Greece: An observational study.** *Journal of Nursing Education and Practice* 2015, Vol. 5, No. 5

⁽⁶⁾ Athanasakis K, Ollandezos M, Angeli A, Gregoriou A, Geitona M, Kyriopoulos J. **Estimating the direct cost of Type 2 diabetes in Greece: the effects of blood glucose regulation on patient cost.** *Diabet Med* 2010;27:679-84.

Lessons learnt:

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ITALY

Country: Italy

Date: 9th December 2015

Partner: National Institute of Health – Istituto Superiore di Sanità

Name of responder: Angela Giusti

Partners/Stakeholders involved in the analysis:

National Institute of health (A. Giusti, M. Maggini, B. Caffari, F. Lombardo, F. Pricci),

Ministry of Health (R. D'Elia, P. Pisanti),

HIRS (M. Massi Benedetti),

FAND - Italian Patient Association (A. Bottazzo),

Diabete Forum - Italian Patient Association (R. Stara)

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify: Individual phone call

Included policies and programs:

1. National Prevention Plan (NPP) 2014-2018
2. National Diabetes Plan 2012
3. IGEA National Program 2006-2012
4. NPPs 2005-2009 and 2010-2013
5. Gaining Health National Program (2007-...)
6. Legge 115/1987

	Positive ↓	Negative ↓
internal ↓	<p style="text-align: center;">Strengths</p> <p style="text-align: center;"><i>(Strengths are internal attributes of the policy)</i></p> <ul style="list-style-type: none"> - National policies and laws exist since 1985 (1-6) - Formalization of the network of Diabetes Care Centers (DCC) (6) - Definition of Evidence-Based National Guidelines on Integrated Care (IC) (3) - Definition of characteristics of the information system for IC (3) - Definition of a set of indicators at national level (3) - Definition of sound objectives on IC, shared among national and sub-national level (4) - Dedicated funds at national and sub-national level in the first years of the program (4) - National multiprofessional training program on IC (3) - Care pathways defined at national level (3) 	<p style="text-align: center;">Weaknesses</p> <p style="text-align: center;"><i>(are internal attributes of the policy that need to be addressed)</i></p> <ul style="list-style-type: none"> - Non-homogeneous use of dedicated funds at sub-national level (3, 4) - Non-homogeneous implementation of national policies and guidelines at sub-national level (2, 3, 4) - Organizational limitations, related to organization of care (i.e. implementation of the information system, of multidisciplinary and multiprofessional team work, of primary and secondary care integration) (1, 2, 3, 4) - Lack of specific funding for patient education - Lack of funding for some specific prevention activities dedicated to patients - Care pathways definition at sub-national, local level - Need to define specific role for patient associations
external ↓	<p style="text-align: center;">Opportunities</p> <p style="text-align: center;"><i>(are external conditions that may facilitate the policy implementation)</i></p> <ul style="list-style-type: none"> - Politics engagement for diabetes and chronic conditions prevention and care - Proactive Patient Associations - Proactive Health Professionals Societies (GPs, diabetologists, nurses, dieticians, other specialists for diabetes complications, etc.) - General agreement amongst all the actors - Growing social awareness on NCDs and diabetes in particular 	<p style="text-align: center;">Threats</p> <p style="text-align: center;"><i>(are external conditions that may stand in the way of the policy implementation)</i></p> <ul style="list-style-type: none"> - Irregular long term funding (threat for sustainability) - Not efficient use of economic and human resources - Politics changes, lack of long term endorsement by politics, particularly at sub-national level - Tendency to dismantel the network of dedicated diabetes centres - Insufficient attention paid by the university curricula to diabetes clinical care and management - Absence of formal recognition of “specialized diabetes nurses” - Absence of National diabetes register - Lack of consistency among sub-national, local diabetes registries - Non-homogeneous sub-national and local accessibility to drugs and devices

Successful strategies:

The consistency between National programs or projects, such as IGEA and Gaining Health, and National Plans, such as NPP, where Regions have to locally develop actions and interventions suggested and supported by the first ones, can be a successful strategy.

Lessons learnt:

- The investments in training of health professionals is cost-effective provided that, at the same time, the necessary organizational changes are promoted. Complex organizational changes, including multiprofessional team work and integration of primary and secondary care, cannot be delegated to the responsibility of the individual, although properly trained and motivated.
- As well as for all the changes that involve organizational modifications, the implementation of integrated care systems needs both strong political engagement and middle/long term funding.

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LITHUANIA

Country: Lithuania

Date: 8th September 2015

Partner: Zydrune Visockiene

Name of responder: _____

Partners/Stakeholders involved in the analysis:

Patient's organization: The Lithuanian Diabetes Association

Lithuanian Society of Endocrinology

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify: face-to-face discussions

Included policies and programs:

1. _____
2. _____
3. _____

Methodology

SWOT analysis was performed analyzing the following main documents/strategies/programmes regulating diabetes care in Lithuania:

- The order of Ministry of Health on the methods of reimbursement of diabetes treatment
- The order of Ministry of Health on the payment for diabetes patients education
- The Lithuanian High Cardiovascular Risk (LitHiR) primary prevention programme, where the high priority is attributed to the early diabetes diagnosis in patients at high-risk of cardiovascular disease.
- Diabetes management methodology, developed by specialists.

Positive ↓

Negative ↓

internal ↓

Strengths	Weaknesses
<i>(Strengths are internal attributes of the policy)</i>	<i>(are internal attributes of the policy that need to be addressed)</i>
<ul style="list-style-type: none"> - Good accessibility of care for DM patients (GP, Endocrinologists) - Favourable reimbursement system of DM treatment. - Strong and proactive patient's organization. 	<ul style="list-style-type: none"> - Lack of current DM care situation analysis. - Lack of structured team for DM care and shared responsibilities model. - Insufficient public awareness.

external ↓

Opportunities	Threats
<i>(are external conditions that may facilitate the policy implementation)</i>	<i>(are external conditions that may stand in the way of the policy implementation)</i>
<ul style="list-style-type: none"> - Discussion and agreement between stakeholders (specialists, Universities, MOH, payers, patient's organization) on National Diabetes Policy. - More active involvement of politics into process of prioritizing the development of National Diabetes Policy. 	<ul style="list-style-type: none"> - Different understanding about National Diabetes Policy by government and specialists/patient's organization. - Lack of funding and continuity of DM care strategy. - Weak and not unified training system for diabetes nurses and dietitians. Lack of such specialists to join the team.

Successful strategies:**Lessons learnt:**

Very proactive specialists and patient's organization may lead the initiation of working group for development of National Diabetes Policy.

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NORWAY

Country: Norway

Date: 11th November 2015

Partner: The Norwegian Directorate of Health

Name of responder: Monica Sørensen

Partners/Stakeholders involved in the analysis:

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. NCD Strategy,
https://www.regjeringen.no/contentassets/e62aa5018afa4557ac5e9f5e7800891f/ncd_strategy_060913.pdf

	Positive ↓	Negative ↓
internal →	<p style="text-align: center;">Strengths</p> <p style="text-align: center;"><i>(Strengths are internal attributes of the policy)</i></p> <p><u>Prevention</u></p> <ul style="list-style-type: none"> - It is a strength that the strategy address the most common risk factors of the 4 main NCDs (cancer, COPD, CVD and diabetes), as most of the patients with chronic diseases suffer from more than one NCD and will benefit from disease prevention initiatives cut across the specific diseases. <p><u>Management</u></p> <ul style="list-style-type: none"> - Strong governmental leadership is essential for policy action. Björn-Inge Larsen served as Chief Medical Officer and member of the World Health Organization's Executive Board in 2011 - The Norwegian Directorate of Health is responsible for follow-up and achievement of the goals set in the strategy. By this, the Directorate is forced to cooperate internally across departments and externally with nongovernmental organizations and community leaders to gather knowledge of existing resources and relevant subnational programs and governmental initiatives already set forth or implemented. - The strategy brings attention to the lack of quality data and low completeness of the diabetes register. <p><u>Relevant initiatives</u></p> <ul style="list-style-type: none"> - School health policies are an essential component of chronic disease prevention efforts. Norway just released its guideline for healthy school meals. - The Keyhole for Healthier Food is a food label that indicates that the product has more whole grain, less saturated fat, less salt and less sugar. Its aim is to help make the right choices when doing grocery shopping and stimulate the food industry to develop healthier products. Since 2005, the trade of keyhole products has tripled and the product range increased by five times. - Healthy Life Centres (HLC) represents interdisciplinary primary health care services part of the public health care in the municipalities. The center's target group is people with, or in high risk of disease, who need support in health behaviour change and coping with chronic diseases. HLC offer education and classes in physical activity, healthy nutrition and tobacco cessation. 	<p style="text-align: center;">Weaknesses</p> <p style="text-align: center;"><i>(are internal attributes of the policy that need to be addressed)</i></p> <p><u>Economy and planning</u></p> <ul style="list-style-type: none"> - The NCD-strategy was published without any action plan of how to reach the goals. The processes ahead of, and during the development of the strategy lacks transparency. If there were performed any needs- or resource analysis ahead of writing the strategy is unclear. - The evaluation process of the strategy is not described or planned. Baseline data and quality measures are scarce concerning the targets and goals set in the strategy, and the targets are not connected to care pathways which would have made the more close-to-practice - The strategy was launched without any budget. It follows that we are to solve the 25 % reduced mortality from NCDs by 2025 and become the world leader in preventing type 2 diabetes and cardiovascular disease within current budgets. - The broad perspective on either public health issues and primary prevention nor patients with established NCDs, may lead to less attention to high risk groups. There are no specific measures mentioned towards this group which may not be met with their needs. <p><u>Implementation</u></p> <ul style="list-style-type: none"> - A successful policy demands a coordinated action among decision makers in all sectors as several primary risk factors lie outside the direct influence of the health sector. The NCD strategy lacks trans-sectorial (e.g. transport, urban planning, agriculture and trade) obligation and engagement to battle the underlying risk factors of poverty, lack of education and unhealthy environmental conditions. - The strategy does not include examples of how initiatives can be implemented locally according to regional needs and features - The strategy lacks a multidisciplinary approach to solve the health challenges of multimorbid patients.

external ↓

<p style="text-align: center;">Opportunities</p> <p style="text-align: center;"><i>(are external conditions that may facilitate the policy implementation)</i></p>	<p style="text-align: center;">Threats</p> <p style="text-align: center;"><i>(are external conditions that may stand in the way of the policy implementation)</i></p>
<p><u>Organization</u></p> <ul style="list-style-type: none"> - The strategy brings about increased awareness of a necessary shift in resources from tertiary care towards prevention. Adapting a quality model like the Chronic Care Model could, in long term, result in significant savings. - There is a huge unexploited potential in trans-sectorial interaction and cooperation between governments, local policy makers, organizations and manufacturing and commercial industry to build infrastructures that promotes healthy living where people live. Also, workplace environment offer opportunities for the prevention, early detection and management of chronic diseases that we have not yet exploited to the fullest. - There is a full range of chronic disease prevention and control initiatives that has been proven effectual and cost-effective at both the subnational and national levels. The strategy gives an opportunity to explore, sytematize and scale up initiatives proven to be effectful. Also, this is the time to developp or adopt, then implement and monitor national, evidence-based clinical practice guidelines. The guidelines then should be modified to fit local contexts and available resources, and seek endorsement by local professional societies. - Even though the 25 by 25 goal is limited in time, chronic disease risk accumulates throughout the life course, which gives us the opportunity to plan for the future and have a life course perspective of the health promotion initiatives set into action today - To evaluate the strategy, seamless exchange of electronic health records between primary and secondary care are necessary, as well as patient registries with improved data completeness. - Chronic disease education (e.g. healthy diet, the benefits of physical activity and the health consequences of tobacco use) has not got a big enough part of the classroom learning nor extra-curricular activities in schools today. Neither are students used to serve as peer educators in ongoing school- and community-wide chronic disease education programs 	<ul style="list-style-type: none"> - Effective management of chronic diseases requires a comprehensive and integrated approach. Todays care is not organized in multidisciplinary health-care teams and patients are not linked to community resources. Integrated and holistic care requires increased collaboration between health-care workers and patients to ensure that patients and their families have the knowledge, tools and skills needed for self management of chronic conditions. - Specific action and treatment options to prevent diabetic complications are not attended in the strategy and may be underestimated. - Initiatives that has been proven effectual and cost-effective at subnational and local levels, does not necessarily have the same effect in another local contexts. We lack experience and knowledge of which factors that affect the extent of local implementation.

Successful strategies:

- Removing the requirement of patient approval in order to collect data to the national diabetes register would to a great extent increase the completeness of this quality-of-care register
- Budget allocations are needed to implement the national guideline of treatment of diabetes launching early 2016

Lessons learnt:

- The strategy reduces its impact and credibility when there is no budget linked to it.
- Before launching at strategy, baseline data of prevalence, incidence, comorbidities and complication rates are necessary to draw attention to the right problem areas and be able to evaluate the effect of the initiatives
- The evaluation process should be planned and described in the strategy and there should have been executed a cost analysis of what is required to fulfill the goals set in the strategy

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PORTUGAL

Country: Portugal

Date: 20th October 2015

Partner: General Directorate of Health

Name of responder: José Boavida and Cristina Portugal

Partners/Stakeholders involved in the analysis:

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. National Program for Diabetes (NPD)
2. National Plan for Diabetes Prevention and Control 2012-2016

	Positive ↓	Negative ↓
internal ↓	<p style="text-align: center;">Strengths</p> <p style="text-align: center;"><i>(Strengths are internal attributes of the policy)</i></p> <ul style="list-style-type: none"> - NDP is one of the nine Priority Health Programs since 2012 - Specific budget since 2012 - All of the nine Priority Health Programs are integrated in the General Directorate of Health allowing cross-cut interventions - Annual monitoring report on diabetes (since 2009) - NHS that provides universal health care - Implementation of Integrated Care Units in Primary and Secondary Health Care Centers in 2013 - Organizational and Strategic Continuity 	<p style="text-align: center;">Weaknesses</p> <p style="text-align: center;"><i>(are internal attributes of the policy that need to be addressed)</i></p> <ul style="list-style-type: none"> - Lack of human resources in the NDP - Poor coordination between local, regional and central authorities within the Ministry of Health - Complex administrative rules on management procedures
external ↓	<p style="text-align: center;">Opportunities</p> <p style="text-align: center;"><i>(are external conditions that may facilitate the policy implementation)</i></p> <ul style="list-style-type: none"> - A National Health Plan recently extended to 2020 allowing strategic continuity - Resolution in Portuguese Parliament, published in July 2015, signed by all the political parties considering diabetes and the NDP as one of the health priorities in Portugal. - APDP the oldest Diabetes association in the world as a partner 	<p style="text-align: center;">Threats</p> <p style="text-align: center;"><i>(are external conditions that may stand in the way of the policy implementation)</i></p> <ul style="list-style-type: none"> - Social and Economic Crisis - Lack of physicians in general, but GP's in particular - Lack of nurses in Primary Care - Barriers to implement an Integrated Care model in hospitals - No specific budget allocated to education in the health institutions (hospitals and primary care units)
	<p>Successful strategies:</p> <ul style="list-style-type: none"> - Implementation of the Diabetes Coordination Units in Primary and Secondary Health Care Centers with representatives from both to promote integrated care through interdisciplinary teams. - Project ABC Diabetes (under implementation) – a project that focus on education programs on diabetes control for new diagnosed people performed by nurses in primary health care units. - Project GOSTO (under implementation) – education program for people at risk (evaluated by the FinDRisk Questionnaire) - Green Way for Diabetic Foot (under implementation; pilot already implemented) – the primary health care units evaluate the risk and if necessary makes a direct referral to a specialized and dedicated team in the local hospital for treatment. Intra hospital referral can also happen if the patient enters the hospital by the emergency service. <p>Lessons learnt:</p> <p>We consider the following areas crucial to improve diabetes prevention and control:</p> <ul style="list-style-type: none"> - Having national registries and data to allow periodic monitoring that allow us to identify critical areas in need - Education programs in diabetes control for people with diabetes and for prevention of diabetes in people at risk - Promoting Screening of diabetes complications (Retinopathy, Foot and Kidney) that improve outcomes, prevent disabilities and diminishes costs (both social and financial) - Promote integrated care using multidisciplinary teams both in Primary Care Units and hospitals 	

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SLOVENIA

Country: Slovenia

Date: 9th December 2015

Partner: NIJZ

Name of responder: Jelka Zaletel

Partners/Stakeholders involved in the analysis:

Steering group of “Diabetes Prevention and Care Development Programme, Strategy 2010 – 2020”, consisting of representatives of National Diabetes Association, National Association of Nurses in Diabetes, University Department for Family Medicine at Medical Faculty, National Association of Diabetologists, University Medical Centre Ljubljana – Department for Diabetes, Pediatric Clinic – Department for Diabetes, Chamber of Pharmacists, MoH, NIJZ and National Health Insurance Fund

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. “Diabetes Prevention and Care Development Programme, Strategy 2010 – 2020

	Positive ↓	Negative ↓
internal ↓	<p style="text-align: center;">Strengths</p> <p style="text-align: center;"><i>(Strengths are internal attributes of the policy)</i></p> <ul style="list-style-type: none"> - Very high personal commitment of most members of Steering Group, and high level of trust among them - It became a rule that we work together - 2 years' Action Plans, agreed during strategic meeting, enforced by another meeting after the first year - Strong sense to catch windows of opportunities - Flexibility in leadership - Discussions, conceptualization and acting on recently emerging topics (patient empowerment, integrated care, change management) - Transfer of knowledge and experiences from EU projects (ie JA CHRODIS) - Defined horizontal processes, that support all goals of NDP: pt empowerment, care coordination among the levels and among healthcare team members, nurturing partnership, monitoring and evaluation of diabetes prevention and care, monitoring and evaluation of NDP itself - It spans across 10 years and provides enough time to develop the network that is able to have significant impact beyond the previously fragmented actions - Existence of up-to-date national guidelines for type 2 diabetes prevention, early detection and care, type 1 diabetes in childhood and adolescence, gestational diabetes and diabetes prevention in childhood and adolescence - Existence of curriculum for patients' education - Proactive national patients' association 	<p style="text-align: center;">Weaknesses</p> <p style="text-align: center;"><i>(are internal attributes of the policy that need to be addressed)</i></p> <ul style="list-style-type: none"> - Low level of participation at SG meetings of some stakeholders' representatives - Stakeholders have variable organizational structure with variable alignment of position of its representative in SG and in its own organisation - Only a few activities are planned to act at local/regional levels - Weak media coverage - Weak visibility of NDP and SG among members of the stakeholders' organisation - Ill-defined or non-existent levers of SG - Outside SG, institutions are still sylossed, not all disputes from the past are overcome - Regular reporting on activities from Action Plans - It is not well verbalized, that it may be harmful to the NDP process, if some successes may be attributed to NDP - Data collection, monitoring, evaluation - The goals set may be outside the power of the stakeholders - No stakeholders from other sectors outside healthcare - Support to frontline staff, members of the stakeholders institutions - Inability of stakeholders to agree on a set of indicators - No dedicated funding to strengthen diabetes prevention and care specifically - Variable uptake of guidelines among levels of care and among geographical regions - Models of care not defined in detail (ie education, diabetic foot)

external ↓

Opportunities	Threats
<p><i>(are external conditions that may facilitate the policy implementation)</i></p> <ul style="list-style-type: none"> - National project with high level policy commitment and allocated funding to restructure primary care delivery design by introducing nurses as prevention and care coordinators - Already established national program for health promotion/disease prevention with dedicated funding, existent health promotion centres, health promoting workshops and established organizational structure - “Together for health”, a Norwegian Grant Project to develop health promotion/disease prevention activities for children and adolescents, and to upgrade the existent national health promotion/disease prevention program for people at high risk for type 2 diabetes, and patients with type 2 diabetes - Current healthcare reform process (where diabetes is taken as a case study to analyze delivery design) - Strengthening of eHealth with proactive engagement of University Medical Centre and Pediatric clinic 	<p><i>(are external conditions that may stand in the way of the policy implementation)</i></p> <ul style="list-style-type: none"> - Existence of national-level projects that are important for diabetes prevention and care, that Steering Group is not aware of, or is not involved in itself or through involvement of key stakeholders, - No connections with sectors covered by other Ministries - No systematic integration with other national policies or programs - Longterm (beyond 10 years) existence of SG, introduction of other types of incentives to its work - Adopted by government, but no transsectoral support is felt - Primary care organization is under the responsibility of municipalities, that are more than 250 – fragmentation - University curricula are still not dealing with up-to-date topics in medicine, such as – pt empowerment, integrated care, working in teams, - In general, no meaningful data collection, monitoring, and evaluation, to plan and act according to where the problem is.

Successful strategies:

Complementarity of NDP to other national-wide projects. Use of windows of opportunity. Flexibility in leadership, reliability in commitment. Having no financial incentives for work in steering group attracted specific type of people. Personal commitment, shared values and goals, that are agreed with everybody, generate sustainable energy to work and to induce and implement changes.

Lessons learnt:

In addition to working at national level, focus should go down to local/regional level, energizing the local stakeholders, showing them the benefits of working together, without sylosses, identifying the same general goals – the same process as happened at national level.

Integration at local level will need many champions, facilitators – NDP should develop its mobilizing power.

New people on board are needed, and may not have the same background of experience like those who co-created the NDP, and that will bring opportunities as well as threads.

Go out from healthcare system.

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SPAIN

Country: SPAIN

Date: 2nd October 2015

Partner: ISCIII

Name of responder: Vendula Blaya Nováková, María del Mar Polo de Santos, Antonio Sarría Santamera

Partners/Stakeholders involved in the analysis:

Former coordinator of the Diabetes Strategy at the Ministry of Health (MoH), a nurse involved in a health promotion – health education program, a primary care physician/researcher in the area of diabetes prevention programs, public health officers from the Department of Primary Care, Planning and Evaluation of a Regional MoH, head of the Department of Programs and Healthcare Services of a Regional MoH, a representative of a pharmaceutical company working in the field of diabetes treatment

Method of participation:

- Email
- Meeting, workshop
- Group call (skype, hangout or other)
- Other, please specify _____

Included policies and programs:

1. Diabetes Strategy in the National Health System. Updated 2012 (Estrategia en Diabetes del Sistema Nacional de Salud. Actualización 2012)
2. DE-PLAN-CAT: Diabetes in Europe – Prevention using Lifestyle, Physical Activity and Nutritional Intervention – Catalonia
3. Patient Competent in Diabetes (Paciente Competente en Diabetes) and Retinography Training: Technique and Interpretation/Fogar dixital - Galician Health Service
4. Active Patient Program – Basque Public Health System

	Positive ↓	Negative ↓
internal ↓	<p style="text-align: center;">Strengths</p> <p style="text-align: center;"><i>(Strengths are internal attributes of the policy)</i></p> <p>National perspective</p> <ul style="list-style-type: none"> - As the healthcare delivery in Spain is the responsibility of the Autonomous Communities, and each Community has its own healthcare service, the Strategy has created a coordination framework that ensures the standardization of the contents and priorities in diabetic care across the different Autonomous Communities. - The Strategy aims for a greater cohesion of the diabetes programs of the individual Autonomous Communities in order to ensure equality in prevention and health promotion strategies, early detection, treatment and prevention of complications; and contributes to the homogenization of the quality of the health services across the Spanish territory. - Based on this national Strategy, most Autonomous Communities have developed their own structured diabetes plans which take into account regional differences, geographic distances in some less populated regions, etc. - The MoH, which is the coordinator of the National Strategy, has the authority to summon all the constituents of the Strategy on national level. It also facilitates the contact and mediates between the different parties involved (healthcare authorities, health professionals, patient associations, scientific societies, researchers, pharma industry, etc.) - The Strategy is not only evidence-based, but also emanates from the consensus between all these parties. - The MoH has a unique global vision of the situation across Spain, which enables the identification and exchange of good practices between the different Autonomous Communities and promotes clinical excellence. The MoH also coordinates the Diabetes Strategy with other chronic disease strategies and with the activities of the other ministries. <p>Regional perspective</p> <ul style="list-style-type: none"> - The diabetes programs aim for integrated care, and tend to be based in primary care but combine the collaboration between primary care professionals and medical specialists. 	<p style="text-align: center;">Weaknesses</p> <p style="text-align: center;"><i>(are internal attributes of the policy that need to be addressed)</i></p> <p>National perspective</p> <ul style="list-style-type: none"> - The organization of the Spanish National Health System, which counts with 17 Autonomous Communities and 2 Autonomous Cities, each with their own strategic plan, hinders the coordination of the Strategy. - The MoH also does not have direct access to - Clinical data from the Autonomous Communities for comparison and assessment of the progress made. - Changes in the health authorities' priorities may relegate the application of the Strategy. - Budgetary limitations limit the applicability of new initiatives that support to the Strategy implementation, even if these activities are considered of priority. <p>Regional perspective</p> <ul style="list-style-type: none"> - The greater the implementation of a program, the more staff it requires (for which there may not be enough funding) and the less efficient it is.² Implementing the programs adds to the workload of the healthcare professionals, whose time is already limited.⁴ - Demotivation of the talented healthcare professionals who have an institutional vision and traditionally (and selflessly) collaborate with the health authorities as times go on, demotivation of the professionals who have to fight organizational obstacles while providing care, demotivation of the professionals when the success of the program depends on a change in patient's thinking and actions.⁴ There is an increased demand for care, but the results are not apparent in real time. - Patient compliance/adherence. The impact of the campaigns and programs is limited; a greater involvement of social and business agents in prevention strategies is needed. In addition to conventional lifestyle counseling, information and communication technologies should be used with the goal of improving adherence to the treatment plan.^{2,4} New habits are more difficult to implement in some particular regions, e.g., the aging and wide geographic dispersion of the population in Galicia makes the implementation of programs much more costly in terms of both human resources and infrastructures.³

<ul style="list-style-type: none"> - Communication technologies may be used for remote consultations, and shared medical electronic record in some Autonomous Communities facilitates access to patient data to healthcare professionals working at different healthcare levels.³ This kind of collaboration also brings training opportunities for the healthcare professionals. - The diabetes programs try to be proactive rather than reactive.⁴ Attention is paid to the prevention of diabetes (focus on risk factors, such as obesity programs, chronic strategies), promotion of healthy lifestyles, and early detection of new cases, as well as prevention of chronic complications. Early detection of new cases or of patient decompensations may be handled through an automatic alarm system implemented through the integrated electronic medical record.³ - Patient education programs aim to empower patients.⁴ There are individual and group models, peer groups...^{2,3,4} - Possibility to measure patient outcomes, quality, effectiveness and cost of the interventions on primary care and hospital level. 	<ul style="list-style-type: none"> - The Strategy is a basic framework, but the treatment needs to be individualized, customized based on risks, age, needs, complications, etc. - Fragmented care.
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external ↓

Opportunities	Threats
<p style="text-align: center;"><i>(are external conditions that may facilitate the policy implementation)</i></p> <ul style="list-style-type: none"> - Strengthening the leadership between the different parties involved in the Strategy and, at the same time, promotion of the role of the Strategy as a “forum” where these parties meet. - Coordination on all levels: primary care - specialist care, physicians – nurses - educators, prevention - treatment, healthcare professionals – patients. - The Strategy permits to create tools for the evaluation of the situation at any time and for assessing the usefulness of the measures implemented. - Increasing awareness about diabetes at different levels: diabetes is not only a health problem, but also a social issue - the society is becoming increasingly sensitive to the prevention of diabetes in parallel to its increasing prevalence and social impact, resulting in a reduction of the social stigma of these patients;⁴ public health service managers 	<p style="text-align: center;"><i>(are external conditions that may stand in the way of the policy implementation)</i></p> <ul style="list-style-type: none"> - The economic crisis still lasts. The resources are reduced, and destined more towards the treatment than prevention of diabetes. The healthcare professionals are demotivated by the socio-economic context. - The political priorities shift too fast, before the Strategy has become fully entrenched; and if the Strategy is not actively maintained, it will lose prestige in the eyes of the healthcare professionals and become just another document that does not evolve. There is a lack of continuity in the actions started due to the changes in the healthcare organization or political changes, because the political influence on the managers of healthcare organization is excessive and primes over the technical point of view. Especially primary care professionals, but also overall the healthcare system itself, are overwhelmed by the confluence of numerous health priorities at the same time.

<p>are becoming increasingly sensitive to the issue of diabetes;^{2,3} increasing the knowledge of the patients with diabetes facilitates an active participation in their own care;⁴ promoting healthy lifestyle among the diabetic patients also has a positive effect on their immediate environment.⁴ New communication technologies may facilitate the dissemination of the preventive strategies.²</p> <ul style="list-style-type: none"> - Redefining collaborations and traditional roles leads to improvements in efficiency and quality of care – redesigning patient care by clinicians, establishment of integrated care and interdisciplinary teams,³ change in the traditional roles of health professionals and patients towards a more symmetrical relationship.⁴ Diabetes management is changing, there is a shift towards being closer to the patient – enhanced role of primary care in the follow-up and monitoring, resulting in earlier detection and treatment of complications and comorbidities, ultimately leading to improvements in mid-term health outcomes.³ 	<ul style="list-style-type: none"> - On the other hand, the diffusion of the Strategy among healthcare professionals working in clinical care may be insufficient. Other healthcare professionals may fear the Strategy implies a greater control over their work and may be resistant to change. - Growing prevalence of diabetes and pre-diabetes. The Spanish lifestyle (sedentary, lack of exercise) and the culture of eating and drinking are difficult to change, and it is even more difficult to maintain these healthy lifestyle changes. There are no specific laws promoting healthy lifestyles and no culture of disease prevention in the society. - Social inequalities penalize the overall dissemination of the strategy.² - Diabetes management is changing, there is a transition from a hospital-centric system towards new infrastructures and tools, patient's home is becoming the care center now. - Gaps in our knowledge of diabetes.
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Successful strategies:

- The DE-PLAN-CAT achieved an overall reduction of diabetes incidence by 36.5% in a 4-year follow-up. The price per QALY was 3243 €.²
- The launch of e-services in Galicia has reduced the attendance in outpatient clinics by 12%, decreased the average response time for hospital referral and achieved that 78% of the consultations can be made without having to transfer the patient to a hospital, and saved estimated 373,560 €/year and hospital department. The satisfaction level was above 90% both in patients and healthcare workers.³
- The Active Patient Program improves the blood pressure control and food habits, even though it does not improve the glycemic control of diabetes.⁴

Lessons learnt

- Even though the cost-effectiveness of diabetes prevention programs is somewhat controversial, even delaying the onset of the disease has a significant impact on both the individual and the society.²
- The success of the program depends on the motivation of the professionals; the health administration merely provides means and resources.³
- The diabetes programs need to take into account and work with all the risk factors at once. Peer education provides extra value to the patients; they feel accompanied in their disease. Patients truly needs to be the center of the care. Healthcare professionals need to increase their empathy and be aware of the real needs of the patients.⁴
- We need to be aware that 98% of the daily decisions in relation to treatment are made by patients at home, and focus our efforts accordingly. Diabetes is a complex and multifactorial disease that requires a series of strategies in order to prevent complication. These interventions must be coordinated and integrated across all levels of healthcare.

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