



# National Diabetes Plans: can they support changes in health care systems to strengthen diabetes prevention and care?

Jelka Zaletel<sup>1</sup>, Milivoj Piletic<sup>1</sup>, Jaana Lindström<sup>2</sup>, Andrea Icks<sup>3</sup>, Ulrike Rothe<sup>4</sup>, Monica Sørensen<sup>5</sup> and Marina Maggini<sup>6</sup>, on behalf of the Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS)

<sup>1</sup>National Institute of Public Health, Ljubljana, Slovenia

<sup>2</sup>National Institute for Health and Welfare, Helsinki, Finland

<sup>3</sup>Heinrich Heine University, German Diabetes Center, Düsseldorf, Germany

<sup>4</sup>Dresden University of Technology, Dresden, Germany

<sup>5</sup>Norwegian Directorate of Health, Oslo, Norway

<sup>6</sup>Centro Nazionale di Epidemiologia, Sorveglianza e Promozione della Salute, Istituto Superiore di Sanità, Rome, Italy

## Abstract

Healthcare systems do not fit well with the “modern” patient, who has a right to autonomy and self-determination. The services that are designed and delivered in policy contexts are not prone to encourage innovation. National Diabetes Plans, defined as “any formal strategy for improving diabetes policy, services and outcomes that encompass structured and integrated or linked activities which are planned and co-ordinated nationally and conducted at the national, regional, and local level”, may hold a great potential not only to improve prevention and care for type 2 diabetes, but also for transforming healthcare delivery. Today, changes to adapt healthcare delivery tend to be implemented within existing provider structures, with limited understanding of specific context, structures, processes and potential for change. National Diabetes Plan can be a diagnostic tool for barriers, can be a driver for planning the change, and can help develop capacities and competences that are needed to strengthen healthcare systems to better address health promotion and chronic diseases.

## Key words

- diabetes
- National Diabetes Plan

## NATIONAL DIABETES PLANS: STRATEGIC, COORDINATIVE AND IMPLEMENTATION ACTIVITIES

National Diabetes Plans can be defined as “any formal strategy for improving diabetes policy, services and outcomes that encompass structured and integrated or linked activities which are planned and co-ordinated nationally and conducted at the national, regional, and local level” [1]. National Diabetes Plans may indeed focus on one disease, but along the continuum of the disease. According to IDF (International Diabetes Federation), they should encompass diabetes prevention, identification and care for people at high risk, early diagnosis and high quality complex care to prevent chronic complications, and they generally aim to assure the patients the maximum possible well being with empowerment as a core underlying process [1]. To implement such programmes, the existent health delivery systems with

their rigid organisational structures and funding mechanisms may act as barriers. Paternalism, that serves well in the approach to acutely ill, is an important obstacle to functional relationship in health promotion and care of patients with chronic diseases.

## BENEFITS AND OBSTACLES OF STAND-ALONE PROGRAMMES

National Diabetes Plans may be seen as vertical, or stand-alone programmes, since they address “only one disease”. Horizontal or integrated programmes on the other hand are those, where actions are functionally merged with health care delivery. The studies on vertical programmes were done a decade ago and focus mostly on HIV, mental health and certain communicable diseases, mostly in low- and middle income countries. The support for vertical programmes was driven by the assumption that concentrating on a few focused interven-



tions is an effective way to maximise the effect in short time when extra resources were available as opposed to waiting for comprehensive changes in the health system. The arguments against, however, were that they have limited chance of sustainability and can have negative effect on non-targeted populations and increase fragmentation of the system [2].

As such, they may be desirable when rapid response is needed and as a temporary measure if the health system is weak and does not support the targeted population in their needs, for example to deliver very complex services where highly skilled workforce is needed. If designed as time-limited programmes, a strategy should be developed to avoid negative effect for the health system and non-targeted population, and the mechanisms should be in place that would support integration into the existent health services at a later stage. If not time-limited, there should be mechanisms at strategic and operational levels to assure tight linkage between horizontal and vertical elements of the system. The integration should be supported by legal and regulatory adjustments to link the leadership, organisation and funding of vertical programmes with the mainstream health system. These changes should also create an environment that is supportive to structural and operational integration that emphasises the needs of the person or population rather than the disease [2].

Time aspect is an important issue, because it is known that system changes take time, since they should be built step-by-step with continuous evaluation. So, in addition to rapid response measures, long-term actions should be planned too, especially if they address barriers such as paternalism outside acute illness, local conditions, lack of cooperation between sectors.

Having said that it is wise to keep in mind several focuses of the possible definitions of the other type, the horizontal, or integrated, programme. "It is the process of bringing together common functions within and between organizations to solve common problems, developing commitment to shared vision and goals and using common technologies and resources to achieve these goals" [3], bringing out the shared vision between organizations. They "tackle the overall health problems on a wide front and on a long-term basis through the creation of a system of permanent institutions [4] and include a variety of managerial or operational changes to health systems to bring together inputs, delivery, management and organisation of particular service functions [5], focusing on overall health on a wide front and as a long-term process. Or: "It is a process where disease control activities are functionally merged or tightly coordinated with multifunctional health care delivery" [6], underlining the need for connections and coordination.

### **CHRONIC DISEASES AS DRIVERS FOR CHANGES IN HEALTHCARE SYSTEMS**

Chronic diseases, and the potential of health promotion in preventing those diseases, are as concepts the essential drivers for changes in today's healthcare system. Although politically visible, the translation of policy commitment into effective policy programmes seems to be very difficult. Main obstacles seem to be

the complexity and long-term nature of the interventions, the sustainability of the system that served acutely ill, and paternalistic approach of healthcare professional toward the patient. If they are to be efficiently overcome, the actions should connect disconnected parts of health system, integrate public health and social care in the new network, and develop supportive regulatory framework. To adapt the systems in place, innovative approaches are needed at policy as well as at implementation level. The success of these innovations is mostly defined by specific political, economic and cultural context [7].

In this sense, it seems hard to understand that in the field of chronic diseases the implementation of the changes seem to be mostly limited within existing provider structures and do not aim to overcome barriers between providers, institutions, and sectors through service redesign. Even the most promising projects rarely manage to go broader than a pilot phase. Local conditions seem to influence implementation and sustainability the most. It is suggested, that the knowledge base for it is the implementation science that is bringing the evidence to support the implementation of the change such as understanding the "system readiness for change", and understanding existing approaches to identify those components that present the greatest obstacles and main barriers to change [7].

Recently, patient empowerment is becoming highly ranked at EU and national policy level as an idea and the strategy in the field of health promotion and chronic diseases at micro, meso and macro level, but implementation of these ideas seems to be very weak [7]. Paternalism, that functions well in the systems designed for acutely ill, is still prevailing. In health promotion and chronic disease care, cultural and social differences, and the beliefs and norms of the patients are even of a greater importance. In programmes aimed to target patient empowerment, it is frequently believed that the quality of care rises, but the patients may still report that they feel less involved in the decisions about their care. Patient preferences and not (only) expert views will need to drive policy determination and support its implementation in "experience-based co-design" [7]. However, research on methods to assess patients' preferences should be developed first, and projects developed and evaluated in accordingly.

Overcoming the barriers and forming new interactions between the parts of the systems as well as inclusion of patients voice into the decision making and support of the implementation cannot arise from the current systems. Therefore, regulatory innovations are needed and context that enables innovative approaches is crucial. And those, who should implement the change, should develop the competence and the capacity to be successful actors of the change [7].

### **NATIONAL DIABETES PLANS CAN BE THE DIAGNOSTIC TOOL TO DRIVE STRENGTHENING OF HEALTHCARE**

So, diabetes is a well suited model disease that may act as a case study in redesigning health service delivery and its integration with social care. If National



Diabetes Plans are designed and implemented through instant structural and operational integration with existent health system, they can act as a driver to change the system to be able to provide “very complex services with highly skilled workforce” and as such have positive effect on the system, too.

National Diabetes Plans therefore not only hold the great potential to improve prevention and care for type 2 diabetes, but also for transforming the healthcare delivery and services. If National Diabetes Plans manage to nurture the milieu so that those, who are asked to implement the change, will acquire the capacity and competence they need to integrate the goals set out [7], the shared vision defined in the strategy can be effectively implemented and spread across the health care system. The sustainability, however, can only be supported if integration into the health system is assured.

By focusing also on implementation, National Diabetes Plans may create the policy environment where centrally defined requirements and local autonomy have to be balanced (top-down and bottom-up approaches), and represent an opportunity to closing the gap between policy intent and actual implementation [7]. National Diabetes Plans with focus on patient empowerment, not only at individual level, but also through the representation of patients’ organizations in designing and implementing National Diabetes Plans, may give the voice to their needs and co-design the changes in health delivery.

To conclude, National Diabetes Plans, if designed as a machinery that has “structured and integrated or

linked activities” and if “planned and co-ordinated nationally” and if they are to be implemented “at the national, regional, and local level” [1], can be a good exercise to test the system’s capacity to change and identify main obstacles in prevention and treatment of chronic and lifestyle related diseases. Those National Diabetes Plans, that are implemented effectively, can also show the way how to overcome the contextually sensible barriers. On the other hand, also non-successful National Diabetes Plans, that did not fulfil the set goals, are very valuable as a diagnostic tool of what does not work. So to achieve the change, it should be tried some other way.

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## **REFERENCES**

1. IDF Task Force on Diabetes and Non-Communicable Disease Prevention, Policy and Practice. *A Guide to National Diabetes Programmes*. Available from: [www.idf.org/publications/guide-national-diabetes-programmes](http://www.idf.org/publications/guide-national-diabetes-programmes).
2. Atun RA, Bennett S, Duran A. *When do vertical (stand-alone) programmes have a place in health systems?* World Health Organization 2008 and World Health Organization, on behalf of the European Observatory on Health Systems and Policies; 2008. Available from: [www.euro.who.int/en/data-and-evidence/evidence-informed-policy-making/publications/2008/when-do-vertical-stand-alone-programmes-have-a-place-in-health-systems](http://www.euro.who.int/en/data-and-evidence/evidence-informed-policy-making/publications/2008/when-do-vertical-stand-alone-programmes-have-a-place-in-health-systems).
3. WHO study group. *Integration of health care delivery*. Geneva: World Health Organization; 1996. (Technical Report Series, No. 861). Available from: [http://whqlibdoc.who.int/trs/WHO\\_TRS\\_861.pdf](http://whqlibdoc.who.int/trs/WHO_TRS_861.pdf).
4. Msuya J. *Horizontal and vertical delivery of health services: what are the tradeoffs?* Washington, DC: World Bank; 2005.
5. Briggs CJ, Garner P. Strategies for integrating primary health services in middle- and low-income countries at the point of delivery. *Cochrane Database of Systematic Reviews* 2006.
6. Unger JP, Paeppe P, Green A. A code of best practice for disease control programmes to avoid damaging health care services in developing countries. *Int J Health Plan M* 2003;18:S27-39.
7. Nolte E, Knai C, Saltman RB. *Assessing chronic disease management in European health systems: concepts and approaches*. World Health Organization, on behalf of the European Observatory on Health Systems and Policies; 2014. Available from: [www.euro.who.int/en/about-us/partners/observatory/publications/studies/assessing-chronic-disease-management-in-european-health-systems-concepts-and-approaches](http://www.euro.who.int/en/about-us/partners/observatory/publications/studies/assessing-chronic-disease-management-in-european-health-systems-concepts-and-approaches).