

# Developing a National diabetes plan in Lithuania

*Diabetes: a case study on strengthening health care for people with chronic diseases  
WP7 - Final Meeting, 20-21 October 2016, Rome*

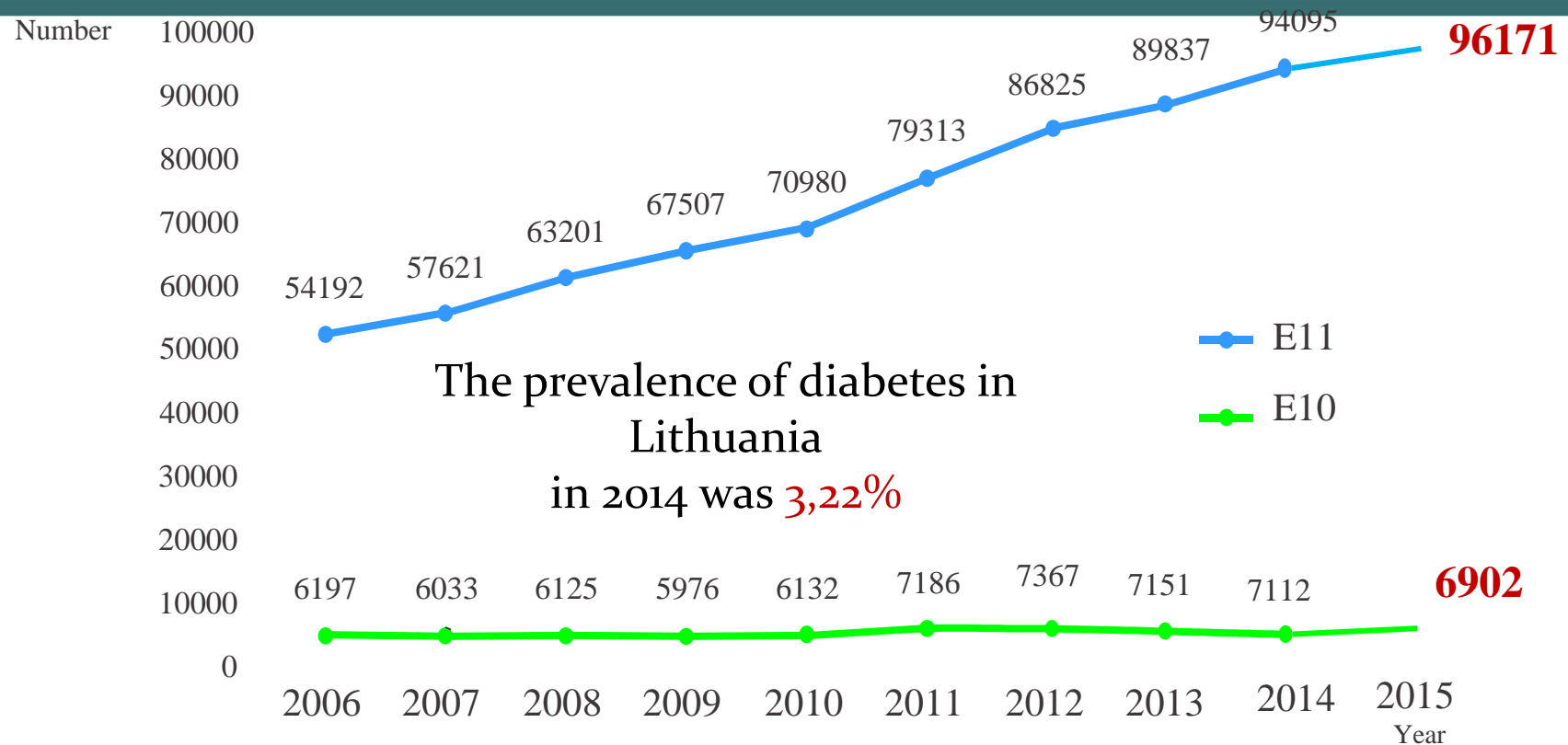


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# Disclosure

- No conflicts of interest to declare.

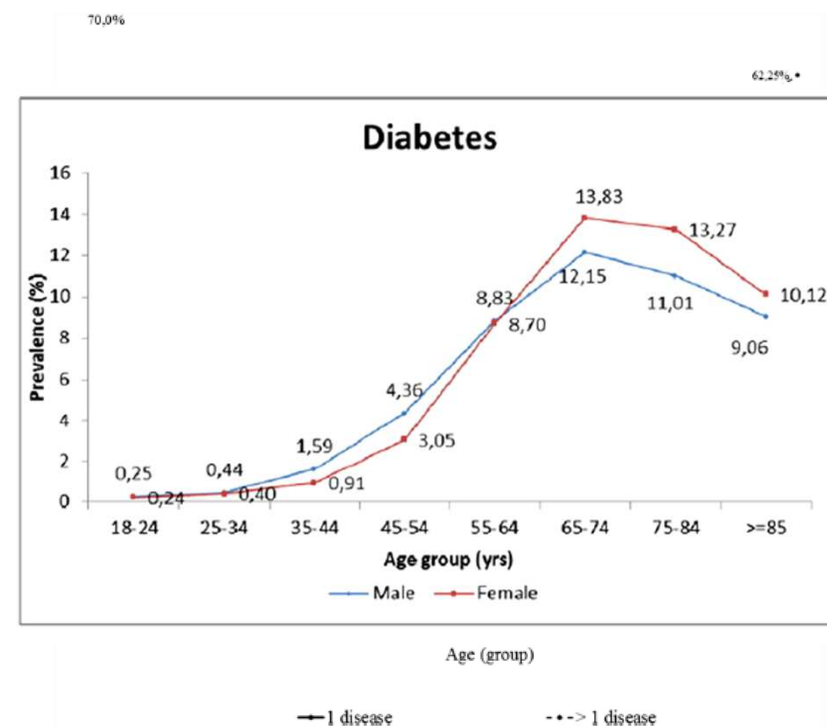
# Diabetes epidemiology in Lithuania: dynamics of E10 and E11



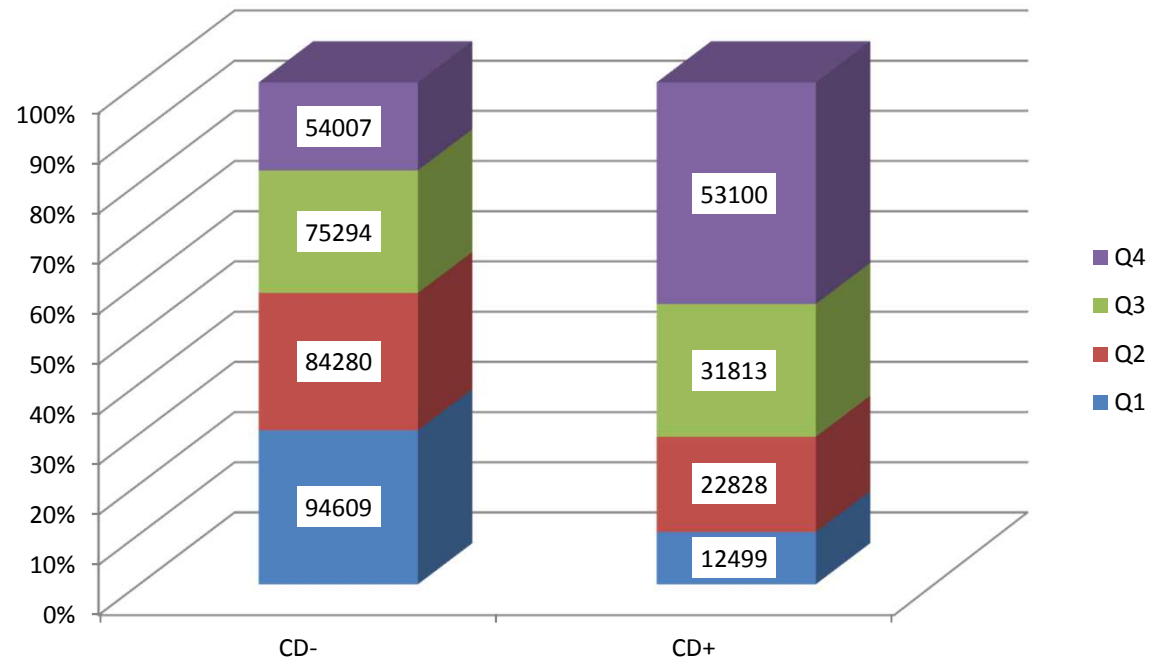
# Prevalence and structure of chronic conditions in Lithuanian population

**Table 3**  
Distribution of diseased people into ten most frequent chronic condition groups and the prevalence of these chronic conditions in Lithuanian adult population.

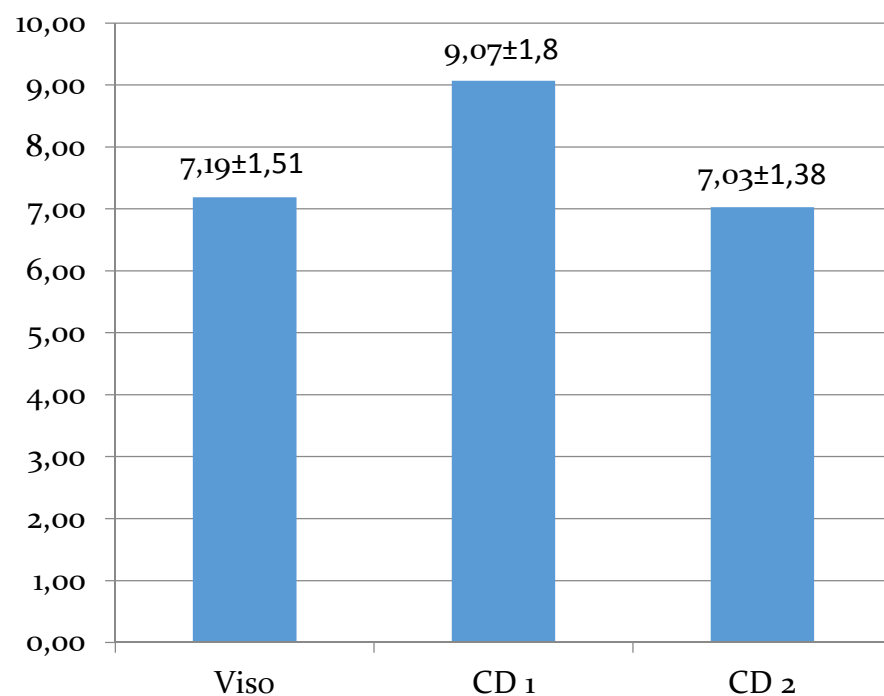
Top	Chronic condition	Adults with chronic conditions (N = 452,769)		Lithuanian adult population (N = 2,410,825)
		No. of diseased people	Percentage of diseased people	Prevalence in population
1	Hypertension	387,781	85.65%	16.08%
2	Ischaemic heart disease	304,698	67.3%	12.64%
3	Heart failure	190,791	42.14%	7.91%
4	Arrhythmias	177,402	39.18%	7.36%
5	Diabetes	124,416	27.48%	5.16%
6	Osteoarthritis	117,972	26.06%	4.89%
7	Back pain	101,406	22.4%	4.21%
8	Dyslipidaemia	98,082	21.66%	4.07%
9	Stroke	58,858	13.00%	2.44%
10	Cancer	56,260	12.43%	2.33%



# Proportion of patients in relation to overall treatment costs in DM+ and DM- groups

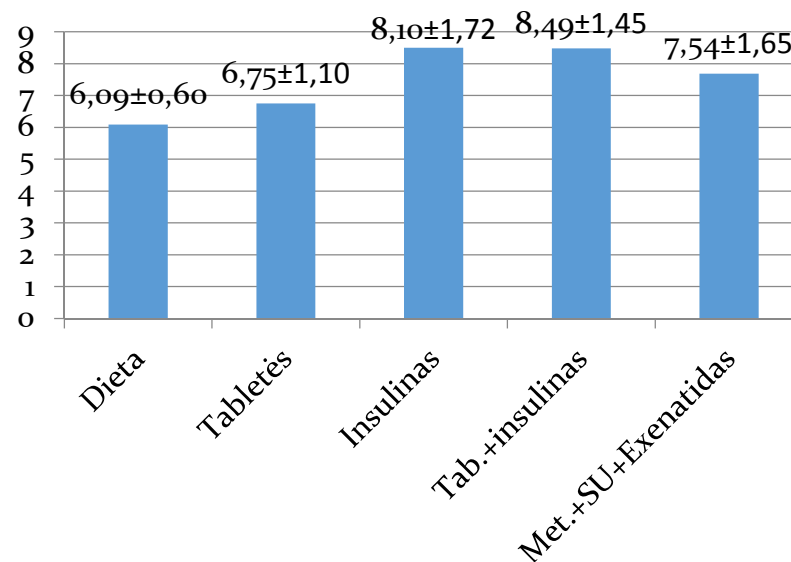


# Diabetes control in Lithuania: HbA<sub>1c</sub>



Target HbA<sub>1c</sub> ≤ 7% was achieved in 57,6 % of patients

13,3% in T<sub>1</sub>DM  
61,2% in T<sub>2</sub>DM



Audit of diabetes care 2012-2013 in 5 largest Vilnius outpatient clinics, sample of 1600 patients

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Visockiene Z et al. Quality of Diabetes Care at the largest outpatient clinics in Vilnius. Acta Med Litu. 2016 (23). No. 2; 126–134



Table 2. Annual checks for diabetes related parameters

Measure	Recorded N, %		P value
	T1DM (N = 128)	T2DM (N = 1591)	
Weight	75 (58.6)	879 (55.3)	0.464
BMI	72 (56.3)	791 (49.7)	0.155
Blood pressure	122 (95.3)	1549 (97.4)	0.165
Feet examination*			0.509
1	24 (18.8)	239 (15.0)	
2	5 (3.9)	74 (4.7)	
Retinal screening (ophthalmologist)*			0.002
0	31 (24.2)	631 (39.7)	
1	56 (43.8)	582 (36.6)	
2	41 (32)	378 (23.8)	
Lipid profile*			0.804
0	80 (62.5)	950 (59.7)	
1	33 (25.8)	430 (27)	
2	15 (11.7)	211 (13.3)	
Plasma creatinine*			0.305
0	29 (22.7)	442 (27.8)	0
1	55 (43)	690 (43.4)	
2	44 (34.4)	459 (28.8)	
Urinary microal- buminuria*			<0.001
0	62 (48.4)	1365 (85.8)	0
1	52 (40.6)	201 (12.6)	
2	14 (10.9)	25 (1.6)	

\* Number of examinations within 2 years.

Table 3. HbA1c assessment and referral to an endocrinologist

HbA1c, %	All (N = 1643)	T1DM (N = 123)	T2DM (N = 1520)	P value
<b>HbA1c assessment rate (times/2 years)</b>				
<7	4.1 ± 1.80 (N = 950)	5.25 ± 1.60 (N = 12)	4.08 ± 1.80 (N = 938)	0.024
≥7 - <8	4.22 ± 1.85 (N = 316)	3.85 ± 1.94 (N = 27)	4.25 ± 1.85 (N = 289)	0.347
≥8 - <9	4.31 ± 1.77 (N = 169)	4.46 ± 1.90 (N = 28)	4.28 ± 1.75 (N = 141)	0.575
≥9	3.75 ± 1.83 (N = 208)	3.70 ± 1.72 (N = 56)	3.76 ± 1.87 (N = 152)	0.958
<b>Referral rate to an endocrinologist (times/2 years) *</b>				
<7	0.65 ± 0.93	0.75 ± 0.75	0.65 ± 0.93	0.393
≥7 - <8	1.27 ± 1.17	1.15 ± 1.17	1.28 ± 1.18	0.553
≥8 - <9	1.57 ± 1.62	2.32 ± 1.94	1.43 ± 1.51	0.020
≥9	1.66 ± 1.46	1.48 ± 1.64	1.72 ± 1.38	0.093

\* Number of patients in different HbA1c groups is the same as in the above part of the table.

Only **56.3%** of needful referrals to an endocrinologist were performed

# DCP

- ***Diabetes Control Programme (DCP) 2006-2007***

I. Early diagnosis of diabetes in high risk subjects (10 regions, 450.000Lt (130.000Eu)).

Results: OGTT performed in 42.574 subjects: DM diagnosed in 4.7%; Impaired glucose tolerance – in 10.6%; Impaired fasting glucose – in 12.0%

II. Information spread for public (on DM risk, healthy living, physical activity)

Results: 5 TV and 3 radio shows; 18 publications in national and regional media; 18 publications for DM patients, newspaper “Diabetas” etc.

III. Education for professionals and patients

Results: 9 teaching materials for GP’s and students; 8 seminars for GP’s and specialists, 4 seminars for diabetes nurses, national conference on diabetes management for GP’s and specialists; 2 conferences for diabetes nurses; summer camp for type 1 DM patients.

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# Background

- Low diabetes prevalence in Lithuania is reported by official institutions and insufficient glycemetic control estimated in a sample of subjects.
- Type 2 diabetes is one of the most common chronic conditions diagnosed in multimorbid subjects, increasing the risk of complications and worsening of concomitant diseases.
- Diabetes is one of the most expensive condition for health care system .
- Diabetes could be prevented, integrating prevention strategy into currently ongoing programmes.
- International documents/guidelines/recommendations support the development of National Diabetes Control Programme.

# National Diabetes Control Programme 2016-2024

Initiative: healthcare professionals - Lithuanian Society of Endocrinology, and patients organization – Lithuanian Diabetes Association

Order of the Minister of Health was issued on the 2nd June 2014 to prepare the project of the Programme till the 1st of Dec 2014.

Working group:

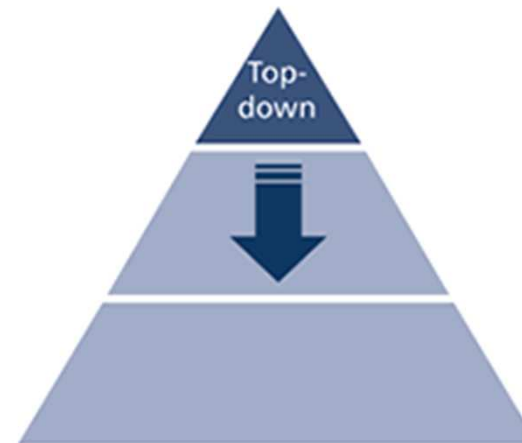
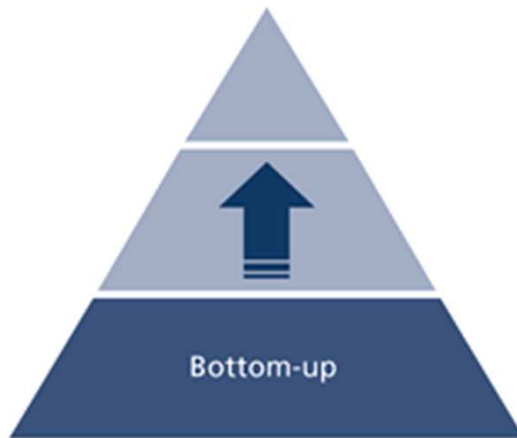
- 6 specialists from MOH (policy makers)
- 1 representative from National Health Insurance Fund
- 8 doctors, representatives from the hospitals/oupatient clinics and Universities (6 endocrinologists and 2 GP)
- President of Lithuanian Diabetes Association

# National Diabetes Control Programme 2016-2024

- The NDP used results from the DCP 2006-2007 and documents earlier developed in Lithuania: Description of Diabetes Treatment with Reimbursed Medications (2012), Description of Nursing Service for Diabetes Patients (2008), Description of Long-term Care of Patients with Chronic Diseases (2014) .
- Experience from other countries and "Guide to National Diabetes Programmes" developed by the International Diabetes Federation (IDF Guide, 2010 ) was proposed by specialists to be used in the development of the NDP.
- **However:** It proved not feasible to incorporate all elements of the IDF Guide in the development of the NDP in Lithuania as this would have required a high level of intersectorial collaboration, which is too difficult to achieve in practice at present.

# NDCP: leadership

**The MoH is a formal leader in the development of the NDP.**



“Local strategies need to be in local political agenda and linked to budgetary decisions & reporting of implementation of strategies”

# National Diabetes Control Programme 2016-2024

- **Goals of the programme:**

To develop and improve primary, secondary and tertiary diabetes prevention.

To improve management and coordination of diabetes care and support continues and qualitative situation analysis.

# National Diabetes Control Programme 2016-2024

- **Primary prevention covers:**

Strategy to increase community awareness about diabetes risk factors/diabetes itself and possible interventions aimed at reducing and minimising risk of disease.

- **Secondary prevention covers:**

Identification of high-risk individuals and early diagnosis of type 2 diabetes.

- **Tertiary prevention covers:**

Strategy for early detection and timely comprehensive care of the chronic complications of diabetes and concomitant diseases.

# National Diabetes Control Programme 2016-2024

- **Management and situation analysis covers:**

Development of system for continues Programme supervision.

Improvement of inter-institutional and international collaboration.

Development of electronic Diabetes database in the setting of National e-medicine system.

# National Diabetes Control Programme 2016-2024

Goals and objectives

Tools for  
implementation

Roles and responsibilities  
assigned

Financial resources

Expected outcomes

**3 years planning:  
2016-2018**



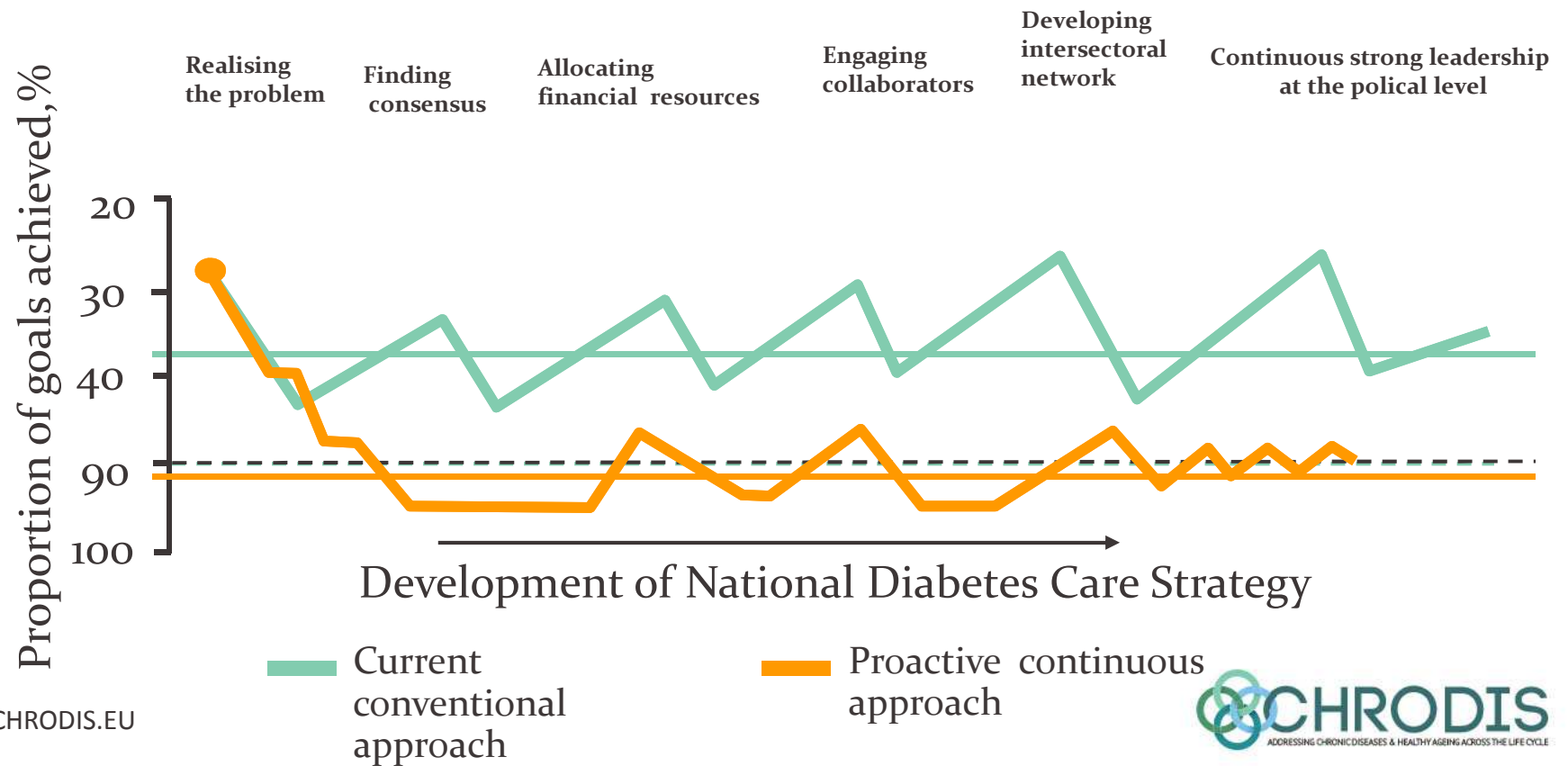
# The main obstacles for the implementation and continuity of the NDCP

- Lack of financial resources.
- Lack of political leadership and priority of the problem at the governmental level.
- Lack of data on how already available recommendations are followed and what quality of diabetes care is achieved.
- Weak management and monitoring of the process.



Needs to be addressed

# Conceptual Approach in the Development of National Diabetes Care Strategy



# The Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS)\*



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\* This presentation arises from the Joint Action addressing chronic diseases and healthy ageing across the life cycle (JA-CHRODIS), which has received funding from the European Union, under the framework of the Health Programme (2008-2013).