CHRODIS JA

WP 7

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

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Questionnaire

on practices for prevention and management of diabetes in EU member states

Tasks 1-4

CHRODIS
ADDRESSING CHRONIC DISEASES & HEALTHY AGEING ACROSS THE LIFE CYCLE

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CHRODIS - JA

WP7 - Diabetes: a case study on strengthening on health care for people with chronic diseases.

The European Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (CHRODIS-JA) aims to promote and facilitate a process of exchange and transfer of good practices between European countries and regions, addressing chronic conditions, with a specific focus on health promotion and prevention of chronic conditions, multi-morbidity and diabetes.

The principal objective of work package 7 (Diabetes: a case study on strengthening on health care for people with chronic diseases**)** is to improve coordination and cooperation among Member States to act on diabetes, including the exchange of good practices across the EU, and to create ground for innovative approaches to reduce the burden of chronic diseases.

The purpose of this questionnaire is to help to provide a structured overview about current programs (interventions, initiatives, approaches or equivalents) that focus on aspects of primary prevention of diabetes, identification of people at high risk, early diagnosis, secondary prevention, comprehensive multifactorial care, education programs for persons with diabetes and trainings for professionals.

The responses to this questionnaire will not be used to examine the performance of policies or programs in any given country, to rank countries according to their policies and programs or as a benchmarking tool.

Participation in this project will provide excellent opportunities to share expertise and experience regarding the care for people with diabetes among a wide range of European countries. Based on the results of this questionnaire, good practices will be identified and studied in more detail.

Structure of the questionnaire .....

Instruction for filling in the questionnaire.....

<u>Participant information</u>

Contact Person	
Position	
Name of the Institution/Association	
Type of Institution/Association:	
Street	
Zip Code / Town	
Country	
Telephone:	
E-mail Address:	

Please, do not hesitate to seek assistance by writing to or calling the following contacts at the National Institute of Health, Rome (Italy):

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Other Institutions

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For more information about the CHRODIS-JA: www.....

Task 1-Prevention of diabetes: focus on people at high risk (A1-A4)

A1. PREVENTION STRATEGIES			
1. Do the policies and legislation support environment favouring diabetes prevention?	Yes	No	unknown/ not applicable
2. Is a national diabetes plan with specific prevention targets available?	Yes	No	unknown/ n.a.
3. Do the national health monitoring systems provide sufficient information for the surveillance of diabetes incidence and prevalence?	Yes	No	unknown/ n.a
4. Are ethnic minorities and low socio-economic groups considered in all activities of diabetes prevention?	Yes	No	unknown/ n.a
5. Is the basic knowledge in population-level prevention of diabetes part of the curricula/guidelines of medical professionals?	Yes	No	unknown/ n.a
6. Have the different screening protocols been evaluated at population level?	Yes	No	unknown/ n.a
7. Are there a statistic (based on either register data or representative sample) and data sources available about:	**Data available**		
a. proportion of population aware of diabetes and its risk factors?	Yes	No	unknown/ n.a
b. prevalence of diabetes in the population?	Yes	No	unknown/ n.a
c. percentage of the population physically inactive?	Yes	No	unknown/ n.a
d. prevalence of overweight, obesity and abdominal obesity in population?	Yes	No	unknown/ n.a
e. percentage of population following national recommendations on nutrition?	Yes	No	unknown/ n.a
f. percentage of health care cost allocated to prevention programmes?	Yes	No	unknown/ n.a
A2. SCREENING AND HIGH RISK PREVENTION STRATEGIES			
8. High-risk prevention strategies are included in the education of the health care professionals.	Yes	No	unknown/ n.a
9. Validated diabetes risk assessment tools are available to health care providers.	Yes	No	unknown/ n.a
10. Information technology systems supporting the implementation of screening for diabetes are available at health care provider level?	Yes	No	unknown/ n.a
11. Medical record system supports interventions for chronic disease prevention.	Yes	No	unknown/ n.a
12. Defined clinical pathways exist for the health care provider to deal with individuals at risk for diabetes.	Yes	No	unknown/ n.a
13. Multidisciplinary approach for interventions is supported by the health care providers.	Yes	No	unknown/ n.a
14. Health care providers are collaborating actively with other players active in health promotion.	Yes	No	unknown/ n.a
15. In your country, are there a statistic and data sources available about:	**Data available**		
a. proportion of the population screened for diabetes by health care provider per year?	Yes	No	unknown/ n.a
b. proportion of health care personnel per health care provider active in population level prevention?	Yes	No	unknown/ n.a
c. number of health promotion organizations active in population level prevention?	Yes	No	unknown/ n.a
d. percentage of remitted high-risk individuals participating in lifestyle interventions?	Yes	No	unknown/ n.a
e. percentage of identified high-risk individuals remitted to lifestyle interventions?	Yes	No	unknown/ n.a
f. percentage of identified high-risk individuals remitted to diagnostic procedures?	Yes	No	unknown/ n.a
g. number of healthcare professionals at health care provider level qualified for interventions per 100.000 inhabitants?	Yes	No	unknown/ n.a
h. proportion of individuals dropping out of interventions?	Yes	No	unknown/ n.a
i. proportion of high-risk individuals in interventions achieving clinically significant changes in risk factors at 1 year follow-up?	Yes	No	unknown/ n.a
j. diabetes incidence rate among high-risk individuals in interventions at health care provider level?	Yes	No	unknown/ n.a

A3. HIGH RISK PREVENTION STRATEGIES IN INDIVIDUALS			
16. Are the individual's risk factor profiles assessed?	Yes	No	unknown
17. Is the individual's motivation for behavioral changes discussed?	Yes	No	unknown
18. Have the structure and content of the interventions been defined at individual level?	Yes	No	unknown
19. Have individualized targets for prevention interventions been established?	Yes	No	unknown
20. Is a plan for follow-up defined?	Yes	No	unknown
21. The individual medical records and data sources are available and include information about:	**Data available**		
a. proportion of planned prevention intervention visits completed over 1 year?	Yes	No	unknown
b. weight change over 1 year?	Yes	No	unknown
c. change in waist circumference over 1 year?	Yes	No	unknown
d. change in glucose over 1 year?	Yes	No	unknown
e. change in the quality of nutrition over 1 year?	Yes	No	unknown

A4. IN YOUR OPINION IS THERE ANY OTHER STRATEGY WORTH TO BE REPORTED?

If yes, please give a short description

Task 2-Secondary prevention of type 2 diabetes (B1-B4)

B1. POPULATION LEVEL MANAGEMENT STRATEGIES			
22. Do the policies and legislation support environment favouring disease (diabetes) management programs? ** if yes then please fill out also the questions B3 about the (diabetes) management programs*	Yes*	No	unknown/ not applicable
23. Do you have a national disease management program for secondary prevention of diabetes and prevention of diabetes complications?	Yes	No	unknown/ n.a
24. Do the national health monitoring systems provide sufficient information for the surveillance of specific diabetes complications?	Yes	No	unknown/ n.a
25. Are ethnic minorities and low socio-economic groups considered in all activities of diabetes secondary prevention, e.g. diabetes management program?	Yes	No	unknown/ n.a
26. Are there a statistic (based on either register data or representative sample) and data sources available about:	**Data available**		
a. proportion of population aware of and educated for diabetes and its prognostic factors?	Yes	No	unknown/ n.a
b. incidences of the diabetes complications in the diabetic population?	Yes	No	unknown/ n.a
c. incidence of diabetic foot syndrome?	Yes	No	unknown/ n.a
d. incidence of upper limb amputations?	Yes	No	unknown/ n.a
e. incidence of diabetic retinopathy?	Yes	No	unknown/ n.a
f. incidence of diabetic nephropathy?	Yes	No	unknown/ n.a
g. incidence of myocardial infarction?	Yes	No	unknown/ n.a
h. incidence of stroke?	Yes	No	unknown/ n.a
i. prevalence of hypertension?	Yes	No	unknown/ n.a
j. prevalence's of lipid disorders (dyslipidaemia)?	Yes	No	unknown/ n.a
k. prevalence of the metabolic vascular syndrome?	Yes	No	unknown/ n.a
27. The incidences of diabetes complications in the population have been reduced as a result of secondary prevention programs (e.g. disease management programmes)?	Yes	No	unknown/ n.a
28. Is the basic knowledge of diabetes management part of the curricula/guidelines of medical professionals? ** if yes then please fill out also the questions B3 about the (diabetes) management programs*	Yes*	No	unknown/ n.a
29. Are quality management strategies to prevent diabetes complications (secondary prevention) included in the education of the health care professionals?	Yes	No	unknown/ n.a
30. Validated cardiovascular risk assessment tools for diabetes are available to health care providers?	Yes	No	unknown/ n.a
31. Defined clinical pathways exist for the health care provider to deal with diabetic patients at risk for microvascular and cardiovascular diseases?	Yes	No	unknown/ n.a
32. Multidisciplinary approach for interventions against the metabolic vascular syndrome is supported by the health care providers?	Yes	No	unknown/ n.a
33. Are there a statistic and data sources available about:	**Data available**		
a. proportion of diabetic patients in interventions achieving clinically significant changes in prognostic factors at 1 year follow-up?	Yes	No	unknown/ n.a
b. percentage of diabetes patients involved in a disease management programs?	Yes	No	unknown/ n.a
c. myocardial infarction rate among diabetes patients in secondary prevented at health care provider level?	Yes	No	unknown/ n.a
d. proportion of diabetes patients dropping out of diabetes management?	Yes	No	unknown/ n.a
e. number of healthcare professionals at health care provider level qualified for diabetes management per 100.000 inhabitants?	Yes	No	unknown/ n.a
B2. DIABETES MANAGEMENT STRATEGIES IN INDIVIDUALS			
34. Are the individual's prognostic factor profiles assessed?	Yes	No	unknown/ n.a
35. Structure and content of the secondary prevention interventions (diabetes management) have been defined at individual level?	Yes	No	unknown/ n.a

36. Have individualized targets for diabetes management been established?	Yes	No	unknown/ n.a
37. The individual medical records, of persons with diabetes, and data sources are available and include information about:	**Data available**		
a. change in blood pressure over 1 year?	Yes	No	unknown/ n.a
b. change in lipid disorders over 1 year?	Yes	No	unknown/ n.a
c. change in the presence of the Metabolic vascular syndrome over 1 year?	Yes	No	unknown/ n.a
d. proportion of planned diabetes management (secondary prevention) intervention visits completed over 1 year?	Yes	No	unknown/ n.a
e. weight change over 1 year?	Yes	No	unknown/ n.a
f. change in waist circumference over 1 year?	Yes	No	unknown/ n.a
g. change in HbA1c, respectively over 1 year?	Yes	No	unknown/ n.a

B3. DIABETES MANAGEMENT PROGRAM

38. What is the official name of the (diabetes) management program? Name:……..

39. What is the name of the leading organization of the (diabetes) management program? Name: ……

40. What is (are) the target group(s) of the (diabetes) management program?

- o Patients with diabetes
- o Diabetic patients with co-morbidities
- o General practice (GP's)
- o Diabetes specialists in own practice
- o Diabetes specialists in hospitals
- o Nurses
- o Other. Specify ……..

41. What are the main objectives of the (diabetes) management program?

- o Preventing or reducing of inappropriate health care
- o Improving integration of different organizations/ care providers
- o Increasing multi-disciplinary collaboration
- o Improving patient involvement/ centeredness
- o Improving early detection of diabetes co-morbidities
- o Decreasing/ delaying of complications of diabetes
- o Decreasing morbidity
- o Decreasing mortality
- o Reducing hospitalizations
- o Reducing (public) costs
- o Other. Specify ……..

42. Where is the (diabetes) management program implemented?

Implementation level

- o Local
- o Regional
- o National

Spread

- o Rural
- o Urban
- o Both rural and urban

43. Who initiated the (diabetes) management program?

- o Governmental body
- o Hospitals
- o Primary care organization/ scientific association
- o Diabetologists/ scientific association
- o Home care organization
- o Other. Specify ……..

44. Who has been involved in the (diabetes) management program?

- o Hospitals
- o Policlinic/ outpatient clinic/ ambulatory care
- o Primary care practices (GP's)
- o Diabetologists
- o Diabetes specialised nurses
- o Health Centre
- o Patient organization
- o Community and social care / home care organization
- o Insurer
- o Other. Specify ……..

45. In which year did or will the diabetes management program start? Year:

46. Is the (diabetes) management program now running?

- o Yes
- o No

47. Is the (diabetes) management program finished prematurely?

o Yes, because of:

- o Not enough patients
- o Insufficient support by the care providers
- o Insufficient management support
- o Financial reasons
- o other ……..

o No

48. Are specific indicators used to monitor the (diabetes) management program?

o Yes
o No

49. Has the (diabetes) management program been evaluated?

o Yes

- o use of routine.
- o outcome quality
- o process quality
- o structure quality

o No

50. Are the goals of the (diabetes) management program achieved?

o Yes

o No

51. Which of the following aspects of care pathways were set as goals (a) and is a monitoring activity provided(b)?

	a) Set as goal		b) Monitoring activity	
	Yes	No	Yes	No
Improved clinical outcomes				
Improved patient participation				
Improved empowerment/ education				
Improved quality of life				
Improved patient satisfaction				
Reduced hospital (re)admissions				
Improved staff and management responsiveness				
Increased competencies of the staff				
Improved cost effectiveness				
Improved equity of care				
Improved adherence on guidelines				
Improved collaboration of care provider/ physicians				
More frequently and earlier refer to specialists				

52. Are the pathways/ guidelines risk-adjusted?

- o Yes
- o No

53. Which specialists are involved?

- o Diabetologist
- o Cardiologist
- o Diabetes surgeon
- o Angiologist
- o Podologist
- o Neurologist
- o Ophthalmologist
- o Other. Specify ……..

54. Were patients involved in the development of:

- o the (diabetes) management program?
- o the guidelines?
- o the care pathways?
- o No, patients were not involved.

55. Which elements or tools that support patient involvement in decision-making are applied as part of the (diabetes) management program?

- o Counseling to understand the needs of the patient
- o Providing patients with informational leaflets with treatment options
- o Using a web based tool to prepare the patient for the consultation with the care provider
- o Active participation in the decision making process concerning the choices in the care that is delivered
- o Active participation in development of a personal /individualized care plan
- o Asking an informal carer to be present at the consultation with the care provider
- o Other. Specify ……
- o Not applicable, shared decision making is not an integrated aspect of the (diabetes) management programme

56. Is self-management by patients part of the management program?

- o Yes
- o No

57. Which self-management activities are addressed by the management program?

- o Self-monitoring (e.g. monitoring blood pressure, blood glucose levels)
- o Lifestyle changes (e.g. smoking cessation, healthy diet, physical exercise)
- o evaluated education programmes for diabetes patients

58. Who is responsible for general communication to the patient and for answering questions that patients may have?

- o Central care provider
- o Case manager
- o Diabetologist/ General practice (GP)
- o Diabetes specialised nurses
- o Insurer
- o Other. Specify ……..

59. In your opinion, what barriers/difficulties are hindering patient involvement or a patient centered approach in this (diabetes) management program:

- o Inadequate knowledge/ skills of care providers regarding patient involvement/ centeredness
- o Inadequate knowledge/ skills of patients in self-management
- o Negative attitudes of care providers
- o Negative attitudes of patients
- o Inadequate support for care providers (e.g. education, supportive tools)
- o Inadequate support for patients (e.g. education, supportive tools)
- o Inadequate collaboration between care providers
- o Lack of time of the care providers
- o Lack of a clear managerial vision/strategy on patient involvement/ centeredness
- o Inadequate funding (e.g. for implementation of supportive tools)
- o Other. Specify ……..
- o No barriers

60. What are the sources of funding for the (diabetes) management program?

- o The statutory health financing system
- o Public insurers
- o Private insurers
- o Co-payment by the patient
- o Trade unions
- o EU structural funds
- o Other. Specify ……..

61. Is there an incentive payment:

- o Yes
  - o pay for performance.
  - o pay for outcome.
- o No

B4. IN YOUR OPINION IS THERE ANY OTHER PROGRAM WORTH TO BE REPORTED?

If yes, please give a short description

Task 3 Identification of health promotion interventions for type 2 diabetes (C1-C4)

C1. HEALTH PROMOTION INTERVENTIONS FOR PERSONS WITH DIABETES			
62. Does your Country have a diabetes plan/strategy that covers health promotion interventions for persons with diabetes? * *if yes then please fill out also the questions C3 about health promotion interventions*	Yes	No	
63. Is it a stand-alone plan or included in a more comprehensive plan (i.e. diabetes management program, chronic diseases program, etc.)?	Stand-alone	Included	
C2. CHARACTERISTICS OF HEALTH PROMOTION INTERVENTIONS			
64. Name the best evaluated health promotion interventions for persons with diabetes and their main characteristics.			
Health promotion interventions & its abbreviation	References (publication year)	Setting	Type of evidence*
1.		☐ Outpatient ☐ Inpatient	
2.		☐ Outpatient ☐ Inpatient	
3.		☐ Outpatient ☐ Inpatient	
4. Optional		☐ Outpatient ☐ Inpatient	
***Type of evidence** Randomised trial = high Observational study = low Any other evidence = very low			

65. Characteristics of the intervention	**Intervention**			
	1	2	3	4
Monostrategy or multistrategy, including	Yes	Yes	Yes	Yes
1) healthy diet				
2) diet modification				
3) management of stress				
4) avoidance of tobacco				
5) physical activity				
6) other, please specify:_____				

66. Which criteria does your health promotion intervention meet on structure level?	**Intervention**			
	1.	**2.**	**3.**	**4.**
The following *organizational* aspects are defined:	Yes	Yes	Yes	Yes
1) goals				
2) mission statement				
3) target group (inclusion and exclusion criteria)				
4) setting (e.g. inpatient, outpatient)				
5) scheduling of the sessions (based on evidence-based model)				
6) defined number of participants				
7) type participants (e.g., group, inclusion of relatives)				
8) qualification of the trainers (e.g., certified trainees regarding content and methodology)				
9) environmental requirements (e.g., an appropriate and accessible facilities)				
The following *operational* aspects are defined:				
10) appropriate tools				
11) education material for patient information, if needed				
12) individualized plan of care based on assessment and behavioural goal				
13) documented individualized follow-up on behavioural goals				
14) description of information exchange between all stakeholders incl. physicians				
15) description of the inclusion of relatives, if relevant				
The following aspects of *quality measurement* are defined:				
16) evaluation/ measurement of the programs				
17) provision of the evaluation results				
18) five year evaluation of the institution regular audit				
67. Which outcomes are evaluated in your health promotion intervention?	**1.**	**2.**	**3.**	**4.**
Primary outcomes				
1) HbA1c Values	☐	☐	☐	☐
2) Quality of life	☐	☐	☐	☐
3) Empowerment/self-efficacy	☐	☐	☐	☐
4) Weight	☐	☐	☐	☐
5) Waist circumference	☐	☐	☐	☐
6) Smoking reduction/cessation	☐	☐	☐	☐
7) Other, please specify _____	☐	☐	☐	☐
8) Other, please specify _____	☐	☐	☐	☐

68. Which eligibility requirements for educators/trainers are described?	**1.**	**2.**	**3.**	**4.**
1) Disciplines				
clinical psychologist	☐	☐	☐	☐
registered nurse	☐	☐	☐	☐
occupational therapist	☐	☐	☐	☐
physical therapist	☐	☐	☐	☐
physician	☐	☐	☐	☐
physician assistant	☐	☐	☐	☐
exercise specialist	☐	☐	☐	☐
exercise physiologist	☐	☐	☐	☐
A health professional with a master's degree or higher in social work, health education or other relevant Master	☐	☐	☐	☐
2) Work experience				
Number of years of professional practice experience	☐	☐	☐	☐
Number of hours training	☐	☐	☐	☐
Number of years training	☐	☐	☐	☐

C3. TRAINING PROGRAMS FOR PROFESSIONALS AIMED TO HEALTH PROMOTION INTERVENTION FOR PERSONS WITH DIABETES			
69. In your country, do you have training programs for professionals aimed to health promotion interventions for persons with diabetes?	yes	no	unknown/ not applicable
70. If yes, name the best evaluated health professional training programs and their main characteristics.			
Training program & its abbreviation	References (publication year)	Setting	Type of evidence*
1.		☐ Outpatient ☐ Inpatient	
2.		☐ Outpatient ☐ Inpatient	
3.		☐ Outpatient ☐ Inpatient	
4. Optional		☐ Outpatient ☐ Inpatient	
***Type of evidence** Randomised trial = high Observational study = low Any other evidence = very low			

71. Which criteria do your health-professionals training program meet on structure level?	**Intervention**			
	1.	**2.**	**3.**	**4.**
The following *organizational* aspects are defined:	Yes	Yes	Yes	Yes
1) rationale				
2) core components of the educator/trainer role: (e.g., clinical practice, education, which includes prevention at every level, and health promotion, counselling and behavioural change techniques, research and quality improvement/audit processes, administration/management, which incorporates leadership)				
3) teaching methods that are used within the intervention and can be identified within the curriculum				
4) physical space and resources are conducive to the objectives and based on individual/community needs.				
The following *operational* aspects are defined:				
5) training methods that are used within the intervention can be identified within the curriculum				
6) the intervention is focused on promoting skills and empowerment				
7) relationships are fostered with available community resources such as diabetes associations, blind society, social services				
8) the intervention is provided in a professional and ethical manner and is person-centered and evidence-based where possible				
9) the intervention includes peer and lay leaders as part of the training team, if relevant				
10) the intervention is adequately reimbursed by third-party payers (i.e. supported by local/central government or other public system)				
The following aspects of *quality measurement* are defined:				
11) identified person to be responsible for the organization and administration of the intervention in such a way that the process and outcome standards can be met.				
12) account of the assessment process regarding the delivering of the intervention , content				
13) account of the ongoing review and competency development process				
14) account of the ongoing training process				
15) evidence of the audit data collection (e.g. completed forms, report)				
16) advisory committee is established to ensure that the views and values of all stakeholders are represented in the ongoing planning and delivery of the intervention				
17) competence and performance of personnel involved in the intervention is reviewed at least annually				
18) the effectiveness and quality of the intervention will be annually assessed, linked to outcomes, and the services will be reviewed on the basis of the assessment				
19) personnel involved in the intervention have a sound clinical understanding of diabetes, are knowledgeable about teaching and learning skills and health promotion interventions.				
20) assessment of the educator/trainer's competence in relation to content delivery of the intervention				
21) research is undertaken to provide an evidence base for practice				

C4. IN YOUR OPINION IS THERE ANY OTHER INTERVENTION WORTH TO BE REPORTED?

If yes, please give a short description

Task 4- Patient education programs and trainings for professionals (D1-D3)

D1. EDUCATION PROGRAMS FOR PERSONS WITH DIABETES			
72. In your country, do you have education programs for persons with diabetes?	Yes	No	unknown/ not applicable
73. If yes, name the best evaluated education programs and their main characteristics. (Name maximum three evaluated education programs! If you have more than three best evaluated programs, you can add them below)	Yes	No	
Education program & its abbreviation	References (publication year)	Setting	Type of evidence*
1.		☐ Outpatient ☐ Inpatient	
2.		☐ Outpatient ☐ Inpatient	
3.		☐ Outpatient ☐ Inpatient	
4. Optional		☐ Outpatient ☐ Inpatient	
***Type of evidence** Randomised trial = high Observational study = low Any other evidence = very low			

74. **Which quality criteria does your patient education program met on structure level?** Quality Criteria for evaluating patient education programs:	Program names (abbreviation)			
	1.	2.	3.	4.
The following *organizational* aspects are defined:	Yes	Yes	Yes	Yes
1. goals				
2. mission statement				
3. target group (inclusion and exclusion criteria)				
4. setting (e.g. inpatient, outpatient)				
5. number of the education units (45 minutes)				
6. scheduling of the education units (45 minutes) (type-1 diabetes-24 education units a 45 minutes; type 2-diabtes a length of 20 education units a 45 minutes; type 2-diabtes and a low risk of secondary diseases eight education units a 45 minutes)				
7. limitation of the number of participants (6-11 participants)				
8. type participants (e.g., group, inclusion of relatives)				
9. qualification of the trainers (e.g., certified trainees regarding content and pedagogical qualification)				
10. environmental requirements (e.g., an appropriate and accessible room with education facilities)				
The following *operational* aspects are defined:				
11. appropriate media (e.g., beamer, overhead, white board)				
12. education material for patient information				
13. individualized educational plan of care based on assessment and behavioural goal				
14. documented individualized follow-up on education and goals				
15. description of information exchange between all stakeholders incl. physicians				
16. description of the inclusion of relatives				
The following aspects of *quality measurement* are defined:				
17) evaluation/ measurement of the education programs				
18) provision of the evaluation results				
19) five year evaluation of the education institution regular audit				
The education program contains:				
20) an evaluated curriculum				
21) a theory driven curriculum				
22) an evidence based curriculum				
23) specific methods				
24) specific didactics				

75. **Which outcomes are evaluated in your patient education program?**	Program names (abbreviation)			
	1.	2.	3.	4.
Quality Criteria for evaluating patient education programs:	Yes	Yes	Yes	Yes
1) HbA1c Values	☐	☐	☐	☐
2) Diabetes knowledge*	☐	☐	☐	☐
3) Quality of life*	☐	☐	☐	☐
4) Empowerment/self-efficacy*	☐	☐	☐	☐
* Ideally measured using standard (validated) questionnaires				

76. Which **Quality Indicators** (QI) for evaluating patient education programs are used	Program names (abbreviation)			
	1.	2.	3.	4.
1) Number of patients included in the diabetes education group				
2) Number of education units				
3) Length of education units				

77. Which **eligibility requirements** for diabetes educators are described?				
Eligibility requirements	Program names (abbreviation			
	1.	2.	3.	4
1) Disciplines				
clinical psychologist	☐	☐	☐	
registered nurse	☐	☐	☐	
occupational therapist	☐	☐	☐	
optometrist	☐	☐	☐	
pharmacist	☐	☐	☐	
physical therapist	☐	☐	☐	
physician (M.D. or D.O.)	☐	☐	☐	
physician assistant	☐	☐	☐	
exercise specialist	☐	☐	☐	
exercise physiologist	☐	☐	☐	
dietitians	☐	☐	☐	
health educator holding active certification as a Master Certified Health Education Specialist with the National Commission for Health Education Credentialing;	☐	☐	☐	
A health professional with a master's degree or higher in social work	☐	☐	☐	
2) Work experience				
Number of years of professional practice experience				
Number of hours education training				
Number of years education training				
Number of credits in 3 years				

D2. TRAINING PROGRAMS FOR PROFESSIONALS			
78. In your country, do you have training programs for professionals?	Yes	No	unknown/ not applicable
79. If yes, name the best evaluated health professional training programs and their main characteristics. (Name maximum three evaluated training programs! If you have more than three best evaluated programs, you can add them below)			
Training program & its abbreviation	References (publication year)	Setting	Type of evidence*
1.		☐ Outpatient ☐ Inpatient	
3.		☐ Outpatient ☐ Inpatient	
c.		☐ Outpatient ☐ Inpatient	
4 Optional		☐ Outpatient ☐ Inpatient	
***Type of evidence** Randomised trial = high Observational study = low Any other evidence = very low			

80. **Which quality criteria do your health-professionals training program met on structure level?** Quality Criteria for evaluating training programs:	Program names (abbreviation)			
	1.	2.	3.	4.
The following organizational aspects are defined:	Yes	Yes	Yes	Yes
1) statement containing the philosophy for structured self-management education				
2) rationale (identifies the need to train diabetes educators and demonstrates that there has been consultation with key stakeholders and consumers)				
3) core components of the diabetes educator role: (e.g., clinical practice, education, which includes prevention at every level, and health promotion, counselling and behavioural change techniques, research and quality improvement/audit processes, administration/management, which incorporates leadership)				
4) description of student workload				
5) statement containing the theories				
6) teaching methods that are used within the programme and can be identified within the curriculum				
7) physical space and education resources are conducive to learning and based on individual/community needs.				
The following *operational* aspects are defined:				
8) teaching methods that are used within the programme and can be identified within the curriculum				
9) the program is focused on promoting skills and empowerment (versus didactic information-providing approach)				
10) diabetes education covers topics based on individual assessment and fosters acquisition of knowledge leading to self-management of diabetes				
11) relationships are fostered with available community resources such as diabetes associations, blind society, social services				
12) education is provided in a professional and ethical manner and is learner-centered and evidence-based where possible				
13) the program includes peer and lay leaders as part of the educational team				
14) the program is adequately reimbursed by third-party payers (i.e. supported by local/central government or other public system)				
The following aspects of *quality measurement* are defined:				
15) identified person to be responsible for the organization and administration of the diabetes education service in such a way that the process and outcome standards can be met.				
16) account of the assessment process regarding the delivering of the programme, content				
17) account of the ongoing review and competency development process				
18) account of the ongoing training process				
19) evidence of the audit data collection (e.g. completed forms, report)				

80. **Which quality criteria do your health-professionals training program met on structure level?** Quality Criteria for evaluating training programs:	Program names (abbreviation)			
	1.	2.	3.	4.
20) advisory committee is established to ensure that the views and values of all stakeholders are represented in the ongoing planning and delivery of diabetes education.				
21) competence and performance of personnel involved in diabetes education is reviewed at least annually				
22) the effectiveness and quality of education will be annually assessed, linked to outcomes, and the services will be reviewed on the basis of the assessment				
23) professional staff in the diabetes service is appointed on a permanent basis, not on a rotational basis.				
24) personnel involved in diabetes education have a sound clinical understanding of diabetes, are knowledgeable about teaching and learning skills and diabetes self-management practices.				
25) assessment of the educator's competence in relation to content delivery of this programme				
26) individual diabetes education and diabetes education programmes are learner-centered and subject to ongoing review and modification.				
27) Educational and clinical research are undertaken to provide an evidence base for practice				
The education program contains:				
28) evidence from the curriculum				
29) an evidence based curriculum				
30) account for holding and updating the curriculum				
31) ongoing learner-centered needs assessments of individuals and/or communities				
32) clinical aspects as well as psychosocial issues and emotional well-being				

D3. IN YOUR OPINION IS THERE ANY OTHER PROGRAM WORTH TO BE REPORTED?

If yes, please give a short description

Glossary

Educational diabetes programs

A structured patient education is an international accepted and vital intervention for people with diabetes with an evident effect on the therapy and prognosis of diabetes. Therefore it is labelled as education and care programs with a targeted structure of education. Usually, it means that the core contents, goals, methods and didactics are described in a curriculum and materials or tools for the educators and participants are provided (Bundesärztekammer (BÄK), Kassenärztliche Bundesvereinigung (KBV), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF) 2013).
Educational strategies and interventions are considered in educational diabetes programs. Patient education is described as a complex intervention with special requirements on evidence and transparency regarding its rationale, methodology, performance and outcome representation. Appropriate educational interventions and self-management support strategies were defined as a standard (Bundesärztekammer (BÄK), Kassenärztliche Bundesvereinigung (KBV), Arbeitsgemeinschaft der Wissenschaftlichen Medizinischen Fachgesellschaften (AWMF) 2013;

Funnell et al. 2010

Efficacy

The extent to which an **intervention** produces a beneficial result under ideal conditions
1.Cochrane collaboration

Grey literature

Grey literature is the kind of material that is not published in easily accessible journals or databases. It includes things like conference proceedings that include the **abstracts** of the research presented at conferences, unpublished theses, and so on.
1. Cochrane collaboration

Guideline

Clinical practice guidelines ('guidelines') are systematically developed statements to assist practitioner and patient decisions about appropriate health
care for specific clinical circumstances. In addition, guidelines can play an important role in health policy formation and have evolved to cover topics across the health care continuum (e.g., health promotion, screening, diagnosis).
1. AGREE The science of practice guideline

Health Indicator

A health indicator is a characteristic of an individual, population, or environment which is subject to measurement (directly or indirectly) and can be used to describe one or more aspects of the health of an individual or population (quality, quantity and time). Health indicators can be used to define public health problems at a particular point in time, to indicate change over time in the level of the health of a population or individual, to define differences in the health of populations, and to assess the extent to which the objectives of a programme are being reached.

1. WHO definition (Health Promotion Glossary)

Health Literacy

Health literacy is linked to literacy and entails people's knowledge, motivation and competences to access, understand, appraise, and apply health information in order to make judgments and take decisions in everyday life concerning healthcare, disease prevention and health promotion to maintain or improve quality of life during the life course.

Sørensen et al. 2012

Health Promotion

Health promotion is the process of enabling people to increase control over, and to improve, their health.

1. World Health Organization's definition as stated in the *Ottawa Charter for Health Promotion*

High (or increased) risk of type 2 diabetes

Increased risk of developing type 2 diabetes within a certain time period compared with general population. Can be defined based on number and/or severity of individuals non-modifiable (e.g. age and heredity) and modifiable risk factors (e.g. obesity and physical inactivity) or plasma glucose (fasting or 2h after a 75g glucose load) or HbA1c above normal range but below cut-off point for diabetes diagnosis (see "prediabetes"). Can be detected before the clinical onset/diagnosis of type 2 diabetes. The greater the level of each risk factor and/or a risk score combining several risk factors, the greater the individuals risk.

Indicator

Indicators in the context of evaluation are simply one-dimensional measures that help to measure, to express, or at least to reflect and to simplify the more complex formulation of the objectives.
1. EMCDDA Glossary

Information need

Information need is a recognition that your knowledge is inadequate to satisfy a goal that you have, within the context/situation that you find yourself at a specific point in the time.

Ormandy 2011

Meta-analysis

The use of statistical techniques in a **systematic review** to integrate the results of included studies. Sometimes misused as a synonym for systematic reviews, where the review includes a meta-analysis.
1.Cochrane collaboration

Metabolic vascular syndrome tbd

National Diabetes Plan

Any systematic and coordinated approach to improving the organization, accessibility, and quality of diabetes prevention and care.

Outcome

An immediate or direct effect of a programme. Outcomes are frequently stated, for example: by a specified date, there will be a change (increase or decrease) in the target's behaviour, among the target population, (Chinman M, Imm P, Wandersman, A., 2004).

1. EMCDDA Glossary

Outcome Indicator

Outcome indicators relate the results of a project in the target group to its specific objectives (and the underlying working hypothesis).

1.EMCDDA Glossary

Patient education

Patient education that is designed to empower patients to deal with diabetes in a biopsychosocial context has a very different goal than diabetes patient education that is designed to persuade patients to comply with treatment recommendations of health professionals in order to improve their physical status. If empowerment is the desired outcome, then diabetes patient education becomes a process designed to improve the quality of life of patients by enabling them to take charge of their health through recognition and promotion of individual strengths, informed choices, and personal goals.

1.Funnell et al. 1991

Patient empowerment

Empowerment is more than an intervention or strategy to help people make behavior changes to adhere to a treatment plan. Fundamentally, patient empowerment is an outcome. Patients are empowered when they have knowledge, skills, attitudes, and self-awareness necessary to influence their own behaviour and that of others in order to improve the quality of their lives.
1.Funnell et al. 1991

Prediabetes

People with blood glucose levels that are higher than normal but not yet high enough to be diagnosed as diabetes are sometimes referred to have “prediabetes” or being “prediabetic”. The state when fasting glucose is increased is called “impaired fasting glucose (IFG)” and the state when plasma glucose 2h after a 75g glucose load is increased is called “impaired glucose tolerance (IGT)”. The classification is problematic because it suggests that all individuals with prediabetes will develop diabetes and that individuals who do not meet these criteria are unlikely to develop diabetes—neither of which is true.

Prevention (of diabetes)

Intervention which affects the diabetes risk factors or glycaemia so that type 2 diabetes does not emerge or the onset is delayed.

Process Indicator

Process indicators relate the outputs of a project (its deliverables, structures created, opportunities given, materials published) to its operational objectives.

1.EMCDDA Glossary

Review

A review article in the medical literature which summarises a number of different studies and may draw conclusions about a particular intervention. Review articles are often not systematic. Review articles are also sometimes called overviews.

1.Cochrane collaboration

Secondary prevention

Secondary prevention of diabetes relies on early detection of diabetes (e.g. throughscreening) and application of intervention strategies and disease management, respectively to prevent progression of the disease. Therefore all (primary) preventions of the secondary diseases (e.g. diabetes specific complications and co-morbidities) of type 2 diabetes are involved.

Systematic review

A review of a clearly formulated question that uses systematic and explicit methods to identify, select, and critically appraise relevant research, and to collect and analyse data from the studies that are included in the

review. Statistical methods (**meta-analysis**) may or may not be used to analyse and summarise the results of the included studies

1.Cochrane collaboration

2. PRISMA Statement

Training of the professionals

"(…) every diabetes care intervention is an educative process and that specific education is required to enable health professionals to be effective diabetes educators. Within these areas, training programmes and curricula are necessary to prepare people for the role of diabetes educator. Diabetes education is a specialty and requires knowledge and competence at an advanced level if it is to be delivered effectively." ()

1.International Diabetes Federation 2008

THANK YOU
for your collaboration