JA-CHRODIS

Work Package 7

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

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Examples of potential Good Practices

for prevention and management of diabetes

CHRODIS

ADDRESSING CHRONIC DISEASES & HEALTHY AGEING ACROSS THE LIFE CYCLE

Co-funded by the Health Programme of the European Union

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Introduction

This Report is an integral part of the survey on practices for prevention and management of diabetes conducted by the WP7 of the European Joint Action on Chronic Diseases and Promoting Healthy Ageing across the Life Cycle (JA-CHRODIS).

The survey was organized in two phases: the first had the objective to provide a structured overview about current programmes (interventions, initiatives, approaches or equivalents) that focus on aspects of primary prevention of diabetes, identification of people at high risk, early diagnosis, prevention of complications of diabetes, comprehensive multifactorial care, education programmes for persons with diabetes and training for professionals; the second phase was devoted to the description of the programmes identified in the first one.

The survey was not intended to provide an exhaustive description of all the activities on diabetes in the participating countries, in fact the partners were asked to report plans, programs, interventions, strategies, experiences that they felt worth to be reported and shared.

The results of the first phase are available on the JA-CHRODIS website: http://chrodis.eu/wp-content/uploads/2016/01/Report-prevention-and-management-diabetes-Final.pdf.

All the partners and experts who reported programmes were requested to further describe them, using a specific text format, to make them available for the scientific community and all the stakeholders.

The programmes described in this Report may be considered as potential good practices until they will be evaluated using a set of quality criteria. To this purpose, the WP7 together with the colleagues of the Aragon Health Science Institute (WP4 leaders) defined a core set of quality criteria that may be applied to various domains: prevention, care, health promotion, education, and training. An extensive process was carried out to identify the quality criteria involving the WP7 community, and experts from a wide number of organizations across Europe and from a variety of professional backgrounds. The consultation with the expert panel followed the RAND modified Delphi methodology. The process led to the agreement on 9 quality criteria, made up of 39 categories ranked and weighted, to assess whether an intervention, policy, strategy, programme, as well as processes and practices, can be regarded as a "good practice" in the field of diabetes prevention and care (https://drive.google.com/file/d/0B8Xu4R_n0-nzT3R4RVRDSnZ1UGc/view).

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Therapie Aktiv - education programme for persons with diabetes

Austria

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions, diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities.
The target groups are all the persons with diabetes mellitus type 2.
The following criteria are defined in the education programme: goals, rationale, setting, scheduling of the education sessions, number of participants and qualification of the trainers/educators.

Therapie Aktiv is a disease management programme (DMP) for patients with diabetes mellitus type 2. The main aims of the programme are:

- Improvement of diabetes care
- Prevention of long term diabetes complications (e. g. amputations, heart attacks, strokes)

Structured education programme for persons with diabetes mellitus type 2 in the context of the Disease Management Programme Therapie Aktiv
Diabetics can take part in courses/trainings relating to diabetes mellitus type 2 (non-insulin-dependent or insulin-dependent). In the diabetes training diabetics learn everything they need to know about diabetes, enabling them to take charge of their own health.
People with type 2 diabetes attend the workshop in groups once a week for 4 or 5 weeks, relatives are allowed to attend. The diabetes self-management workshops can take place in medical surgeries, health care centers or Austrian social security institutions. (After a training programme for health professionals general practitioners and specialists in internal medicine are qualified to organize trainings for diabetics in their own practices/surgeries).

Year of implementation, level of implementation, funding

The Disease Management Programme (DMP) Therapie Aktiv was introduced 2007 in Austria in order to improve health care delivery for diabetics via the promotion of treatment according to guidelines. The programme is based on an agreement between Austrian social security institutions, medical association and federal public health funds.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Outcome criteria: metabolic control (HbA1c values or incidence of hypoglycaemia) and diabetes knowledge, quality of life, empowerment/self-efficacy.
Evidence criteria: international evaluated structured education programme (e.g. Düsseldorfer Modell, Medias 2).

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Why should this programme/experience be considered a good practice?

Type 2 diabetics get more knowledge about the disease.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Diabetics learn interesting facts about the symptoms of diabetes, healthy eating, physical activity, hyper/hypoglycemia, management of stress, appropriate use of medication, prevention of diabetes complications, foot examination and self care, methods of self-monitoring, regular check-ups, etc.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

A doctor, a diabetes adviser/educator and a dietitian help each participant to lay down measures for better dealing with the disease in daily life. Participants share experiences and help each other solve problems they encounter in creating and carrying out their self-management.

Leading organization of the programme/experience

Main Association of Austrian Social Security Institutions (Hauptverband der österreichischen Sozialversicherungsträger).

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References

Co-funded by the Health Programme of the European Union

Aktivtreff Diabetes

Effectiveness of a peer support programme versus usual care in
disease management of diabetes mellitus type 2 regarding improvement of metabolic control

Austria

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions, diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities.
The target groups are: all the persons with diabetes, persons with diabetes with co-morbidities and persons with a new diagnosis of diabetes.
The education programme takes into account low socio-economic groups and gender differences.
The following criteria are defined in the education programme: goals, rationale, target group, setting, scheduling of the education sessions, number of participants, environmental requirements, qualification of the trainers/educators, core components of the educator/trainer's role, monitoring of the effectiveness and quality of the programme and source of funding.

Year of implementation, level of implementation, funding

2011-2013

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Outcome criteria: metabolic control (HbA1c values or incidence of hypoglycaemia), diabetes knowledge, quality of life and Empowerment/self-efficacy.
Evidence criteria: the programme is based on randomised trial.

Why should this programme/experience be considered a good practice?

Positive evaluation by the participants; reduction in costs in health economic evaluation (not yet published).

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

There was no improvement in glycemic control due to low initial values. The programme should be targeted specifically at patients with unsufficient glycemic control.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The programme improves knowledge on diabetes and strengthens self management skills.

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Leading organization of the programme/experience

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References

Co-funded by the Health Programme of the European Union

Training for Diabetics Type 2 Carinthia

Austria

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions, diabetes knowledge, prevention of diabetes complications and coping with everyday living activities.
The target groups are all the persons with diabetes, relatives and caregivers.
The education programme takes into account ethnic minorities and low socio-economic groups.
The following criteria are defined in the education programme: goals, rationale, setting, scheduling of the education sessions, number of participants, qualification of the trainers/educators, core components of the educator/trainer's role, monitoring of the effectiveness and quality of the programme and source of funding.

Year of implementation, level of implementation, funding

2007

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Outcome criteria: quality of life and empowerment/self-efficacy.
Evidence criteria: the programme is based on Düsseldorfer Modell.

Why should this programme/experience be considered a good practice?

It is planned to complement the existing Diabetikerschulung Typ II Kärnten with the participation of the KGKK in the DMP Therapie Aktiv project. This next step should improve the care of type II diabetics in Carinthia significantly.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

By improving the understanding of the illness, the compliance of the patient increases. Unfortunately, the reliability of the patients regarding the attendance of the courses is occasionally insufficient.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Leading organization of the programme/experience

Kärntner Gebietskrankenkasse + beteiligte SV-Träger + Ärztekammer für Kärnten

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References

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National Action Plan Motion NAP.b

Austria

Short description of the programme/experience

The programme is on the institutional and national level. A theoretical basis of the programme includes description of the method.
Transparency: the concept includes a specification of the project aims and objectives.
The following elements of the programme are described and theoretically justified: frequency, duration and selection and recruitment method location.
The target population is defined on the basis of needs assessment.
The following dimensions are taken into consideration: socioeconomic status, ethnicity and cultural factors, gender differences, rural-urban area and vulnerable groups.
The intervention aims to promote the target group(s) self-management skills.
Potential burdens of the intervention are addressed and the benefit-burden balance are fairly balanced.
The intervention creates ownership among the target group and several stakeholders considering: multidisciplinary, multi-/inter-sectorial and partnerships and alliances.

Year of implementation, level of implementation, funding

2013

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

There is monitoring system (only for selected parts) in place to deliver data aligned with evaluation and reporting needs.

Why should this programme/experience be considered a good practice?

Because it covers all areas of life and all affected target groups.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The holistic approach is paramount for success. A risk for failure is lacking cooperation and motivation.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

HEPA (ie. The WHO / EU programmefor Health Enhancing Physical Activity) can support both prevention efforts and the treatment of diabetes.

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Leading organization of the programme/experience

Collaboration between the Federal Ministry of Health and the Federal Ministry of Defence and Sports. The Federal Ministry of Defence and Sports implements the plan in cooperation with main stakeholders.

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Federal Ministry of Health
http://www.bmg.gv.at/home/Nationaler_Aktionsplan_Bewegung

Federal Ministry of Defence and Sports
https://www.sportministerium.at/de/themen/nationaler-aktionsplan-bewegung

References

Co-funded by the Health Programme of the European Union

Austrian National Nutrition Action Plan (NAP.e)

Austria

Short description of the programme/experience

The NAP.e, was launched in 2011 and follows a horizontal “health in all policies“-strategy. It combines Austria's nutrition policies and strategies for the first time. The primary goals of the NAP.e are a reduction of over-, under- and malnutrition as well as the reduction of the rising rates of overweight and obesity by 2020. The healthier choice must become the easier. NAP.e isn´t a static document but a rolling strategy and catalogue of measures – its aims and subjects are adapted regularly, measures already established are reviewed and if necessary updated.
The prevention of diet- and lifestyle related diseases starts in early infancy. Therefore NAP.e addresses different target groups in all life stages. It focuses on the primary prevention of non-communicable diseases (NCD) in general on the behavioural and situational prevention level. NAP.e doesn´t address specific diseases. Secondary prevention measures like interventions in diabetes are not the primarily addressed ones of NAP.e and are mainly implemented by organizations like the Austrian Diabetes Association. Institutions implementing interventions in diabetes are represented in the National Nutrition Commission (NEC). The NEC, consisting of all relevant institutions and organizations in Austria, is an interdisciplinary nutrition advisory body for the Minister of Health and is the main panel in the strategic development of Austrian nutrition policy.

Year of implementation, level of implementation, funding

2011 - The programme is on the national level.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Why should this programme/experience be considered a good practice?

A national nutrition strategy is crucial for concerted action in the field of nutrition. The NAP.e defines common goals, agreed objectives and describes fields of action. It was adopted by the council of ministers in 2011 what forms the basis for intersectional and interdisciplinary cooperation and enforcement.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Positive: common intersectional approach, enhanced networking, concerted action.
Negative: constraints due to budgetary cuts since 2011.

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How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Leading organization of the programme/experience

Austrian Federal Ministry of Health

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http://www.bmg.gv.at/cms/home/attachments/6/5/8/CH1046/CMS1378816554856/nap.e_20130909.pdf

http://www.bmg.gv.at/

References

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General screening

Austria

Short description of the programme/experience

The "Allgemeine Vorsorgeuntersuchung" is the Austrian yearly medical check-up. The following data/statistics are available for the target population: prevalence of diabetes, percentage of the population physically inactive, prevalence of overweight, obesity and abdominal obesity and percentage of population following national recommendations on nutrition.
Individual's risk factor profile is assessed.
Individual's motivation for behavioural changes is discussed.

Year of implementation, level of implementation, funding

1974

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Why should this programme/experience be considered a good practice?

The medical check-up (once in 12 months) is free for the whole population in Austria; preventing diabetes is on e of the goals for the medical check-up programme. Around 12 % of the population take part in this
programme. It is one of the ways to find people with diabetes and people with risk factors for diabetes.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Early detection for diabetes and its risk factors is important – the medical check-up tries to find people with risk factors for diabetes.

Leading organization of the programme/experience

Österreichische Sozialversicherung (Austrian social security Organisation)

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References

Co-funded by the Health Programme of the European Union

Continuous diabetes counseling

Austria

Short description of the programme/experience

The following items are included in the education programme for diabetes consultants: health promotion interventions, diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities.
The following criteria are defined in the education programme: goals, rationale, target group, setting, scheduling of the education sessions, number of participants, environmental requirements, qualification of the trainers/educators, core components of the educator/trainer's role and monitoring of the effectiveness and quality of the programme.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Monitoring criteria: structure indicators and process indicators.

Why should this programme/experience be considered a good practice?

The trainers have practical experience or are educated / trained diabetes consultants.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The programme is approved by the Österreische Diabetesgesellschaft – ÖDG (Austrian Diabetes Association), the content complies the ÖDG guidelines. Also there is a cooperation with the Verband Österreichischer DiabetesberaterInnen (Austrian Association of Diabetes diabetes consultants).

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Leading organization of the programme/experience

AZW (Ausbidlungszentrum West für Gesundheitsberufe)

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References

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Diabetes Education for Dietitians

Austria

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions, diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities.
The following criteria are defined in the education programme: goals, rationale, target group, setting, scheduling of the education sessions, number of participants, environmental requirements,
qualification of the trainers/educators, core components of the educator/trainer's role and source of funding.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Monitoring criteria: intermediate outcome indicators.
Evidence criteria: the programme is based on satisfaction enquiry questionnaire.

Why should this programme/experience be considered a good practice?

The Diabetes training course for Dietitians is an important tool to transform scientific knowledge into practice for dietitians. The aim is to put the well-based theoretical knowledge of diabetes mellitus into best practice and therapy so that the diabetics can benefit from the dietitians in the training programmes. The dietitians learn about the aims of the training programmes for the diabetics and work with patient empowerment.
Dietitians learn the structure and content of education programmes for persons with diabetes. After accomplishing the training programme, Dietitians are capable of teaching the contents they learned to diabetics, based on the knowledge they acquired from each lesson (choice of food, physical activity, diabetes knowledge, prevention of diabetes complication, management of stress, coping with everyday living activities).
Dietitians gain knowledge, which they then communicate to patients with diabetes. The education programme offers the specific contents needed to communicate professionally with diabetics.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

- high transfer of knowledge about Diabetes Mellitus (cause of disease, aims, symptoms,..)
- Practical orientation by observing and participating with a professional dietetic instructor specialized in diabetics.
- Participants have to represent a dietician process about diabetics
- discussing diabetics case studies

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- learning about patient empowerment
- assessment of theoretical knowledge by a multiple choice test

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The programme supports patient empowerment, change of lifestyle, encourages and requires compliance, improves the treatment adherence, it helps to prevent health consequences.

Leading organization of the programme/experience

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References

Co-funded by the Health Programme of the European Union

University course on Diabetes Care

Austria

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions, diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities. The following criteria are defined in the education programme: goals, rationale, target group, setting, scheduling of the education sessions, number of participants, environmental requirements, qualification of the trainers/educators, core components of the educator/trainer's role, monitoring of the effectiveness and quality of the programme and source of funding.

Year of implementation, level of implementation, funding

2014

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Why should this programme/experience be considered a good practice?

Training programmes for Health Professionals offers an interactive learning environment that supports participants to develop their skills in effective diabetes management.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Leading organization of the programme/experience

Diabetes Care / Diabetes Educator

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DGKS Barbara Semlitsch, MSc, LKH-Uniklinikum, UKIM, Endokrinologie und Stoffwechsel, Graz

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References

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Programme of Health Care for Persons with Diabetes in Croatia - Education

Croatia

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions (choice of food, physical activity), diabetes knowledge, prevention of diabetes complications and coping with everyday living activities.
The target groups are: all the persons with diabetes, persons with diabetes with comorbidities, persons with a new diagnosis of diabetes, relatives and caregivers.
The education programme takes into account gender differences.
The following criteria are defined in the education programme: goals, rationale, target group (inclusion and exclusion criteria), setting (e.g. primary care), scheduling of the education sessions, number of participants, core components of the educator/trainer's role (e.g. clinical practice, health promotion, counselling and behavioural change techniques) and monitoring of the effectiveness and quality of the programme.
The programme is based on observational study, non-analytic studies (case reports, case series) and expert opinion.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

The following outcome criteria are measured: metabolic control (HbA1c values or incidence of hypoglycemia) and diabetes knowledge (ideally measured using standard, validated, questionnaires).

Why should this programme/experience be considered a good practice?

This structured diabetes education programme covering all major aspects of diabetes self-care and the reasons for it should be made available to all adults with type 2 diabetes in the months after diagnosis, and repeated according to agreed need and it will be considered a good practice.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Implementation of national clinical guidelines is an essential part of clinical governance and is the reason for success. Mechanisms should be in place to review care provided against the guideline recommendations. The reasons for any differences should be assessed and addressed where

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appropriate. Local arrangements should be made to implement the national guideline in hospitals, units and practices.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

This Education programme helps in driving the change by its potential benefits of an effective patient education programme for people with type 2 diabetes which include: improving knowledge, health beliefs, and lifestyle changes; improving patient outcomes (weight, haemoglobin A1c (HbA1c), lipid levels, smoking, and psychosocial changes such as quality of life and levels of depression; improving levels of physical activity and reducing the need for, and potentially better targeting of, medication and other items such as blood testing strips.

Leading organization of the programme/experience

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References

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Programme of Health Care for Persons with Diabetes in Croatia – Health Promotion

Croatia

Short description of the programme/experience

The programme is on the institutional, local and national level. The concept includes an adequate estimation of: human resources, material and non-material requirements and budget requirements.
A theoretical basis of the programme includes: description of the method, description of activities in a chain of causation and time frame and description of interactions between key stakeholders and processes.
The following elements of the programme are described and theoretically justified: frequency, duration, selection and recruitment method, location. The target population is defined on the basis of needs assessment.
The following dimensions are taken into consideration: rural-urban area and vulnerable groups.
The intervention aims to promote the target group(s) self-management skills.
The intervention creates ownership among the target group and several stakeholders considering: multidisciplinary, multi-/inter-sectorial and partnerships and alliances.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

There is a defined evaluation framework, assessing structure, process and outcome.
The evaluation methods and/or tools are validated.
There is monitoring systems in place to deliver data aligned with evaluation and reporting needs.

Why should this programme/experience be considered a good practice?

This programme is addressing key areas relevant for preventing type 2 diabetes. It is based on type 2 diabetes risk questionnaires, design and implement a programme of targeted health checks.
The challenge is to make diabetes the most important issue in creating Croatian healthcare policy.
Crucial to this initiative has been the joint involvement of key leaders in diabetes issues in Croatia. The collaboration is based on common goals, commitment, respect and trust. Partnering with other major stakeholders has facilitated more effective communication with the diabetic community, and on their behalf to a wider audience including the media and general public.

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Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Reasons for success: According to the programme recommendations, lifestyle modification may be necessary. Patients should be advised that success will depend upon their agreeing to follow the prescribed treatment to lower their different risks, especially risk of CVD. They should also become aware of any potential side effects of drugs.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Implement prevention initiatives in vulnerable and high-risk populations; improve the health of pregnant women, infants and children.
Diabetes is an interdisciplinary problem with profound implications for society and for individuals, and general public has to pay attention to diabetes. Strong media interest helps raise diabetes awareness indirectly in the target audience.

Leading organization of the programme/experience

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References

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Programme of Health Care for Persons with Diabetes in Croatia - Management

Croatia

Short description of the programme/experience

The programme was initiated by: governmental body, hospitals, primary care organization/scientific association, diabetologist-endocrinologists/scientific association, home care organization, patient organization/association and insurer.
The key components of the programme are: self-management support, delivery system design, decision support tools, integrated care delivery system, interdisciplinary working practice team and clinical information system supporting interdisciplinary working practice and monitoring.
The decision support tools involve guidelines for diabetes type 2 and complex guidelines for persons with diabetes type 2 and multiple chronic conditions.
The integrated care delivery system involves general practitioners, diabetes specialists in hospital, specialized nurses, cardiologist, ophthalmologist, neurologist, angiologist, nephrologist and podologist.
The patient centered approach is based on risk assessment for complications, defined clinical pathways to deal with individuals at different risk for complications, individualized targets for interventions, shared decision making and plan for follow-up is defined.
The main objectives are: preventing or reducing inappropriate health care, improving integration of different organizations/care providers, increasing multi-disciplinary/multi-professional collaboration, improving patient involvement/centeredness, improving quality of care for persons with diabetes, improving early detection of co-morbidities, decreasing/delaying complications, decreasing morbidity, decreasing mortality, reducing hospitalizations, reducing inequalities in access to care and reducing (public) costs.

Year of implementation, level of implementation, funding

Incentive payment for performance and for outcome.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Process indicators: proportion of persons with diabetes enrolled in the programme(70%) and dropping out of programme(10%), proportion of planned visits completed (50%), proportion of persons with diabetes with regular education (40%), proportion of persons with diabetes who regularly self-check (blood glucose) (70%) and regularly checked (50%) up on: HbA1c (60%), body weight (40%), blood pressure (50%), lipid parameters (40%), uric acid (30%), creatinine (30%), Albumin i. U (30%), foot pulses and vibration sensation test (or filament test) (20%), ECG+ 24 RR profile (25%), ocular fundus (30%) and foot inspection (20%).
Intermediate outcome indicators: HbA1c (40%), BMI (50%), waist circumference (50%), blood pressure

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(50%), HDL-C (50%), LDL-C HDL-C (50%), TG (50%), quality of life (50%) and smoking people (50%).
Longterm outcome indicators: major limb amputation rate reducing, myocardial infarction rate reducing, stroke rate reducing, cardiovascular mortality rate reducing, microangiopathy rates reducing, nephropathy or dialysis, retinopathy or blindness and neuropathy or diabetic foot syndrome.

Why should this programme/experience be considered a good practice?

This can be considered a good practice because of its success in terms of participation and achieved targets. CroDiab survey offer a good indication of the distribution and diversity of diabetes in Croatia, providing clinicians with helpful data that they can use to make assessment exercises.
Ensure that intervention is provided as soon as appropriate, deliver coordinated and high-quality care responses to address the needs of people living with diabetes.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The reasons for success: Early detection, screening, simple diagnostics procedures, patient education.
The reasons for failure: Limited financial resources, health priorities are not clarified.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Empower patients through people-centred chronic care models, capture data to inform and drive decision making.
Applicability for the wider population. Participation in the project helps to share best practices across Croatia in practical and tangible ways.
The creation of an electronic diabetes register is setting the agenda for the definition of a Croatian National Diabetes Register.

Leading organization of the programme/experience

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http://www.zadi.hr/doc/NacionalniProgram2015-2020.pdf

References

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Programme of Health Care for Persons with Diabetes in Croatia - Prevention

Croatia

Short description of the programme/experience

Activities of diabetes prevention take into account gender differences.
The following data/statistics are available for the target population: prevalence of diabetes and prevalence of overweight, obesity and abdominal obesity.
Screening for high risk: screening protocols to identify high-risk persons have been evaluated at national level, validated diabetes risk assessment tools are available to health care providers and information technology systems supporting the implementation of screening are available at health care provider level.
The following data are available: proportion of the population screened (by health care provider) per year and percentage of identified high-risk individuals remitted to diagnostic procedures.
Interventions for high risk individuals: high-risk prevention strategies are included in the education of the health care professionals; defined clinical pathways exist for the health care provider to deal with individuals at risk for diabetes; multidisciplinary approach for interventions is supported by the health care provider; health care providers are collaborating with other players in health promotion; medical record system supports interventions for chronic disease prevention; individual's risk factor profile is assessed; individual's motivation for behavioural changes is discussed; structure and content of the interventions have been defined at individual level; individualized targets for interventions have been established.
Plan for follow-up is defined.
The following data are available: proportion of individuals dropping out of interventions, diabetes incidence rate among high-risk individuals in interventions at health care provider, proportion of planned intervention visits completed over 1 year, weight change over 1 year, change in waist circumference over 1 year, change in glucose level over 1 year.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Why should this programme/experience be considered a good practice?

This programme is health care programme for population at increased risk: positive family history, previously established glucose intolerance, gestational diabetes, those older than 45, obese, patients with hypertension and/or hyperlipidemia, persons who had increased glycemic values measured in stress situations (myocardial infarction, burns, traumas, infections, operations), and other persons suspected

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for diabetes. Individual counseling and group work (about 20 patients) are aimed at changing life-threatening habits and adopting healthier lifestyle.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The reasons for success: early detection, screening, simple diagnostics procedures, patient education.
The reasons for failure: limited financial resources, health priorities are not clarified.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Applicability for the wider population (Diabetes Patients Forums).

Leading organization of the programme/experience

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http://www.zadi.hr/doc/NacionalniProgram2015-2020.pdf

References

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Programme of Health Care for Persons with Diabetes in Croatia - Training

Croatia

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions (choice of food, physical activity), diabetes knowledge, prevention of diabetes complications, coping with everyday living activities.
The following criteria are defined in the education programme: goals, rationale, target group (inclusion and exclusion criteria), setting (e.g. primary care), scheduling of the education sessions, number of participants, monitoring of the effectiveness and quality of the programme and source of funding.
The programme is based on observational study.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Indicators used to monitor the training programme: structure indicators (e.g. account of the ongoing training process) and process indicators (e.g. number of interventions, number of professionals trained).

Why should this programme/experience be considered a good practice?

In our Training programme there are some training elements which will make this programme considered a good practice: physical fitness is composed of several components, including cardiorespiratory endurance, body composition, muscular endurance, muscular strength or power, flexibility, and balance/coordination. Each component of fitness has a unique role in the preservation of health.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Implementation of national clinical guidelines is an essential part of clinical governance and is the reason for success. Mechanisms should be in place to review care provided against the guideline recommendations. The reasons for any differences should be assessed and addressed where appropriate. Local arrangements should then be made to implement the national guideline in individual hospitals, units and practices.

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How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Training programme provides to understand the complexities relating to lifestyle that a person with diabetes faces each day. This programme will give attendees knowledge and confidence when working with people with diabetes. Diabetes programme's experience and expertise ensure that those complying the programme receive the most up-to-date and comprehensive information available.

Leading organization of the programme/experience

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Website

http://www.zadi.hr/doc/NacionalniProgram2015-2020.pdf

References

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Regional Network of diabetologists and diabetes nurses

Finland

Short description of the programme/experience

North Karelia is one the 18 regions in Finland. There are 13 municipalities in North Karelia and the population is approximately 175000. Health services are provided by one central hospital (specialized care) and 13 health centres (primary care). Diabetes care is organized with shared responsibilities of specialized care and primary health care and both specialists, GPs, nurses and many other professionals are involved in the work. In North Karelia, there is a special network of these professionals coordinated by a small key team consisting of professionals from the hospital and from some health centres. The main aim of the network is to harmonize the treatment and follow-up of diabetes patients in the region and to improve the quality of care. The network is responsible for planning, development, implementation and follow-up of clinical pathways in diabetes care. Common processes that are based on national Current Care Guidelines are agreed within the network. The network also agrees the measures of following up the processes and outcomes and related indicators. The network organizes regular training and continuous education for the professionals and carries out seminars and workshops to develop the work. The network has actively been involved in the regional work developing electronic patient records and reporting systems. At the moment all professionals involved in the care of diabetes patients can easily produce online reporting related to the outcomes of care of their own patients.

Year of implementation, level of implementation, funding

The work of the network has been started already in the beginning of 1980s and gradually developed to current form. The network has all the time been implemented regionally and all the key experts in the region have been actively involved. There is no separate funding to run the network, but it is embedded in the regional health care development and continuous education system.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

The network has developed a joined recommendation for clinical pathways of diabetes patients including the indicators for follow-up of the process and the treatment outcomes. Each health centre is required to provide these indicators on a regular basis.

Why should this programme/experience be considered a good practice?

In Finland, each municipality is responsible for providing the health and social services for their population. The regional network of physicians and nurses treating diabetes in the Hospital District of North Karelia (new organization from the beginning of 2017 will be called “Siun sote”) and in all 13

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municipalities helps to develope equal services in all municipalities, improves the collaboration between the primary health care and the specialized care, provides health professionals the opportunity to exchange ideas, achieve education and to benchmark their performance. The network has also been able to contribute to the development of regional electronic patient records to support the assessment of the quality of care.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The network has always had enthusiastic leadership (both from hospital and from primary health care). Municipalities have given permission for the health professionals to allocate some working time for the collaboration.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The network improves the regional clinical pathways, increases the professional knowledge of physicians and nurses, affects to the development of regional electronic patient records and reporting systems, improves the collaboration and information change between primary health care and specialized care.

Leading organization of the programme/experience

The Hospital District of North Karelia

Contact person

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References

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Asalée
General Health Response Team

France

Short description of the programme/experience

The programme was initiated by primary care organization/scientific association, and general practitioners, with support of government bodies. The key components of the programme are: decision support tools, integrated care delivery system, interdisciplinary working practice team and clinical information system, supporting interdisciplinary practice and monitoring. It aims at management of patients with type 2 diabetes (and also: patients with high cardio-vascular risk, screening for COPD and Alzheimer). The integrated care delivery system involves general practitioners and specialized nurses. The programmes funds part-time position and training of the nurses in voluntary GP practices, supervision of the health professional involved, information system.
The patient-centered approach relies on risk assessment for complications, defined clinical pathways according to the patient's risk level for complications, individualized targets for interventions, shared decision making, and patient education. Plan for follow-up is defined.
The programme takes into account socio-economic status and gender.
The main objectives are: preventing or reducing inappropriate healthcare, increasing multi-disciplinary/multi-professional collaboration, improving patient involvement/centeredness, improving quality of care for diabetic people, improving early detection of co-morbidities, decreasing/delaying complications, decreasing morbidity and mortality, reducing hospitalizations, reducing inequalities in access to care and reducing (public) costs.

Year of implementation, level of implementation, funding

The project started in 2004. It is still an experimental scheme, but it has been extended to a national level since 2012. It is funded through the national health insurance system.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Process indicators: proportion of persons with diabetes enrolled in the programme (80 %), proportion of persons with diabetes whith regular education (80 %), proportion of persons with diabetes who were regularly checked for HbA1c (90 %), body weight (90 %), blood pressure (90 %), lipid parameters (90 %), creatinine (90 %), albumin i. U (90 %), foot pulses and vibration sensation test (or filament test) (90 %), ECG+ 24 RR profile (90 %), ocular fundus (90 %), foot inspection (90 %) and microalbuminuria.
Intermediate outcome indicators: HbA1c (target: < 7 %), BMI, waist circumference, blood pressure (target: 140/90), HDL-C, LDL-C HDL-C, TG, quality of life (ideally measured through QALY) and smoking people (target: cessation).

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Why should this programme/experience be considered a good practice?

The ASALEE experiment improves quality and effeciency in healthcare: improvement of the main outcome indicators for diabetic patients (2.8 times improvement for HgA1C (HbA1C) target compared to diabetic patients not followed by ASALEE; IRDES, 2008) and reduced healthcare costs (by 10%; CNAM, 2010). These were the core objectives.
The programme was developed by healthcare providers in accordance with standard practice of care, validated by the French National Authority for Health (Haute Autorité de Santé), including evidence-based guidelines , self-assessment and external evaluations for the past 10 years.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

From the healthcare provider point of view, a key factor in ASALEE is a teamwork relationship in place of a vertical doctor-patient relationship. This takes into account both the biomedical and environmental aspects of patients. Healthcare professionals have complementary therapeutic approaches: screening, education, and diagnosis. ASALEE put the interpersonal face-to-face provider/patient relationship at the center of the process. Technology is involved as soon as its input is pertinent, and is used with the help of the over-arching provider/patient relationship.
As a programme, ASALEE has not noticed failure per se. However, it is facing two inherent limitations: One is the logistical difficulties for GPs to accomodate an additional professional in their own clinic; second is a paradox: although ASALEE is an answer to the lack of family doctors, ASALEE needs a sufficient critical mass of family doctors in the region in order to develop.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

We are dealing with a multidisciplinary challenge: to bring the population of Type 2 diabetic patients a comprehensive care in the context of a family practice. Making prevention and patient education possible there and encouraging patients to consult their family practitioner, ASALEE is inherently a programme that promotes and develops prevention. Moreover, this programme may contribute to rethinking of primary healthcare by focusing more on prevention and patient education, knowing that Type 2 diabete is a model for chronic illness.
In the course of its first 7 years of existence, ASALEE grew at an extremely rapid pace (+ 1000 %). In the past 3 years, that same growth rate has continued (+ 1000%). However, since ASALEE requires profound changes in terms of current delivery healthcare, time is needed for each healthcare professional to take ownership of this advancement.

Leading organization of the programme/experience

Association Asalée

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https://www.asalee.fr
https://www.youtube.com/watch?v=NUy_2zEZKHI

References

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Sophia
Remote Coaching Programme for Patients with Diabetes

France

Short description of the programme/experience

Sophia is a remote coaching programme for patients with diabetes, providing: phone call support by trained nurses based in call centers, and also online and written resources.
The key components of the programme are: self-management support, delivery system design and decision support tools to people with diabetes.
Registration is offered to all adult insured patients. Registration is voluntary (opt-in) and free of charges. GPs may also proceed to the registration. A more active coaching is targeting high risk patients.
The patient centered approach is based on risk assessment for complications.
The programme takes into account low socio-economic groups.
The main objectives are: improving patient involvement/centeredness, improving early detection of co-morbidities, decreasing/delaying complications, reducing hospitalizations, reducing inequalities in access to care and reducing (public) costs.

Year of implementation, level of implementation, funding

Generalization at the national level in 2012.
Funding: National health insurer.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Process indicator: proportion of persons with diabetes enrolled in the programme (30%), proportion of persons with diabetes dropping out of programme (<1%), proportion of persons with diabetes who were regularly checked up on HbA1c, blood pressure, lipid parameters, creatinine, albumin i. U, ECG+ 24 RR profile, ocular fundus and foot inspection.
Intermediate outcome indicators: smoking people.

Why should this programme/experience be considered a good practice?

A phone support for a large population of people with chronic disease (diabetes then asthma). A pilot intervention was experimented between 2008 and 2011 before generalization in 2012. External evaluation was performed.

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Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

With 700 000 members with diabetes, the programme has a very high level of satisfaction (>90% of people). It's highly supported by patients' association. It's a free service. You can enter or exit the programme whenever you want.
Failure - Lower enrollment for more vulnerable patients: Have attention to low involvement of GPs.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

This programme helps to empower people with diabetes by giving them disease basic information, testimony of patients and health professionals and having phone support with nurses to help them change their behaviors.

Leading organization of the programme/experience

CNAMTS (National health insurer)

Contact person

Website

https://www.ameli-sophia.fr/

References

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The Saxonian Diabetes Management Programme

Germany

Short description of the programme

The Saxon Diabetes Management Programme (SDMP) based on integrated practice guidelines, shared care and an integrated intersectoral quality management system. The SDMP was implemented into diabetes contracts between health insurances, GPs and diabetes specialised practitioners (DSPs) unified in the Saxon association of Statutory Health Insurance Physicians.

The evaluation of the SDMP in Germany represents a real world study by using clinical data collected from participating physicians. Between 2000 and 2002 all DSPs and about 75% of the GPs in Saxony participated. Finally 291,771 patients were included in the SDMP. Cross-sectional data were evaluated at the beginning of 2000 (group A1) and at the end of 2002 (group A2). A subcohort of 105,204 patients was followed up over a period of three years (group B). Results – The state-wide implementation of the SDMP resulted in a change of therapeutic practice and in better cooperation. The median HbA1c at the time of referral to DSPs decreased from 8.5% to 7.5% and so the overall mean did. At the end, 78% and 61% of group B achieved the targets for HbA1c and BP, respectively recommended by the guidelines compared to 69% and 50% at baseline. Poorly controlled patients benefited the most. Pre-existing regional differences were aligned. Conclusions – In conclusion, we found that a coordinated, interdisciplinary and integrated care setting was effective and efficient to reduce mean HbA1c and BP continuously over time throughout a country. Therefore, it can be concluded that an integrated care disease management, based on integrated practice guidelines implemented into an integrated care structure and a practicable integrated quality management is an innovative way to improve diabetes care continuously and unselected throughout a country.

Year of implementation, level of implementation, funding

1999, implementation at all care levels (GPs, Diabetes specialized practitioners as well as diabetologists in hospitals), funding by health insurers as well as statutory health insurance physicians, pay for performance as well as pay for outcome

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

It has been evaluated between 2000 and 2002 (results s. above and in Diabetes Care 2008).
Structure indicators: integrated care, GPs for primary care and diabetes specialists in own practices for secondary care, diabetes nurses, integrated practice guidelines with criteria for timely refer to diabetologists and the next care level, respectively, integrated intersectoral quality management system, patient centered and population based intersectoral approach etc.
Process indicators: HbA1c, blood pressure, lipids, Creatinin, Microalbuminuria, education, hospital admissions as well as accounting data from the Association of Statutory Health Insurance Physicians ("Kassenärztliche Vereinigung"), timely refer to specialists etc.
Outcome indicators: HbA1c, blood pressure

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Why should this programme/experience be considered a good practice?

The integrated Saxonian Health Care Model (SDMP) was very innovative and implemented every-where (statewide) in Saxony with a coverage of nearly 90% of all patients with diabetes, of all diabetes specialists in own practices and of about 80% of all GP's in Saxony and was positive evaluated.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

SUCCESS: The SDMP was a bottom-up model with good adaptions to regional conditions and was very simple, especially the valid short documentation, and without any bureaucracy (without administrative workload and without signing in of patients). The documented data by physicians for the evaluation as well as for the quarterly feedback reports were very small, but covered the multi-morbidity, and were selected from there, where they were already registered (e.g. from the regional Associations of Statutory Health Insurance Physicians → secondary data were included). All participating physicians received their valid feedback reports quarterly in time to discuss it in the quality circles: about more than 50% of all GP's took part in peer-review-methods, e.g. in cross-sectoral quality-circles, organized by the regional diabetes specialist. Therefore, the SDMP was widely accepted by nearly all physicians (and also by the patients). Also the scientific basis – the Saxonian practice guidelines – was statewide accepted. The guidelines basis was the natural history of the multifactorial disease, and they included concrete (risk adjusted) targets and standards for cooperation, e.g. for in time refer to the next health care level. Thus, the GP's cooperated with the diabetes specialists outstanding and referred most of the patients with paraclinical parameters above the targets or with diabetes-specific complications in time. Additionally, the pay for performance and especially the already prepared pay for outcome contributed to the great success of the SDMP. And thus, the effectiveness (the outcome) as well as the efficiency of the care model improved significantly while the observation period (of 3 years).
FAILURE: Nothing. Unfortunately, because of the nationwide implementation of the top-down-DMP's in Germany, in 2003 the very successful SDMP was cancelled.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The SDMP could be a model for implementation into other European countries, because of the outstanding cross-sectoral cooperation, the good feasibility with a small documentation and using of secondary data, the high acceptance rate and the significant improvement of the outcome. And, it contained already some components of a Chronic Care Model for multi-morbid patients with DMT2 and could be further developed to a comprehensive disease independent Chronic Care Model.

Leading organization of the programme/experience

The Regional Health Insurance Funds, the Regional Associations of Statutory Health Insurance Physicians (KVS), the Regional Chamber of Physicians (SLÄK), the Regional Ministry of Health (SMS).

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AOKCheckUpPlus

Germany

Short description of the programme/experience

Depending on the diabetes risk (according to FINDRISK questionnaire) diagnostics and primary/secondary prevention offerings, respectively are provided. If an unknown diabetes case has been detected by CheckUpPlus, registration and care follows into the disease management programme (DMP).

Year of implementation, level of implementation, funding

2014, at GPs primary care level, insurer AOKplus

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Not yet

Why should this programme/experience be considered a good practice?

The programme CheckUpPlus is a very innovative early detection programme of persons at high risk of diabetes (among other tools and findings by means of the evidence based FINDRISK sheet/tool) and following active prevention. AOKplus insured persons (age 35-65) who still have no diabetes are screened by means of the CheckUpPlus programme in Saxony instead of the insufficient statutorily regulated CheckUp 35.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Positive lessons learned: Each participant will be individual managed and guided according to his individual risk or an existing condition. This procedure of the programme is unique so far.
Negative lessons learned: The programme hasn't been evaluated yet. Nevertheless, GPs has to use the programme better and more. The transition to prevention offerings must be improved. Furthermore, GPs recommend the insured persons often several interventions, but the insured person doesn´t use them. It would be important to appeal together with the GPs more to the health awareness of an insured person.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

CheckUpPlus programme can identify persons at high risk for diabetes mellitus and diagnose diabetes mellitus at an early stage, respectively. Early identification of high risk groups can lead to early prevention and education of patients at high risk as well as to early detection of a condition and an early and effective care, which is adjusted to individual patient needs.

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Leading organization of the programme/experience

AOKplus (insurer) of Saxony and Thueringia

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References

www.aokplus-online.de/leistungen-services/vorsorge/check-up-plus.html

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“SMS. Be smart. Join in. Be fit."

Germany

Short description of the programme/experience

“SMS. Sei schlau. Mach mit. Sei fit." (engl. “SMS. Be smart. Join in. Be fit."), an initiative led by Professor Müssig in Düsseldorf and Cologne primary schools, seeks to counteract obesity and other lifestyle-related diseases in childhood and adolescence, paying special attention to children with a migration background. The participating children receive extra lessons on nutrition in cooperation with the Educational Center for Dietary Assistants of the Kaiserswerther Diakonie, and take part in the exercise programme for primary schools “Fitness for Kids” developed by sports scientist Prof. Dr. Kerstin Ketelhut. The two health insurance companies IKK classic and KKH, the organization diabetesDE - German Diabetes Aid, the Sports Department of Düsseldorf and other renowned partners and prominent people support the project and provide the participating school children with additional attractive venues for learning outside of school. The patron of the initiative is Thomas Geisel, mayor of the state capital Düsseldorf.

Year of implementation, level of implementation, funding

2012
Funding by the two health insurance companies IKK classic and KKH, the organization diabetesDE - German Diabetes Aid, and the Sports Department of Düsseldorf, the capital city of the German state of North Rhine-Westphalia.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Outcome: Tests on physical fitness and motor skills and questionnaires on dietary behavior and knowledge before and after the intervention
Structure & process: The programme is regularly adapted according to the experiences of the heads of the schools, teachers, children and their families, trainers, and dieticians within a school year and is permanently broadened by novel venues for learning outside of school.

Why should this programme/experience be considered a good practice?

The programme comprises imparting knowledge to school children regarding balanced diet, as well as regular physical activity. The parents are involved in the programme by joint activities, such as participation in sports event. The teachers are trained to become multiplicators of the programme contents.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The nutrition and sports lessons were specifically developed for school children and are given very practically. Therefore, the children follow the programme very enthustically. In particular, the

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participating children appreciate the very attractive venues for learning outside of school, such as baking bread in a bakery.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

By starting in early childhood, the programme aims at avoiding the development of consequences of an unhealthy lifestyle and, consequently, at reducing the risk factors for obesity and type 2 diabetes.

Leading organization of the programme/experience

Düsseldorfer Kids mit PFIFF e.V. (support association)
German Diabetes Center (scientific evaluation)

Contact person

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References

The first results on the impact of the intervention on physical fitness and motor skills of the participatimg children have been submitted to an international scientific journal.

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MEDIAS 2 programme

Germany

Short description of the programme/experience

MEDIAS 2 was developed by the workgroup at the Diabetes-Akademie Bad Mergentheim and Universität Bamberg (Bundesärztekammer et al. 2013). The programme is based on recommendation of the European Diabetes Policy Group, the International Diabetes Federation and Deutsche Diabetes Gesellschaft (Kulzer et al. 2008a). It provides three different education programmes:

- MEDIAS 2 BASIS
- MEDIAS ICT
- MEDIAS 2 BOT+SIT+CT

"MEDIAS 2 Basis" is a certified (Deutsche Diabetes Gesellschaft) group education programme for people (40-65 years) with non- insulin dependent type 2 diabetes and is based on a self-management approach. The programme duration is 8 or 12 h, by a group size of 6-8 participants. It is based on a criteria based curriculum, worksheets, diabetes diaries etc. Diabetes educators are, e.g., special diabetes consultants, physicians, and psychologists (Bundesärztekammer et al. 2013, Kulzer et al. 2008a).
The MEDIAS 2 Basis for patient education aims to stimulate to think about lifestyle and attitude, conscious of behavior (Bundesärztekammer et al. 2013), improve everyday life with diabetes, develop a long-term plan and enable active decision-making (Kulzer & Hermanns 2001).
The curriculum contains principles of diabetes, treatment options, self-observation, individual aims, acute complications, late complications, nutrition, physical activity, risk factors, Quality of Life, diabetes related foot problems, social aspects, handling of failure, and checkups (Kulzer & Hermanns 2001).

"MEDIAS 2 ICT" is also a certified (Deutsche Diabetes Gesellschaft) group education programme for people (40-65 years) with insulin dependent type 2 diabetes with an intensive insulin therapy and it is based on a self-management approach. The programme duration is 12 units (à 90 minutes), by a group size of 4-8 participants. It is based on a criteria based curriculum, worksheets and diabetes diaries. The programme is extended the same topics that exist in MEDIAS 2 BASIS.
It aims to stimulate self-management regarding intensive insulin therapy in everyday situations, quality of life, the understanding insulin therapy, and formulating individual goals. It also includes relatives in insulin therapy, and handling difficulties in order to improve blood sugar level, blood pressure and blood lipids. MEDIAS 2 ICT exercise especially focused on flexible insulin dosage in everyday situations (Bundesärztekammer et al. 2013, Kulzer et al. 2008b).

"MEDIAS 2 BOT+SIT+CT" is a new constructed group education programme for people (40-65 years) with basal supported oral therapy (BOT), supplemental insulin therapy (SIT) and conventional insulin therapy and is based on a self-management approach. MEDIAS 2 BOT+SIT+CT was designed to close the gap between the two other programmes. The programme duration is six units (à 90 minutes), by a group size of 4-8 participants. It is based on cards sets, worksheets, self-control booklet etc. (Kulzer et al. 2008c).

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It aims to help people manage their insulin therapy in everyday situations. It also includes exchange of experiences, increase Quality of Life, stimulate coping strategies, support and information transfer (Kulzer et al. 2008c).

Year of implementation, level of implementation, funding

The results from "MEDIAS 2 BASIS" were first presented in 1996 at 31. Deutsche Diabetes Gesellschaft Jahrestagung (Kulzer et al. 2008d). The fifth Edition was released in 2011. The first edition of "MEDIAS 2 ICT" was released in 2012 (Bundesärztekammer et al. 2013). "MEDIAS 2 BOT+SIT+CT" started in autumn 2015 (Forschungsinstitut Diabetes). The education programme is implemented on regional and national level (Forschungsinstitut Diabetes 2016).

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

MEDIAS 2 Basis has been evaluated by means of a five-year randomised controlled trial including 193 (181 participants 15 months after baseline) overweight people with non- insulin dependent type 2 diabetes (Kulzer et al. 2007, Kulzer & Hermanns 2001).

Quality criteria on sructure level are: Defined goals, defined target group (inclusion and exclusion criteria), defined setting (*e.g*. inpatient, outpatient), description of the number of the education units (45 minutes), description of the scheduling of the education units (45 minutes) per programme: (type 1 diabetes -24 education units; type 2 diabetes -20 education units; type 2 diabetes and a low risk of secondary diseases - 8 education units), limitation of the number of participants (6-11 participants), defined settings (*e.g.,* group setting, inclusion of relatives), description of the environmental requirements, provided education material for patient information, evaluated curricula, defined qualification of the trainers, individualized educational plan of care based on assessment and behavioural goal, description of information exchange between all stakeholders incl. Physicians, description of the inclusion of relatives, description of appropriate media, description of specific didactics (what to learn and why), description of specific methods (how to give lessons), description of the evaluation/ measurement of the education programme, provision of the evaluation results an five year evaluation of the education institution regular audit (Bundesärztekammer et al. 2013).
Outcome level criteria are: HbA1c values, diabetes knowledge, eating behavior, anxiety, depression, Quality of life, self-treatment, empowerment/self-efficacy (Bundesärztekammer et al. 2013, Kulzer et al. 2007, Kulzer & Hermanns 2001).

Why should this programme/experience be considered a good practice?

MEDIAS 2 meets requirements of a modern criteria based patient education, including the self-management approach. This corresponds to the reccommendations of leading professionals societies for patient education. Additionally, the programme is involved in Disease Management Programmes since 2014 in Germany (Kulzer et al. 2008d).

MEDIAS 2 ICT is the first education programme in Germany, which considered all diabetes-related metabolic risk factors (Kulzer et al. 2008b).

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MEDIAS 2 BOT-SIT-CT based on national guidelines (Nationale VersorgungsLeitlinie Typ-2-Diabetes, S3) and also on international guidelines (IDF, ADA, NICE) (Kulzer et al. 2008c).

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

- It is a patient orientated programme: the contents are presented vividly.
- the course will focus on personal contact considering illnes and difficulties
- practice everyday situations in courses (e.g. buying food, go to celebrations) (Kulzer et al. 2008a)

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Self-management training had a significantly higher medium-term efficacy than didactic diabetes education. The group sessions were more effective than a more individualized approach (Kulzer et al. 2007). The best effects are evaluated when the education programme starts shortly after diagnosis (Kulzer et al. 2008a).
The effects are:

1. The patients lose weight after 15 months (mean 2,4 kg)
2. Better control of eating behaviour
3. Significant increase in diabetes knowledge
4. More psychical well-being
5. Improve regular control (foot care, blood sugar measurement)

(Bundesärztekammer 2013, Kulzer et al. 2007, Kulzer & Hermanns 2001)

Leading organization of the programme/experience

FIDAM-Forschungsinstitut der Diabetes-Akademie Bad Mergentheim

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Trainings of the German Diabetes Society

Germany

Short description of the programme/experience

Specialized professions in diabetology, established for the Deutsche Diabetes Gesellschaft. Exemplary training programmes: Diabetologist DDG(Diabetologe DDG), Psychological Specialist DDG (Fachpsychologe DDG), Diabetes Advisor DD (Diabetesberaterin DDG), Diabetes Assistant DDG (Diabetesassistentin DDG), Diabetes Wound Care Nurse DDG (Wundassistentin DDG), Clinical Diabetes Nurse DDG (Diabetes-Pflegefachkraft DDG (Klinik)), Long Term Diabetes Nurse DDG (Diabetes-Pflegefachkraft DDG (Langzeit)).
Kombination: seminar, hospitation, work in diabetes practice (Deutsche Diabetes Gesellschaft [DDG] 2014a).

Diabetologist DDG (Diabetologe DDG)
The aim for medical professionals to becomes an expert with skills of optimal treatment for the patient with Type1 and Type 2 diabetes of all ages. (DDG 2014b). Target Group/Requirement: Qualified medical professionals, who might have to deal with diabetes patients in their field. They have to go through a period of 2-years evidence of practical work in an accepted diabetes specialist medical institution, of which one year has to be on an medial ward. Participation in training courses part 1 and part 2 (DDG 2014b).
Training courses part 1: 80-hours (10 days) of clinical diabetology focussing on theoretical basic knowledge and clinical diabetology (e.g. pediatric diabetology, metabolic syndrome, complications...) (DDG 2016a, DDG 2016b). Training course part 2 of 2: 32-hours (4 days) considers communication and patient-centred consultations in medical practise. Learning units in course 2. focus on communication between patient and physician, self reflection in interactions, dealing with non-compliant patients and support of patient in stressful situations (DDG 2013).

Psychological Spezialist DDG (Fachpsychologe/in Diabetes DDG)
Aim: The professional becomes an expert for psychological and social aspects of diabetes and will acquire skills for diagnosis, education and treatment of people with diabetes and mental problems. Target Group/Requirement: Psychologist with specialist qualification, 2-years evidence of practical work in an accepted diabetes specialized medical institution and participation in training courses. Content of courses: 6 training courses (80 hours) focused on psycho diabetology, behavioral and mental aspects of diabetes, social problems, quality management, 10 days hospitation, 5 case reports

Diabetes Assistant DDG (Diabetesassistentin DDG)
Aim: To aquire skills and knowledge regarding diabetes to teach patients self-management and social competence. Focus on disease specific, medical, educational and psychosocial basis with the aim to learn how to advice, guide and educate people with Type 2 diabetes.
Target Group: Qualified specialist staff in medical professions
Training course: The training is designed for 3-8 months: 160-hours trainig courses (2 x 2 weeks) and a hospitation (40 hours). (DDG 2015)

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Diabetes Advisor DDG (Diabetesberaterin DDG)
Aim: Care and counselling of patients of all ages (including children) with diabetes mellitus type 1, type 2 and pregnant women suffering from diabetes or gestational diabetes. The focus is the analysis and assessment of the patient´s condition, as well as planning, implementation, reflection and evaluation of consulting, training and support for patients and their relatives.
Target Group: Qualified specialist staff in medical professions.
Training course: The training is designed for 12-14 months, during this time the students have to produce evidence of having completed 520 hours of training (5 x 2-3 weeks) and 584 hours of practical work. There is the option of the shorter course for the Diabetes Assistants (336 hours training (4x2 weeks), 362 hours practical). (DDG 2014c, DDG 2014d)
In 2011 this training to become a diabetes advisor was awarded the Innovation Prize of the Federal Institute for Vocational Training (BIBB) in the division: Continuing Education

Clinical Diabetes Nurse DDG (Diabetes-Pflegekraft DDG (clinic))
Aim: To manage inpatients with diabetes: this includes monitoring, documentation and care (e.g. woundmanagement), guidance and education both patients and relatives and to reduce diabetes-related emergencies.
Target Group: All qualified nursing staff
Training courses: 80 hours (2 x 1 week) training courses, physiological and pathological basis, treatment of diabetes mellitus, diabetes-related health care management (DDG 2014e).

Long Term Diabetes Nurse DDG (Diabetes-Pflegekraft DDG (long term))
Aim: Recognize diabetological care riks and consider and avoid this risks in nursing services and long term care, who are working in outpatient clinic or in home care.
Target: qualified staff nurses, e.g. district nurses and elderly care nurses
Training courses: 10 days and practical work (DDG 2014f).

Diabetes Wound Care Nurse DDG (Wundassistentin DDG)
Aim: To treat and monitor the patients' wounds and promote health management to avoid relapses.
Requirement: Qualified specialist staff in medical professions.
Training course: The training is designed for 6 months: during this time the students have to provide evidence of having completed 40-hours trainig course (1 week) and a hospitation (24 hours). (DDG 2015).

Year of implementation, level of implementation, funding

Level of implementation: national (Deutsche Diabetes Gesellschaft 2014).

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Evaluation in progress.

Why should this meme/experience be considered a good practice?

Best standards compared to international standards, quality assurance: QSW (Deutsche Diabetes Gesellschaft 2014). According to European Standard EQR and DQR of lifelong learning'

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What are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Quality assurance by applying quality standards under supervision of the German Diabetes Society (Deutsche Diabetes Gesellschaft 2014).
In 2011 the Federal Institute for Vocational Education and Training (BIBB) has honoured the "Continuing Education Innovation Prize" (WIP) to the innovative and trend-setting project and idea in vocational education and training to the qualification: Diabetes Advisor (Diabetesberaterin DDG)

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Qualitative training programme (evaluation in progress).

Leading organization of the programme/experience

Deutsche Diabetes Gesellschaft (DDG), Germany

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IPIONI-National Pilot Project on Prevention and Health Promotion for Older People

Greece

Short description of the programme/experience

The proposal was prepared and submitted to the Department of Pimary Health Care of the Ministry of Health by the Hellenic Association of Gerontology & Geriatrics, and it was approved in Spring 2015. Having in mind that in Greece there was not a general framework for health propmotion and prevention for older people the proposal aimed to sensitize the responsible authorities on the necessity of it. The proposal included demographic data (European Health for All database) as well as epidemiological data on specific for older people morbidity and mortality (http://www.worldlifeexpectancy.com/country-health-profile/greece).
During a meeting in July 2015 it was decided that the first pilot will focus on the prevention of Diabetes type II. Following this, all relevant scientific bodies were invited to provide information in order to design the first implementation. In subsequent meetings, professional bodies and patient orgnaisations were also involved as well as the National Inter-Municipal Network of Healthy Cities.
The target population were all people over 55, healthy and those with chronic ill-health including those with known diabetes.

Year of implementation, level of implementation, funding

- Run from the 1st of October to the 31st of December 2015 – it was announced on the 1st of October – Older People's Day - during a day seminars organized by HAGG in the Municipal Theatre of Piraeus and the Municipality of Maroussi.
- Information was distributed to all primary health care facilities - those run by the NHS and the local authorities - in Greece electronically.
- Material was based on current and valid scientific data. It included a standard protocol, a standard history, the most current information of diabetes prevention and relevant websites.
- Additional information was available through the internet.
- There were organized health promotion activities in Open Care Centres (KAPI) and Health Centres. These included:
  - provision of information
  - preventive tests on-site
  - risk assessment
  - management and referral of diabetics to diabetes reference centres
- There was also provision of electronic prescribing of additional examinations when needed.
- Funding was based on existing coverage by social security and a large part of the implementation was also volunteering.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

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This first pilot did not aim at formal evaluation. It was decided from the beginning that evaluation will be descriptive and that all stakeholders involved will provide a report describing what they did. During a meeting at the ministry of health in the beginning of June 2016 most of the participating bodies presented their findings. These included:

- All participating bodies provided information through their websites.
- Regional health authorities provided descriptive evaluation of the implementation activities in their area of responsibility.
- Many municipalities actively collaborated and provided educational sessions and blood sugar tests in the open care centres (KAPIs). This was evident through a web search.
- Many health professionals volunteered to provide information in organized activities by health centres and KAPIs.

Why should this programme/experience be considered a good practice?

It is the first national project - although a pilot - aimed at this specific population. In addition is aimed at improving services provided to older people through cooperation of scientific organisations, professional bodies, primary health care services, local authorities under the coordination of the ministry of health.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The evaluation of this pilot was positive as participant organisations reported.
As this was the first pilot and its implementation was national it was found out that collaboration among the different stakeholders was not always successful. This will be taken into account in the 2nd pilot that will run autumn 2016 with focus on a different topic. During this 2nd pilot, the project on Diabetes Type II will continue and there will be an effort to evaluate it formally.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

As of today prevention and health promotion for older people was fragmented. This project tried to improve cooperation among the different stakeholders and provide appropriate services in an organised manner and avoiding duplication.

Leading organization of the programme/experience

Ministry of Health, Department of Primary Health Care, Coordinator
Hellenic Association of Gerontology and Geriatrics-HAGG, Scientific coordinator

Contact person

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U.S. Preventive Services Task Force (USPSTF): Focus on Older Adults, http://www.uspreventiveservicestaskforce.org/uspstopics.htm

WHO (2012), http://www.who.int/countries/grc/en/

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C.U.R.I.A.M.O. Healthy Lifestyle Institute's Model

Italy

Short description of the programme/experience

The concept includes a specification of the project aims and objectives, an adequate estimation of human resources, material and non-material requirements and budget requirements.
A theoretical basis of the programme exists and includes description of the method, description of activities in a chain of causation and time frame and description of interactions between key stakeholders and processes.
The following elements of the programme are described and theoretically justified: frequency, intensity, duration, selection and recruitment method location.
The target population is defined on the basis of needs assessment, taking into consideration: socioeconomic status, ethnicity and cultural factors, gender differences and vulnerable groups.
The intervention, designed in consultation with the target groups, aims to promote the target group(s) self-management skills.
Potential burdens of the intervention are addressed and the benefit-burden balance is fairly balanced.
The intervention creates ownership among the target group and several stakeholders considering: multidisciplinary, multi-/inter-sectorial, partnerships and alliances.

Year of implementation, level of implementation, funding

The programme is on the Institutional and local level.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

There is a defined evaluation framework, assessing structure, process and outcome.
The evaluation methods and/or tools are validated.
There is monitoring systems in place to deliver data aligned with evaluation and reporting needs.

Why should this programme/experience be considered a good practice?

The C.U.R.I.A.MO. model is an innovative multidisciplinary methodological approach that has theoreticalstructure based on the review of the literature, on the experience in the treatment with lifestyle intervention of obese adults and on the pilot experience in the treatment of obese children, adolescents and their parents. The most relevant aspect characterizing this model is the multidisciplinary approach that aims to improve, at the same time, three key aspects of healthy lifestyles: nutrition, exercise and psychological motivation, and the adoption of a family-based approach with the related interventions: psychological, nutritional, physical exercising for children, adolescents and their parents. The model of intervention is described in detail in the publication of De Feo *et al*. 2011. This methodology, as clinical intervention has been recently implemented by EUROBIS (Epode Umbria Region Obesity Intervention Study). The project (www.eurobis.it) is one of EPODE programme, it is a coordinated, capacity building approach, a community base programme, that aims to reduce childhoods

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obesity through a social process in which local environment, childhood setting and family norms are directed and encouraged to facilitate the adoption of a healthy lifestyle in children based on a combination of preventive and curative strategies aiming at overcoming the division between prevention and heath care.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The reasons for the success are 1) the multidisciplinary approach, through which physical activity, healthy nutrition and motivation to a correct style of life are enhancing, and 2) the patient centered care. We have reported in detail the opinion of the patients (see publication: Piana N *et al*., 2013) and the psychological determinants of the final success of the intervention (see publication: Mazzeschi C *et al*., 2012).

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The intervention programme by improving the three key aspects of healthy lifestyles: nutrition, exercise and psychological motivation increases the quality of life of patients either affected by obesity or by diabetes (see publication: Mazzeschi C *et al*., 2012).

Leading organization of the programme/experience

Healthy Lifestyle Institute C.U.R.I.A.MO. - University of Perugia

Contact person

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C.U.R.I.A.M.O. Innovative multidisciplinary intervention for changing the lifestyles of persons with type 2 diabetes mellitus and/or obesity

Italy

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions, diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities.
The target groups are all the persons with diabetes, persons with diabetes with comorbidities, persons with a new diagnosis of diabetes, relatives and caregivers.
The education programme takes into account gender differences.
The following criteria are defined in the education programme: goals, rationale, target group, setting, scheduling of the education sessions, number of participants, environmental requirements, qualification of the trainers/educators, core components of the educator/trainer's role, monitoring of the effectiveness and quality of the programme and source of funding.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

The following outcome criteria are measured: metabolic control (HbA1c values or incidence of hypoglycemia) and quality of life (empowerment/self-efficacy).
The programme is based on the following evidence: randomised trial, observational study and qualitative study based on narratives.

Why should this programme/experience be considered a good practice?

The effectiveness of the model is its multidisciplinary approach who is able to face the complexity of the chronic disease and of human being in a long term stable lifestyle change. The CURIAMO model involves the following health care professionals: medical doctors with specialties in endocrinology, sport medicine or cardiology, psychologists, dieticians, educators, nurses, exercise physiologists, and a manager of outside leisure time activities. The philosophy of the CURIAMO model is the active involvement of the patient who is considered the actor of change. The intensive lifestyle intervention of the first three months includes the following 7 steps: 1) Visit with a specialist in endocrinology, 2) Visit with a specialist of nutrition, 3) visit with a specialist of psychology, 4) visit with a specialist of sport

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medicine, 5) supervised programme of 2 sessions per week of structured indoor exercise with an exercise physiologist, 6) educational sessions with other patients (15/20 for each group) organized by an educator (doctor of pedagogic sciences and a nurse) to support motivation for lifestyle change and 7) daily Nordic walking activity combined with walking excursions during weekends planned by a manager for outside leisure time activities. Steps 1-4 will serve to both clinical judgment and to promote behavioral change. Steps 5-7 are finalized to improve physical fitness and to use group power to support long-term lifestyle change.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

This model is theoretically grounded on socio-cognitive and group empowerment. The main aim of the multidisciplinary approach is to actively involve the patient, who is considered the main actor in achieving change. For this reason the intervention (a four-month intensive programme) is characterized by counseling centered on each patient's need, by promoting the involvement of patients in educational group session, nutritional education and exercises session tailored on each patient. The model is designed to promote participant's growth in three parallel fields: exercise, nutrition and psychological well-being. Motivation to change is based on promoting decisional balance and auto-efficacy, motivation to long-term stable lifestyle improvement is based on several group empowerment strategies: educational group session for nutrition and for motivation to change, indoor exercise sessions and outdoor excursions and activities.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The present model of lifestyle intervention represent an advancement of our previous physical activity counseling strategy because utilizes a structured multidisciplinary approach. Patients perceive the effort and the support of a group of health care professionals finalized to improve their psychological and clinical conditions and for this reason they are strongly motivated. The weekly meetings of operators confirm that also health care professionals, thanks to the model that emphasizes their specific competences and to the positive feedbacks received by patients, reinforce their attitude and motivation to care.

Leading organization of the programme/experience

HEALTHY LIFESTYLE INSTITUTE of Perugia University - C.U.R.I.A.M.O. – Centro Universitario Ricerca Interdipartimentale Attività Motoria.

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Co-funded by the Health Programme of the European Union

Diabetic Retinopathy Centre

Italy

Short description of the programme/experience

The key components of the programme are: integrated care delivery system, interdisciplinary working practice team and clinical information system supporting interdisciplinary working practice and monitoring. The integrated care delivery system involves diabetes specialists in hospital, specialized nurses and ophthalmologist.
The programme was initiated by diabetologist-internists. The patient centered approach is based on defined clinical pathways to deal with individuals at different risk for complications and plan for follow-up is defined. The programme takes into account ethnic minorities and low socio-economic groups.
The main objectives are: increasing multi-disciplinary/multi-professional collaboration, improving quality of care for persons with diabetes, decreasing/delaying complications, decreasing morbidity and reducing inequalities in access to care.

Year of implementation, level of implementation, funding

Year of implementation: 1991 (officially opened in 1998).
Level of implementation: Tertiary care referral centre
Incentive payment for performance.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Process indicator: proportion of persons with diabetes with regular check of ocular fundus (schedule 100%)
Longterm outcome indicator: reducing rates of visual loss or blindness.

Why should this programme/experience be considered a good practice?

The Centre offers screening for sight-threatening diabetic retinopathy to patients with type 1 and 2 diabetes followed in the general out patient diabetes clinic of the major teaching hospital in Turin, together with short term further assessment and, if necessary, treatment by laser photocoagulation. By including all passages within the same premises, we are often able to considerably reduce waiting times and deliver appropriate care as needed, also minimizing the ill effects of reduced access to care due to socio-economic problems.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Positive lessons: dedicated nursing and specialist (diabetologist and ophthalmologists) staff. Support from external funding source. Negative lessons: drying up of external funding and consequent possible wearing of staff involved.

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How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

By early detection of sight-threatening lesions we are able to deliver timely treatment, thus managing to prevent deterioration of vision. Data collected over almost 25 years of activity show that visual acuity is indeed preserved over time (5 years) in the patients who are involved in the screening programme.

Leading organization of the programme/experience

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Master Course on Endocrinology and Diabetes for nursing personnel

Italy

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions, diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities.

Year of implementation, level of implementation, funding

2007. University of Turin.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

The following quality criteria are defined in the education programme: goals, rationale, target group, setting, scheduling of the education sessions, number of participants, environmental requirements, qualification of the trainers/educators, core components of the educator/trainer's role, monitoring of the effectiveness and quality of the programme and source of funding.
The following indicators are used to monitor the training programme: structure indicators, process indicators and intermediate outcome indicators.
The programme is based on the following evidence criteria: randomised trial and observational study.

Why should this programme/experience be considered a good practice?

The training helps workers to acquire skills and knowledge in the management of chronic disease. The training programme incorporated developmental and learning theory, longitudinal interactions with individual with diabetes, reflective learning and discussions to explore the experience of illness. We examined the written work of students who had been asked to analyse the activities observed and to relate on their personal experience.
We observed in this pedagogical training that the students had learned to perceive emotional and relational aspects in the patients.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

In recent years, sharing the training with doctors, nutritionists, psychologists, educators, nurses have noted the usefulness of the training and the fatigue of daily work in chronic disease. The training also helps to overcome the stress that comes from working with patients with chronic diseases.

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How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

In educational planning much depends both on the way of understanding education and the way of understanding the person and the possibilities of human action. The human person is the first and most important value in education.

Leading organization of the programme/experience

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Co-funded by the Health Programme of the European Union

Group Care Model: The Turin experience

Italy

Short description of the programme/experience

The following items are included in the education programme: health promotion interventions, diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities. The target groups are: all the persons with diabetes, relatives and caregivers.
The education programme takes into account ethnic minorities, low socio-economic groups and gender differences.

Year of implementation, level of implementation, funding

Year of implementation: 1996.
This pilot experience evolved into the ROMEO trial. T2DM patients (n=815) were randomized to be followed by either Group Care or the usual unidirectional provider-patient approach for 4 years.

2002: ROMEO was supported by a 3-year grant from the European Foundation for the Study of Diabetes EASD/EFSD (EFSD-Novo Nordisk programme for Type 2 diabetes).
2008 and 2012: supported by grants of the Italian Ministry of Health.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

The following quality criteria are defined in the education programme: goals, rationale, target group, setting, scheduling of the education sessions, number of participants, environmental requirements, qualification of the trainers/educators, core components of the educator/trainer's role, monitoring of the effectiveness and quality of the programme and source of funding.
The following outcome criteria are measured: quality of life, knowledge of diabetes and health behaviours.

Why should this programme/experience be considered a good practice?

The programme is based on the following evidence criteria: randomised trial and observational study.
We first demonstrated the feasibility and efficacy of Group Care from cognitive, quality of life and clinical points of view by a 5-year pilot randomised, controlled clinical trial. Patients followed by Group Care reduced their body weight and improved HbA1c, a measure of long-term blood glucose control, and HDL cholesterol without increasing drug prescriptions. Knowledge of diabetes and problem-solving abilities improved steadily and were still getting better at year 5 among patients followed by Group Care, although most of them were elderly and had poor or even no formal schooling. Quality of life started to improve at year 2. In contrast, all these psychological and cognitive variables worsened among control patients followed by the traditional one-to-one doctor-patient relationship. This pilot experience evolved into the ROMEO trial. T2DM patients (n=815) were randomized to be followed by either Group Care or the usual unidirectional provider-patient approach for 4 years. At the end of the trial, patients on Group

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Care had lower body mass index, HbA1c, total cholesterol, LDL cholesterol, triglyceride, systolic and diastolic blood pressure and serum creatinine, and higher HDL cholesterol ($p<0.001$, all) than controls receiving usual care, despite similar pharmacological prescriptions. Also health behaviours, quality of life and knowledge of diabetes had improved in Group Care patients but not among controls ($p<0.001$, all).

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The Group Care Model suggest that patients with Diabetes Type 1 and Type 2 have a more internal locus of control and empowerment. Patients can formulate their own personal strategy to adopt an internal locus of control and make the changes necessary to alter life circumstances and reach personal goals.
In group care, the focus is on health rather than disease, prevention and education rather than cure, making people aware of their choices in relation to health. Experience sharing may help modify the locus of control by promoting the development of a sense of responsibility toward one's own healthy behaviors.
Traditional visits, on the other hand, are centered on medical information and prescriptions aimed at avoiding the feared consequences of incorrect behaviors, but these messages often fail to come across because they are removed from the patients' perceptions of their disease.
In conclusion, the group Care Model reinforces communication and peer identification and that it may achieve its clinical results by promoting awareness, self-efficacy, positive attitudes toward diabetes and the setting of care, an internal locus of control, and, ultimately, empowerment in the patients.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Patients with chronic diseases are normally prescribed multiple drug therapies (it is not uncommon for elderly people with multiple pathologies to have to take 10-15 pills a day) but then are usually left on their own to face the challenges and health risks posed by daily life situations. As a consequence, disease progression and onset of complications are accelerated because of inappropriate/wrong choices with regard to food, physical activity and all other daily threats to preserving health. These patients need continuous lifestyle training to learn the best survival strategies.
Group Care is a group education model which improves clinical and psycho-cognitive variables in people with diabetes. It is feasible in daily practice and was repeatedly proven clinically effective, cost-effective and transferable to other health care settings. It should now be tested in patients with other chronic diseases.
Our data suggest that the improvements observed are not entirely explained by weight loss or healthier behaviours. They suggest a role for central nervous system (CNS) mechanisms, activated by the group-based educational activities, which might interact with the metabolic milieu sustaining diabetes. Understanding some of these mechanisms will help elucidate the possible connections between mind and health.

Leading organization of the programme/experience

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ROMEO Paper (http://www.ncbi.nlm.nih.gov/pubmed/20103547)

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SINERGIA - Chronic care model for the management of diabetes

Italy

Short description of the programme/experience

The key components of the programme are: self-management support, delivery system design, decision support tools, integrated care delivery system interdisciplinary working practice team and clinical information system supporting interdisciplinary working practice and monitoring. The decision support tools are guidelines for diabetes type 2; the integrated care delivery system involves general practitioners, diabetes specialists, specialized nurses, dietitians and patient associations.
The programme was initiated by diabetologists. The patient centered approach is based on risk assessment for complications, defined clinical pathways to deal with individuals at different risk for complications, individualized targets for interventions, shared decision making and plan for follow-up is defined. The programme takes into account low socio-economic groups and gender differences.
The main objectives are: preventing or reducing inappropriate health care, improving integration of different organizations/care providers, increasing multi-disciplinary/multi-professional collaboration, improving patient involvement/centeredness, improving quality of care for persons with diabetes, improving early detection of co-morbidities, decreasing/delaying complications, decreasing morbidity, decreasing mortality, reducing hospitalizations, reducing inequalities in access to care and reducing public costs.

Year of implementation, level of implementation, funding

2006, diabetes outpatient clinic, usual fund from National health system

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Process indicator: proportion of persons with diabetes enrolled in the programme and dropping out of programme, proportion of persons with diabetes with regular education, self-check blood glucose and check of HbA1c, body weight, blood pressure, lipid parameters, uric acid, creatinine, albumin, foot pulses and vibration sensation test (or filament test), ECG+ 24 RR profile, ocular fundus, foot inspection.
Intermediate outcome indicators: HbA1c, BMI, blood pressure, HDL-C, LDL-C HDL-C, TG, smoking people.

Why should this programme/experience be considered a good practice?

It is based on well established model of care (Chronic care model) and it works in the real life.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The organization of care is patient centred.
Information: leaflets with basic information on the “programme” are available.

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Good communication with patients: a synthesis of each visit is written with the patient in a clinical diary that is shared with other professionals.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

It increases awareness of health professionals on the essential elements for a better quality of care.

Leading organization of the programme/experience

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Co-funded by the Health Programme of the European Union

Patient-centered approach for the prevention and treatment of patients with diabetes mellitus

Italy

Short description of the programme/experience

The key components of the programme are: integrated care delivery system and clinical information system supporting interdisciplinary working practice and monitoring. The integrated care delivery system involves diabetes specialists in hospital, specialized nurses, cardiologists, ophthalmologists and nephrologists.
The programme was initiated by diabetologist-endocrinologists.
The patient centered approach is based on risk assessment for complications, individualized targets for interventions, shared decision making and plan for follow-up is defined. The programme takes into account gender differences.
The main objectives are: improving early detection of co-morbidities, decreasing/delaying complications, decreasing morbidity, decreasing mortality, reducing hospitalizations and semplification administrative procedures.

Year of implementation, level of implementation, funding

2008 - Outpatient clinic with no funding from NHS.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Process indicators: proportion of persons with diabetes with regular education, self-check blood glucose and check of HbA1c, body weight, blood pressure, lipid parameters, uric acid, creatinine, albumin, foot pulses and vibration sensation test (or filament test), ECG+ 24 RR profile, ocular fundus, foot inspection and peripheral nerve assessment.
Intermediate outcome indicators: HbA1c, BMI, waist circumference, blood pressure, HDL-C, LDL-C HDL-C, TG, smoking people, glomerular filtration, microalbuminuria and creatinine.
Longterm outcome indicator: reducing rates of major limb amputation, myocardial infarction, stroke, cardiovascular mortality, nephropathy or dialysis, retinopathy or blindness and neuropathy or diabetic foot syndrome.

Why should this programme/experience be considered a good practice?

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The programme is based on a multidisciplinary approach. Its main objectives are: identification of patients at high risk of complications; early identification of complications; decreasing incidence of complications and decreasing mortality.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Positive - Empowerment of patients, which are followed by a multidisciplinary team.
Negative - Organizational problems. Shortage of dedicated professionals. Low budget.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The aim of this programme is to reverse the consolidated concept that the patient must reach each single specialist involved in her/his cure. This programme put the patient at the centre of the health system so that each specialist and nurses move toward her/him. This approach makes the health system toward patients with diabetes more efficient, and humanizes the health system itself.

Leading organization of the programme/experience

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References

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Screening Diabetes Palermo

Italy

Short description of the programme/experience

Activities of diabetes prevention take into account gender differences. The following data/statistics are available for the target population: prevalence of diabetes and prevalence of overweight, obesity and abdominal obesity.
Validated diabetes risk assessment tools are available to health care providers. Information technology systems supporting the implementation of screening are available at health care provider level. The following data are available: proportion of the population screened (by health care provider) per year and percentage of identified high-risk individuals remitted to diagnostic procedures.
High-risk prevention strategies are included in the education of the health care professionals. Defined clinical pathways exist for the health care provider to deal with individuals at risk for diabetes. Medical record system supports interventions for chronic disease prevention. Individual's risk factor profile is assessed. Plan for follow-up is defined.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Why should this programme/experience be considered a good practice?

An observational study "Screening Diabetes Palermo" was conducted, in primary care, in Italy. The screening programme is divided into two phases. Phase 1: identification of patients at high risk of diabetes, through the analysis of databases of general practitioners. Phase 2: screening tests for early detection of DMT2 or, of others disorders of glucose metabolism (Impaired fasting glucose IFG, impaired glucose tolerance IGT and HbA1c 42-48 mmol/mol). The OGTT is a central point of the screening programme, in fact, a significant proportion of individuals, with impaired fasting glucose (IFG), has blood glucose levels, after glucose load, compatible with the diagnosis of T2DM or IGT. The total population was composed of 25801 subjects, of which 12918, equal to 50.07%, was at high risk of T2DM. The 39,86% of high-risk individuals had an impaired fasting glucose "IFG". A sample of 815 subjects with IFG, was then subjected to "OGTT", on the basis of which have been identified 123 subjects, equal to 15.9% with IGT and 66 subjects, equal to 10.8%, with a response to OGTT compatible with the diagnosis of T2DM. If the model of screening experienced was transferred, through a joint action, between the Italian regions or European countries, the result could only be a drastic reduction of undiagnosed diabetes and the identification of a large population of patients with other disorders of glucose metabolism requiring preventive interventions. Starting from the results of the study "Screening Diabetes Palermo", we are developing a prevention programme aimed at high-risk individuals, especially with IFG and IGT. Our prevention programme is being implemented and it will be the next phase of our project.

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Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Positive lessons learned: The information systems, through a process of clinical audit, lead to better management of the screening programme. The general practitioners, have special electronic instruments, used to select the diabetes risk population, but also to proactively manage the entire screening programme, including monitoring over time of patients with disorders of glucose metabolism, and the prevention programme.
Negative lessons learned: The cost of special electronic instruments weighs on the general practitioner. The absence of support staff, particularly nursing figures formed and dedicated to delegate part of the welfare activities.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

In primary care, a proactive approach towards diabetes screening permit, through the use of electronic instruments, the identification of individuals at high risk of diabetes and, subsequently, early detection of undiagnosed diabetes and the other disorders of glucose metabolism, predicting the future development of the disease. Randomized controlled trial have shown that individuals with disorders o glucose metabolism (IFG-IGT) can significantly decrease the rate of diabetes onset, with particular interventions. These include intensive lifestyle modification programmes, that have been shown to be very effective. Starting from the results of the study Screening Diabetes Palermo, we are developing a prevention programme aimed at high-risk individuals, especially with IFG and IGT. The programme provides diagnostic pathways, therapeutic care and an effective organizational model, based on the 1) training of the operators; 2) the demedicalization, with the active involvement of support staff, particularly the secretarial staff and nursing figures formed and dedicated to delegate part of the welfare activities; 3) the computerization; 4) a system of indicators that allows monitoring and periodic evaluation of the performance.

Leading organization of the programme/experience

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References

Co-funded by the Health Programme of the European Union

IGEA

Italy

Short description of the programme/experience

IGEA is a national comprehensive strategy to support the implementation of a chronic disease management intervention in Italy. In 2006, within the National Prevention Plan, the National Institute of Health (ISS), and the Italian Centre for Disease Prevention and Control of the Ministry of Health, developed IGEA as a National diabetes disease management programme. The main activities were:

- development of evidence-based decision support tools through the definition of "The national guidance on the management of type 2 diabetes mellitus" that provides minimum clinical and organisational requirements for an integrated management of type 2 diabetes mellitus, including a system of indicators. Recommendations were formulated, by a multidisciplinary work group, according to GRADE method;
- promotion of multidisciplinary health-care teams, as an effective means of achieving the goal of improving health-care outcomes; organization of national cascade-training programme aimed to support Italian Regions in promoting multi-professional team working, and communication in a community of practice perspective, involving health professionals, persons with diabetes and other relevant stakeholders.
- definition of the core characteristics of information systems that are sustainable and well integrated in the given area and that encourage communication not only among physicians but also between physicians and patients, so as to achieve long-term coordinated care. Development of a system of indicators.

Year of implementation, level of implementation, funding

The programme was implemented starting in 2007. It is on Institutional and local level. The Institutional level activities were funded by the Ministry of Health, the local level activities were funded by Regions.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

There is a defined evaluation framework, assessing implementation, process and outcome.
A series of indicators have been defined to be used all over Italy: implementation, process, intermediate outcome, long-term outcome.

Why should this programme/experience be considered a good practice?

IGEA improves the quality of care, placing the person at the centre of the care organisation, through the development of an organizational model that: guarantees effective interventions for all persons with diabetes; implements evidence-based interventions; ensures that both the quality of care and improvements in outcome can be measured; promotes the partnership between primary and secondary care in multidisciplinary health-care teams; promotes the patient empowerment; ensures that the care

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model can be gradually implemented in the entire Country taking into account regional health organization as well as local needs and capabilities.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The 2005-2007 National Prevention Plan specifically gave Regions the task to plan and organize "disease management" programmes for diabetes to prevent the complications of the disease. Then the specific objective of IGEA was the development of tools to support the regional health Authorities toward the implementation of disease management for people with diabetes. The Regional Health Authorities played the role of bridging between the central governmental agencies, regional governments and Local Health Agencies. Cooperation from academic bodies, scientific societies, representative of patient associations was assured.
Positive lessons: Top-down and bottom-up approaches were both used.
IGEA was developed with the cooperation of the patients and all the health professionals involved in the care of people with diabetes. It has a National design that ensures local implementation.
Negative lessons: resistance towards change from systems and professionals who are not accustomed to multidisciplinary team approach.
The implementation of integrated care systems needs both strong political engagement and middle/long term funding.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

IGEA is an integral part of the National Diabetes Plan that defines the strategic approach and outlines common objectives and recommendations for the Italian regions, toward high quality care for people with diabetes.
A series of tools have been produced, as part of IGEA, to support the regional health Authorities toward the implementation of disease management for people with diabetes: guidelines for managing type 2 diabetes in adults; information system design for the management of type 2 diabetes; structure and clinical indicators; training programme for health-care professionals; care pathways for diabetes.

Leading organization of the programme/experience

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www.epicentro.iss.it/igea

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Diabetes nursing speciality

Norway

Short description of the programme/experience

The programme gives students expertise in diabetes nursing, with special focus on information, support and guidance to patients and their families in how to:
- promote prevention of complications
- living with diabetes (coping)
- increase self-management
- increase quality of life

This programme aims to develop the student's research competence and facilitate increased responsibility in management of patients with diabetes. The programme will enable students to combine clinical experience and expertise with the best available knowledge from research to provide follow-up and treatment of high professional quality.

Year of implementation, level of implementation, funding

Available only at Bergen University College. The programme is funded by the Norwegian Government (apart from a small tuition fee per semester). All studies at the college are entitled to loans and grants from the Norwegian Student Loan Fund.
Admission requires that the students have completed a 3-year nursing programme from college/university and 1 year of practice after completing the bachelor's degree.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

The college works continuously to improve the quality and relevance of its courses. Quality improvement is driven by formal requirements from the government. The college's quality assurance system was externally evaluated in 2010 and approved by the Norwegian Agency for Quality Assurance in Education.

Why should this programme/experience be considered a good practice?

More than 200 000 (~4% of the population) people in Norway have diabetes. Half of them do not know they have diabetes. It is crucial that health care professionals have the necessary competence and that the health services have the capacity to serve a continuous and systematic follow-up in these patients. Monitoring and treatment of diabetes requires high expertise in both medical as psychosocial and educational topics. Information, support and guidance are central tasks for a diabetes nurse.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The programme is flexible to new evidence and changes its curriculum accordingly.

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How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Diabetes nurses can take some of the burden from the GPs shoulders in the management of persons with diabetes. These patient requires regular follow-up and guidance in lifestyle changes that may take more time than the general duration of a GP consultation.

Leading organization of the programme/experience

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References

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The National Guidelines for prevention, diagnosis and treatment of diabetes

Norway

Short description of the programme/experience

The key components of the programme are recommendations concerning:

- diagnosis of type 1 and type 2 diabetes
- regimens for follow-up
- delivery system design and patient self-management training
- necessary lifestyle changes
- treatment of overweight/obesity, hyperglycemia, ketoacidosis, coma
- treatment and education of patients requiring insulin
- treatment of hypertension, dyslipidemia
- prevention and treatment of macro- and microvascular complications
- treatment of children and adolescents with diabetes
- prevention and treatment of foot ulcers
- diabetes and dental health
- diabetes and pregnancy
- laboratory analysis in diabetes

Year of implementation, level of implementation, funding

Published in 2009. This is the national clinical guideline for diabetes in Norway. All procedures in primary- and specialist health care have to adhere to these recommendations.
A new, electronic edition was published in September 2016 that will replace the guideline from 2009. The old guideline was well implemented and acknowledged. Development of national guidelines is funded by the Ministry of Health/the Norwegian Directorate of Health.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

There is an ongoing process of developing national quality indicators for diabetes in primary health care in Norway. Today we only have one indicator applied in specialist care (major limb amputation rate) that measures the implementation of good clinical practice in diabetes.

Why should this programme/experience be considered a good practice?

The national clinical guidelines are well implemented and agreed on. The newly revised guideline has involved 70 multidisciplinary health care professionals from primary- and secondary care. We have used the GRADE methodology and the guideline is published electronically in a way, that makes it possible to integrate the recommendations in clinical descision systems/electronic medical records.

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Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

We are lacking a system that evaluates the quality of diabetes care in primary care in Norway. The national diabetes register have only a 15 % coverage.
A factor for success was the development of a patient version of the guidelines which focuses on, among others, educational information about self-management, the importance of regular follow-up and information about diabetes written in lay language.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The revised version of the guidelines has brought more attention to early diagnosis of diabetes, close follow-up of high-risk individuals and intensive lifestyle intervention in people with high risk and in persons with diabetes and overweight/obesity.
Theres is also an increased focus on routines for referrals from general practitioners to specialists and the importance of regularity in nephrological, neurological and ophtamological assessments.

Leading organization of the programme/experience

The Norwegian Directorate of Health

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References

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NCD-strategy: Prevention, diagnosis, treatment and rehabilitation of non-communicable diseases - cardiovascular disease, diabetes, COPD and cancer

Norway

Short description of the programme/experience

The NCD-strategy acknowledge that cardiovascular disease, diabetes, COPD and cancer have something in common; they may be prevented by lifestyle interventions including a healthy diet, regular physical activity, smoking cessation and limited alcohol consumption and avoidance of overweight and obesity.

The strategy also acknowledge that the changes cannot be done in the health care sector alone, but will have to engage trans sectorial and the policy makers in sectors of transport, work place, city planning, and education, among others, will have to cooperate in order to achieve the goals set forth in the plan.

Regarding the diabetes specific part of the strategy, national goals for prevention, diagnosis and treatment of diabetes is mentioned. Subsequent to its publishment, the Norwegian Directorate of Health has been given the assignment to create a detailed plan for follow-up of the goals stated in the strategy.

Year of implementation, level of implementation, funding

The NCD-strategy was published in 2013.
The plan is not yet implemented.
The implementation of the strategy is not funded.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Today, there exist no evaluation framework or indicators that enables monitoring of the goals set forth in the strategy.

Why should this programme/experience be considered a good practice?

This strategy is a step in the right direction of seeing prevention of chronic diseases as a whole. However, Norway has a long way to go before the theoretical goals are specified and implemented in practice, and when we are able to monitor the impact of the plan.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

The decision to assemble the national goals for cancer, chronic obstructive lung disease, cardiovascular disease and diabetes in the same strategy might help stakeholders and health care managers to

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implement the goals locally and regionally in that they only have one document instead of four, and because the initiatives overlap.

The challenges are lack of funding, lack of publicity and acknowledge among health care professionals and local stake holders, and lack of specified actions that will help us reach the goals.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Following the strategy, Norway is re-structuring the primary health care sector toward the Chronic Care Model, and interdisciplinary teams are encouraged to take form in primary care to handle the surge in lifestyle related diseases.

Leading organization of the programme/experience

National Ministry of Health Services (owner)
The Norwegian Directorate of Health (executing authority)

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Patient Education and Health Mastery

Norway

Short description of the programme/experience

The target groups for the Norwegian National Advisory Unit on Learning and Mastery in Health programme are people with chronic diseases or disabilities and their families and friends.
The programme is group based and facilitate self-reliance for people who have long-term health challenges, as well as their next of kin. The aims of the programme is to strengthen patient's mastering and to increase their quality of life. The programme is available in several languages (i.e. english and urdu) and have a duration of at least seven hours.

Year of implementation, level of implementation, funding

The programme has existed since 1997. In Norway, persons with chronic diseases have a statutory right to education about their disease. Until now the programme has only been available in specialist health care at hospitals, but it is increasingly being offered in municipalities across the country.

All patients with type 1 and type 2 diabetes is offered to participate in the course. Participants pay only a deductible of approx. €37 and receive compensations for necessary transport to the course location. The rest of the cost is covered by the National health budget.

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

The courses are usually led by a diabetes nurse, a dietitian and a physiotherapist. The Norwegian Diabetes Association is usually represented at the course as well.
There exist a standardized model in how to implement and evaluate the course. The evaluation is done by the participants themselves. There exist no national or external office for evaluation of the quality or effects of the programme.

Why should this programme/experience be considered a good practice?

The programme aims to give people with diabetes tools to improve coping in everyday life and take into account patient's individual values and preferences. The curriculum focuses on making neccessary changes in knowledge, skills and attitudes in the participants and is developed through a ongoing process where specialists and user organizations work together.

All courses are offered in groups to promote within-group effects of motivation and sharing of experience, challenges and facilitators of successfull self-management.

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Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

- The programme is available for everyone with diabetes and their families and mostly funded by the Norwegian Government.
- Health professionals are leading the course
- The course is interactive and allow for the participants to discuss individual experiences
- The most important aspects of managing diabetes are covered such as healthy diet, physical activity, smoking cessation, coping with stress, and glucose control. Also, prevention of complications, oral,- and foot care are taught.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The programme enables persons with diabetes to take informed descisions in meetings with health care professionals and increase their ability to manage their life with diabetes. The recommendations given at the course may, if they are followed, prevent macro- and micro vascular complications in diabetes.

Leading organization of the programme/experience

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http://diabetes.no/leksikon/s/startkurs/

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Diabetes Prevention and Care Development Programme 2010 - 2020

Slovenia

Short description of the programme/experience

At adoption of the Programme by Slovenian Government in April 2010, it was based on the Resolution on the National Plan of Health Care 2008–2013 "Satisfied Users and Providers of Medical Services", that set among its development priorities and essential objectives greater healthy life expectancy and a further increase in the quality of life for all population groups, reduction of health inequalities and early detection of chronic diseases such as diabetes. The Resolution, within its healthcare objectives, envisaged a comprehensive approach to the treatment of patients based on efficient provision of services, including appropriate restructuring of activities through reassigning particular scopes of work to different work levels and health-service personnel. The role of nurses and midwives in assuming new independent functions concerning treatment of chronic patients was expected to be enhanced. In addition, the Resolution stressed the importance of cooperation of the civil society.

Based on considerations concerning the dimension of the problem caused by diabetes, the increase in the number of patients with diabetes and the burden that this implies for the healthcare system and in accordance with the objectives of the Resolution, Diabetes Prevention and Care Development Programme 2010 - 2020 has been prepared.

The Programme constitutes the strategic basis for taking action in the field of prevention, early detection and treatment of diabetes and for ensuring monitoring, research and training in this area. Moreover, the Programme has to be understood as a completion to other public health-related strategies used in the management of risk factors and chronic diseases, and as a starting point for processes taking place in the health sector with regard to organisation and financing of health insurance and to information technology support for the health sector. The Programme as a whole is based on cooperation between partners within and outside the health sector.

The Diabetes Prevention and Care Development Programme 2010 - 2020 addresses the objectives that Slovenia wishes to fulfil in the field of diabetes. These are:

- prevention of type 2 diabetes in general population,
- preventing and/or delaying the onset of diabetes among people at high risk for type 2 diabetes,
- enhancing early detection, and
- reducing the complications and mortality caused by diabetes.

The centre of interest is a fully empowered patient able to actively participate in the process of medical treatment and care and to take full responsibility for his/her health with a view to living a full and quality life devoid of the problems caused by diabetes. Such prevention and care of patients with diabetes must be based on professional guidelines, standards and clinical pathways through taking account of continuous professional development in the area. In addition, the Programme envisages putting in place

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a monitoring system that will provide verifying the effectiveness of the diabetes prevention and care and enhance the quality of diabetes care.

Implementation of the Programme will enable the citizens of Slovenia to enjoy better and more proportionate accessibility to diabetes care, better coordination of the processes of diabetes prevention an care, more comprehensive medical care and more rational use of resources.

Successful implementation of the Diabetes Prevention and Care Development Programme 2010 - 2020 is executed via two-year action plans to be issued by the Ministry of Health and approved by the Health Council, if necessary; these plans are to define processes and the concrete activities of key partners. These action plans are expected to facilitate better cooperation between partners and links between their activities, monitoring of results regarding diabetes care and to correspondingly upgrade future activity in this area.

The Programme and the current Action Plan are in line with the Resolution on the National Plan of Health Care 2016–2025.

Year of implementation, level of implementation, funding

Year of implementation: starting 2010, ending 2020, when next 10 years' National Diabetes Plan will be put in place
Funding: up to 2016, no specifically dedicated funding related only to diabetes was used. However, diabetes is included in several core national-wide projects at system level, such as restructuring the model of care in primary care (registered nurses as care coordinators) and in up-grading of health promotion centres (such as with new educational programmes for people with disturbed glucose metabolism, and with type 2 diabetes, and orientation into local environment).

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Every Action Plan is followed closely during meetings (5-8 per year) of Steering Group, with special focus on barriers and opportunities. Once yearly, a full day strategic meeting is organised to boost the actions and discuss and incorporate new ideas. A Report on the activities in Action Plan is produced annually, that includes short description of the activities achieved, describes actions, that were not successful and defines, what are the next steps in such cases. Report also includes results of other, non-planned activities and unexpected successes.

Why should this programme/experience be considered a good practice?

This Programme is sustainable in achieving the results as planned in Action Plans, achieves synergies and is complementary to other processes/projects in healthcare, thus resulting in system-wide changes. It is seen as a success by its partners/institutions, such as Ministry of Health and National Patients' Diabetes Association.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Positive: ownership of the Programme by all partners/institution is crucial for its implementation, and is built best during the preparatory phase. Inclusiveness of different partners and their broad perspectives

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is an opportunity and strength, and not a potential thread. Sustainability of the commitment to the ideas and aims of the Programme results from the shared values and beliefs from members of the Steering Group. Over the years, interactions among partners/institutions change, too.
Negative: solution to some of the crucial obstacles are out of the influence of the Steering Group and the partners/institution, that are involved in the Programme implementation. This fact may be a source of exhaustion of the Steering Group, if not addressed in the right way. There are differences in the interest among the partners/institutions, and the level of energy that is put in the planned actions is very variable. During such a long Programme (10 years), representatives of the partners/institutions in the Steering Group may change their interest, or may be replaced by new ones. This is an opportunity, but also a thread if not taken into account.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The most important factor is the trust, that is being built among representatives of the partners, that are represented in the Steering Group, and among the partners/institutions in some cases. This is the basis for the actions/projects, where people from different partners/institutions work together and achieve the results, that have a higher value. Some projects could not even happen without a trustful collaboration. The next important factor is flexibility in leadership and planning – once a year a full day meeting is organised to grasp new opportunities and ideas and connect people/partners/institutions to work together. Complementarity to other processes/projects in Slovenia is a very important value to drive the change, too.

Leading organization of the programme/experience

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Training of Registered Nurses for care coordinators in health promotion and care for selected chronic diseases in primary care – course on diabetes

Slovenia

Short description of the programme/experience

The course was developed in 2011, when existent model of care in family medicine was upgraded by introducing Registered Nurses as care coordinators in health promotion and care for selected chronic diseases, one of them being type 2 diabetes. Since there were no experiences at the beginning, the course included several opportunities for the participants to give feedback on the usefulness and effectiveness of the training, the knowledge and skills that they were still missing, and generally about barriers, obstacles, as well as successes in their day-to-day experience. The flexibility of the agenda was kept also during the next years, since it was perceived as a good characteristic of the participants, so that they themselves can steer the agenda to a certain extent.
Description of the agenda: duration is 26 hours of face to face training, and approximately 4 hours individual work at the own practice.

Day 1: introduction with exam to strengthen the focus, presentation of basic facts on diabetes prevention and care (with strong focus on impaired fasting glucose/impaired glucose tolerance, including its care plan), presentation of roles and protocols of family medicine in diabetes prevention and care, and the role of Registered Nurse as care coordinator, workshop on perceived opportunities and barriers for their work, that includes giving answers and targeted information, lectures on specific topics in depth (basics of diet, hypoglycaemia).

Day 2: lectures on specific topics in depth (multifactorial treatment, goals setting, pharmacotherapy, safe use of the drugs, diabetic ketoacidosis and DAHS, diabetic foot-basics, stepwise education, other chronic complications), description of elements of yearly patient's report that includes individualised treatment goals and the roles of members of healthcare team, at least on example from a peer - Registered Nurse already working in the team, workshops (meal planning, innovative approaches to meal planning, screening for diabetic foot).

Day 3 of the training is 2-4 weeks after day 2, and during this period, a written assignment is given to the participants, asking to report back on their real experience (at least one person with impaired glucose metabolism, at least one person with type 2 diabetes, their understanding and perceived effectiveness of existent prevention programmes at health promotion centres, their knowledge about the coordination of care with secondary level diabetes specialist team, and about sharing the experiences with other Registered Nurses at primary care).

Day 3: feedback from their written assignments as well as experiences during their own work is the basis

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of the training, merged with training in skills of communication with patients, and the basics about group work. Workshops (selfmonitoring of blood glucose, standards of organisation of care, screening for diabetic foot, use of blood glucose meters, basic knowledge about insulin pens, meal planning), lecture (diabetes and driving), and refreshment of the knowledge and understanding about the roles of Registered Nurses, their actions to be taken according to the results, interpretation of yearly report, and planning of the visit. The agenda allows including additional lecture on the topic (s), that was perceived as needed by the participants according to their experience in their real work.

Day 4: Workshop (screening for diabetic foot, patient empowerment/use of didactics appropriate for adults), role-play (patient with newly diagnosed type 2 diabetes at first visit at Registered Nurse), lectures and debate on the rules of national payer (Health Insurance Institute Slovenia) and presentation of National Diabetes Patients' Association and of activities of a local branch. Questionnaire on participants satisfaction with the training. Final exam for participants.

Lecturers: diabetologist with skills in coaching, Registered Nurses-diabetes educators, family medicine specialists, diabetologists, Registered Nurse from family medicine, pharmacist, responsible representatives from national payer, and patients' representatives.

From November 2011 till December 2016, 16 groups of participants completed the training, giving the total number of 455 participants.

Since 2016, at least once yearly two-day refreshment courses will be available, and will also feed back into the changes of the agenda of the training.

Year of implementation, level of implementation, funding

Year of implementation 2011. Funding: public resources

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Feedback from the participants is sought twice during the course via workshops. At the end of the course, evaluation form is distributed, asking to grade the course numerically and give feedback as description (such as what should be kept, what should be changed, comments on didactical methods used). During refreshment course, the RNs are asked again, what type of knowledge/skills they are missing after at least of one year of clinical work. This info is then used to adapt the agenda of the training.

Why should this programme/experience be considered a good practice?

Registered Nurses are trained as care coordinators as a part of national-wide system level change in organisation of healthcare at primary care. The training course evolved during 5 years based on the feedback of the participants during, as well as after the training. It includes a variety of didactical approaches, builds not only knowledge but mostly skills and focuses also on values and beliefs of the participants.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Positive: enthusiasm of lecturers is contagious and can be spread to participants. Participants need a lot of personal encouragement to develop and implement the skills for the new role in the healthcare team.

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After initial resistance in 2011, after good experiences patients see this role of the RN as very important and report high degree of satisfaction. A variety of lecturers from different professions and institutions as well as presentation of National and Local Diabetes Association give the participants the broad perspective of diabetes prevention and care.
Negative: other members of healthcare team (doctors and nurses) are not attending the course.
Awareness of the role of the Registered Nurses in the healthcare teams varies among different healthcare teams. Coordination of care, when shared care is needed (for example with specialist diabetes care), is not assured optimally. Certain skills (such as screening for diabetic foot) seem to be hard to be grasped during the training, and obviously substantial additional changes have to be made.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

Leading organization of the programme/experience

University Medical Centre Ljubljana -Department for endocrinology, diabetes and metabolic diseases, Association of nurses in endocrinology (diabetes educators) at Nurses and Midwives Association of Slovenia, and Department for family medicine at Medical faculty, Ljubljana

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References

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National programme for diabetic retinopathy screening

Slovenia

Short description of the programme/experience

National programme for diabetic retinopathy screening is national payer (Health Insurance Institute Slovenia) funded screening programme that offers regular national-wide systematic diabetic retinopathy screening for patients with diabetes and is organized regionally. The first step of the procedure is performed by Registered Nurse: clinical data are collected (such as type of diabetes, diabetes duration, level of HbA1c, arterial hypertension) and best-corrected visual acuity is determined. Then, Registered Nurse performs digital retinal photography (2 fields for each eye, with midriasis) and sends (using IT technology) the photo and the data collected to the ophthalmologist. Ophthalmologist defines the absence or grades the diabetic retinopathy according to the standardised coding and schedules the patient for next annual screening examination or ophthalmological eye examination and treatment if needed.

Screening takes place at 8 regional screening centres in Slovenia situated in regional ophthalmology clinics with direct access and referral to treatment. The ophthalmology clinic provides any necessary treatment and follow-ups. The referral doctor (family medicine specialists or diabetologist) as well as the patient gets report, stating diagnosis, and schedules next follow up for screening or treatment.

Standards/quality criteria

Standard 1: - to reduce new blindness and visual impairment due to diabetic retinopathy/ evaluate the number of blind and visually impaired patients

Standard 2: - to ensure all patients, including those with newly diagnosed diabetes are screened on time/ Time between the diagnosis of diabetes and screening.

Standard 3: - to maximize the number of referred patients that performed the screening procedure/ Percentage of screened patients of all referred.

Standard 4: To ensure photographs are of adequate quality/ Percentage of patients where a digital image has been obtained but the grading is not obtainable

Standard 5: To ensure grading is accurate/ Percentage of normal images with no diabetic retinopathy and diabetic retinopathy that are re-graded independently as part of quality assurance.

Standard 6: - To ensure referral doctor and patient are informed of the results/ Time between screening procedure and issuing of letters to the referral doctor and patient.

Standard 7: To ensure timely treatment/ Time between referral and treatment

Standard 8: To ensure timely rescreening/ Time between rescreening

Standard 9: To prepare annual report on the programme/ Analysis of criteria

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Year of implementation, level of implementation, funding

2016

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

Please see above

Why should this programme/experience be considered a good practice?

The programme provides regular highly accessible diabetic screening to all persons with diabetes. With direct referral to ophthalmologic examination and treatment if needed timely treatment is achieved. With timely treatment better treatment prognosis and better visual acuity could be expected.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Positive: existence of national diabetes guidelines, that include also diabetic retinopathy screening and treatment. High level of commitment and joint effort of ophthalmologists (and to certain extent diabetologists) to complete the exhaustive procedure that is in Slovenian system needed to for new resources into this programme.
Negative: Low level of awareness of this programme among healthcare professionals and patients. Drivers for referral for patients with diabetes to regional centres (and not to their usual ophthalmologists) are not well addressed. Low level of primary care healthcare teams involvement. IT systems for uniform data collection are not fully in place yet. New and uniform model of organisation disrupts also those local practices, that were achieving good results and were close to the place where the patients live/or the patients were used to.

How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

With systematic national screening programme for diabetic retinopathy we can lower the incidence and prevalence for visual impairment and blindness among patients with diabetes at national level, which is our primary goal. With this programme the quality of care for patients with diabetes is improved in terms of better accessibility for eye examination and with that we can achieve higher rate of population screened, and timely referral for appropriate treatment of diabetic retinopathy.

Leading organization of the programme/experience

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References

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COMPETENT PATIENT IN DIABETES

Spain

Short description of the meme/experience

The following items are included in the education programme: health promotion interventions (choice of food, physical activity), diabetes knowledge, prevention of diabetes complications, management of stress and coping with everyday living activities.
The target groups are: all the persons with diabetes, persons with diabetes with comorbidities, persons with a new diagnosis of diabetes, and relatives and caregivers.
The following criteria are defined in the education programme: goals, rationale, target group (inclusion and exclusion criteria), setting (e.g. primary care), scheduling of the education sessions, number of participants, environmental requirements (e.g. an appropriate and accessible facility), qualification of the trainers/educators (e.g. certified trainees regarding content and methodology), core components of the educator/trainer's role (e.g. clinical practice, health promotion, counselling and behavioural change techniques), monitoring of the effectiveness and quality of the programme and source of funding.

Year of implementation, level of implementation, funding

Is there a defined evaluation framework? List the indicators (structure, process, outcome)

The following outcome criteria are measured: diabetes knowledge (ideally measured using standard, validated, questionnaires) and quality of life; empowerment/self-efficacy (ideally measured using standard, validated, questionnaires).

Why should this programme/experience be considered a good practice?

Training patients in specific abilities and aptitudes in order to manage their disease leads to greater self-care, better use of health resources and services and better treatment adherence.

Which are the reasons for success (positive lessons learned) and failure (negative lessons learned) if any?

Patients evaluation of this course has been very positive (an average of 9 on a 0-10 scale). Training leads to working together to improve the quality of life. Support and cooperation networks are created by the patients, and relations with the health professionals improve.

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How does this programme/experience help in driving the change toward prevention and improvement the quality of care for people with diabetes?

The patient learns how to control better his or her glycemia, improve his or her lifestyle (nutrition, exercise), is able to handle better the symptoms and complications. The patient takes charge of his treatment and knows how to solve problems that may arise.

Leading organization of the programme/experience

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References

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Table 1 - Potential Good practices by Type and Country

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