Diabetes policies and management

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Noncommunicable diseases (NCDs) Integrated Prevention and Control Division of NCDs and Promoting health through the Life-course











Universal health coverage - Service Coverage Index

Effective coverage of diabetes: elevated blood glucose management – proxied using the fraction of individuals with elevated blood sugar reaching the treatment target of fasting plasma glucose levels less than 126 mg/dL. [SDG 3.4.1]





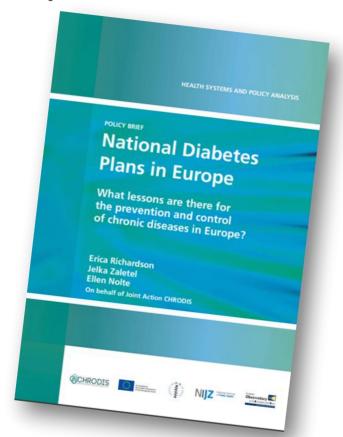
National Diabetes Plans

http://chrodis.eu/our-work/07-type-2-diabetes/wp07-activities/national-plans/



Sustainable diabetes policies

- Leadership
- Multiple stakeholder involvement
- Patient representation
- Resourcing
- Flexibility
- Balance "central vs regional"
- Learning (monitoring and evaluation), also transnational



How do we get there?











Technical package for cardiovascular disease management in primary health care



GLOBAL REPORT

ON DIABETES

Implementation tools

Package of Essential Noncommunicable (PEN) disease interventions for primary health care in low-resource settings



DIABETES PROTOCOL Type 2 diabetes management protocol derived from WHO-PEN QZ, 29

> FPG/RPG > 18 mmol/l (325 mg/dl)

TIST urine ketones

Evidencetreatment p













TEST ADULTS who have symptoms of diabetes with fasting or random plasma glucose (FPG or RPG), Test adults who are 404 years old with BMI >25 with FPG

REVIEW IN 3 MONTHS f goal not achieved increase dose to 1000 mg 2x dafly If goal not achieved, ADD glidazide 80 mg 1x daily. Counsel on hypoglycaemia at all

dose to 1000 mg 1x dafly

FPG >7 mmol/l and <18 mmol/l

and <18 mmol/1* Counsel on diet and

physical activity

subsequent visits REVIEW IN 3 MONTHS f goal not achieved increase dose to 80 mg 2x daily

REVIEW IN 3 MONTHS If goal not achieved, despite adherence to medication, healthy diet and physical activity, REFER to higher-level health care facility for starting insulin*

19 February 2018

BEGIN glidazide 80 mg bid & counsel on dist modification physical activity and adherence to modifines. REMEWIN 3-5 days

CONTINUE gliclazide and diet and physical activity REVIEW in 2-3 months

If goal not achieved

It to higher level of

If they are more affordable than insulin, DFFS inhibitors, SGLT2 inhibitors or plogita

PBA's should be used when exclubin Consider less stringent ofycarenic control in patients with frequent severe hyposylycarenia.

MANAGEMENT OF ACUTE COMPLICATIONS

- <50 mg/dl or 2.8 mmol/l) or signs if conscious, give a sugar-sweetened
- if unconscious, give 20-50 mt of 50% glucose (dextrose) IV over 1-3 minutes overe hyperglycaemia (plasma glucose >18 mmol/l (325 mg/dl) and urine ketone 2+ or signs and symptoms of severe hyperelycaems intravenous drip 0.9% NaCl 1 litre in 2 hours: continue at 1 litre every 4

hours, REFER to hospital.

(126mg/db) refer to table on diagnostic values for other tests which can be used to diagnose diabetes. can be used before insulin in cases of treetwent failure with melformin and gliclastide. Introduce and titrate insulin treatment according to local



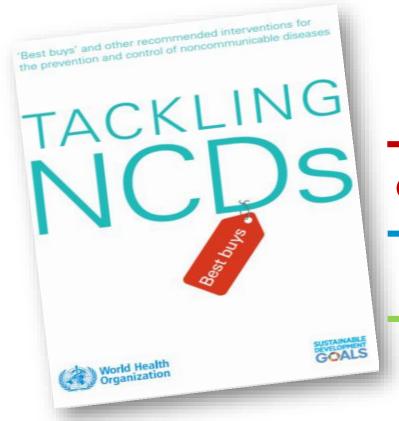
CLASSIFICATION OF DIABETES **MELLITUS** 2019



Guidelines on second-and third-line medicines and type of insulin for the control of blood glucose levels in non-pregnant adults with diabetes mellitus



Clarity of vision on what works best



88 Solutions



16
Best-buys



Best-buys: Effective interventions with cost effectiveness analysis \leq I\$ 100 per DALY averted in LMICs



Effective interventions with cost effectiveness analysis > I\$ 100 per DALY averted in LMICs



Other recommended interventions from WHO guidance (cost effective analysis not available)

Cardiovascular diseases and diabetes solutions

est buy

CARDIOVASCULAR RISK

Drug therapy (including glycaemic control for diabetes mellitus and control of hypertension using a total risk approach) and counselling to individuals who have had a heart attack or stroke and to persons with:

- high risk (≥ 30%) of a fatal and non-fatal cardiovascular event in the next 10 years
- moderate to high risk (≥ 20%) of a fatal and non-fatal cardiovascular event in the next 10 years

fective interventions*

DIABETES

Preventive foot care for people with diabetes (including educational programmes, access to appropriate footwear, multidisciplinary clinics)

<u>Diabetic retinopathy screening</u> for all diabetes patients and laser photocoagulation for prevention of blindness

Effective glycaemic control for people with diabetes, along with standard home glucose monitoring for people treated with insulin to reduce diabetes complications

* WHO CHOICE analysis available

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DIABETES

Lifestyle interventions for preventing type 2 diabetes

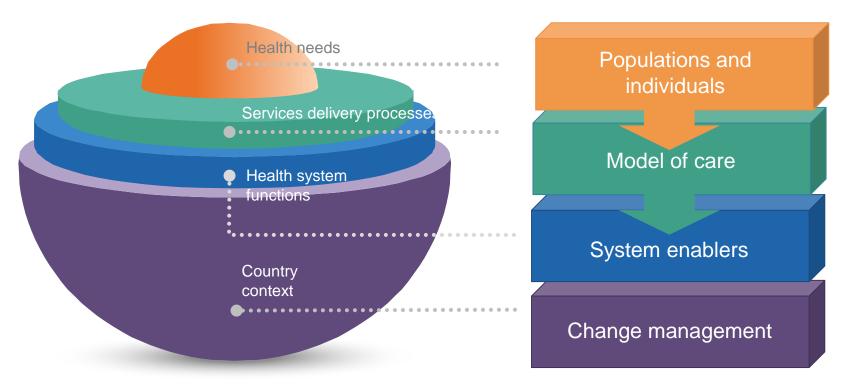
Influenza vaccination for patients with diabetes

Preconception care among women of reproductive age who have diabetes including patient education and intensive glucose management

Screening of people with diabetes for proteinuria and treatment with angiotensin-converting-enzyme inhibitor for the prevention and delay of renal disease

* *WHO CHOICE analysis NOT available

Putting people first means a model of care that is designed based on needs



Source: Strengthening people-centred health systems in the WHO European Region: framework for action on integrated health services delivery (2016). Copenhagen: WHO Regional Office for Europe (http://www.euro.who.int/_data/assets/pdf_file/0004/315787/66wd15e_FFA_IHSD_160535.pdf).



Establish feedback loops for learning and improvement



Align accountability and incentives



Establish multi-profile teams

Adopt a population health management approach



Ten primary health care policy accelerators



Invest in the competencies of doctors and nurses



Upgrade primary health care facilities



Integrate health and social care

Support patients to take responsibility for their health



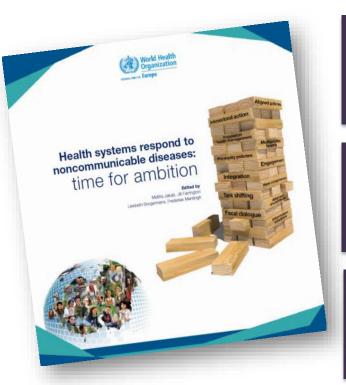
Make health care accessible across the life-course



Empower health managers



Nine cornerstones of a heath system response to NCDs



Strengthened governance

ensures coherent policy frameworks & sustainable intersectoral action for NCDs connecting national, regional and local levels

Adequately regionalized specialist services

provide efficient and timely care for acute conditions

Adequate & prioritized health financing

enables coverage of important services and aligns incentives with service delivery goals

Well-resourced

public health services

lead health promotion & prevention, applying universal proportionalism to drive the equity focus in public health action

People-centredness

is reflected in all health system functions

Access to quality medicines

is ensured through comprehensive coverage, pricing policies and promotion of generics

Multi-profile integrated primary health care

proactively manages community health and wellbeing

Fit-for-purpose health workforce

delivers people-centred interventions and services based on evidence

Information solutions

serve population health management, condition management in primary care, coordination across providers for seamless care, & self-management

Health systems assessments for better NCDs

World Nazida	ı		ARM	BLR	KAZ	MDA	ТЈК	KGZ	TKM
diabe	CVD and diabetes	Risk stratification in primary health care	M	M	M	M	L	M	M
		Effective detection and management of hypertension	M	L	L-M	L	L	L	M
		Effective primary prevention in high-risk groups	M	L	M	L	L	L	M
		Effective secondary prevention after AMI including acetylsalicylic acid	M	L-M	L-M	M	Е	L	M
		Rapid response and secondary care after AMI and stroke	M	M-E	M	L	L	L	M
		Effective detection and follow-up	M	M	L-M	L	N/A	N/A	L-M
		Patient education [nutrition; physical activity; glucose management]	L	M	M	M	N/A	N/A	M
		Hypertension management among diabetes patients	L	N/A	L	N/A	N/A	N/A	L-M
	ountry-	Prevention complications	L	N/A	L-M	N/A	N/A	N/A	M

Key: L = Limited; M = Moderate; E = Extensive; N/A = Not assessed

How would we measure success?









Quality indicators for diabetes care

Incidence, prevalence, mortality

Age-standardized mortality for diabetes mellitus (all ages)

Premature mortality (30-69 yrs) from diabetes mellitus

Percentage with raised fasting blood glucose (plasma venous value ≥ 7.0 mmol/L) or currently on medication for raised blood glucose

Prevalence of diabetes (detected in clinical practice)

Incidence of diabetes (detected in clinical practice)

Process of care measures

Percentage of patients with one or more HbA1c tests annually

Percentage of patients with at least one LDL cholesterol test annually

Percentage of patients with at least one test for microalbuminuria during the measurement year; or who had evidence of medical attention for existing nephropathy;

Percentage of patients who received a dilated eye exam or evaluation of retinal photography by an ophthalmologist or optometrist during the current year or during the prior year if the patient is at low risk for retinopathy

Percentage of patients registered with type 2 diabetes > 40 yrs. of age on statin

Proximal Outcome measures

Percentage of patients with most recent HbA1c level >9.0% (reflecting poor control)

Percentage of diabetes patients with blood glucose controlled at last visit in last quarter (clinical audit)

Percentage of all people currently on medications for diabetes OR have been diagnosed with diabetes AND who have glycaemic control (survey)

Percentage of patients with most recent LDL<130 mg/dl

Percentage of patients with most recent blood pressure <140/90 mmHg

Distal outcome measures

Lower extremity amputation rates

Kidney disease in persons with diabetes

Cardiovascular mortality in patients with diabetes

Blindness

Other

Diabetes admissions per 1000 patients with diabetes [Number of hospital discharges for diabetes per 1000 diabetics]

Retinopathy treatment

NCD Progress monitor indicators

Development and implementation of national multisectoral NCD policies and action plans, which include diabetes

Country has conducted surveys of risk factors (may be a single risk factor or multiple) for either or both raised blood glucose or diabetes in the last five years.

Unhealthy diet reduction measures - Marketing of foods and non-alcoholic beverages to children

Public education and awareness campaign on physical activity

Guidelines for management of diabetes and CVD

Provision of drug therapy, including glycaemic control, and counselling for eligible people at high risk to prevent heart attacks and strokes, with an emphasis on the primary care level

Measurable by WHO Country Capacity Survey

Risk factors and mortality

Proportion of population with insufficient levels of physical activity (less than 150 min per week)

Age-standardized prevalence of overweight (defined as body mass index>25 kg/m²) in persons aged 18+ years

Prevalence of overweight in children

Age-standardized prevalence of obesity (defined as body mass index>30 kg/m²) in persons aged 18+ years

Prevalence of obesity in children

Age-standardized prevalence of obesity (defined as body mass index>30 kg/m²) in persons aged 18+ years

Age-standardized prevalence of raised blood glucose/diabetes among persons aged 18+ years (defined as fasting plasma glucose concentration > 7.0 mmol/l or on medication for raised blood glucose)

Unconditional probability of dying from diabetes between ages 30 and 69 years

Measurable by NCD risk factor surveys, National information Systems or estimated by Global Health Observatory



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Thank you! TIME TO DELIVER



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