

RECOMMENDATION 1. It is recommended to General Practitioners (GPs) and other Primary Health Care (PHC) physicians to set diagnosis of Diabetes mellitus when in venous plasma:

- a) Fasting Plasma Glucose is ≥ 126 mg/dl (7.0 mmol/l), when confirmed at least another day
- b) 2-h plasma glucose is ≥ 200 mg/dl (11.1mmol/l) during an OGTT OR
- c) a random plasma glucose is ≥ 200 mg/dl (11.1 mmol/l) in a patient with classic symptoms of hyperglycemia or hyperglycemic crisis.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 2. As therapeutic target for the management of type 2 Diabetes Mellitus (T2DM), the A1C below 7% is recommended with individualization per patient.

Level of evidence II

Level of Recommendation: B

RECOMMENDATION 3. In patients with T2DM who are meeting the treatment goals (HbA1c<7%), the A1C test is recommended to be performed two times a year and in patients with T2DM who are not meeting the treatment goals (HbA1c> 7%), the A1C test is recommended to be performed every 3 months.

Level of evidence IV

Level of Recommendation: A

RECOMMENDATION 4. It is recommended to GPs and other PHC physicians to measure blood pressure of patients with T2DM at every visit in health services. In case that systolic pressure is ≥ 140 mmHg or/and diastolic pressure is ≥ 85 mmHg, the initiation or optimalization of therapy should be considered.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 5. It is recommended to GPs and other PHC physicians to measure fasting (at least 12 hours from the last meal) lipid profile (total cholesterol, LDL, HDL, triglycerides) of the patients with T2DM at least annually.

Level of evidence IV

Level of Recommendation: C

RECOMMENDATION 6

- As therapeutic target for the LDL cholesterol in patients with T2DM without overt CVD is value <100 mg/Dl (2.6 mmol/L).
- As therapeutic target for the LDL cholesterol in patients with T2DM with overt CVD is value <70 mg/dL (1.8 mmol/L)

• Level of evidence I

Level of Recommendation: A

RECOMMENDATION 7. As initial pharmacological agent for patients with T2DM, is recommended to GPs and other PHC physicians in combination with lifestyle changes, the prescription of metformin, if not contraindicated and if tolerated.

Level of evidence II

Level of Recommendation: A

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Level of evidence I

Level of Recommendation: A

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Level of evidence IV

Level of Recommendation: C

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- Level of evidence I

Level of Recommendation: A

RECOMMENDATION 7. As initial pharmacological agent for patients with T2DM, is recommended to GPs and other PHC physicians in combination with lifestyle changes, the prescription of metformin, if not contraindicated and if tolerated.

Level of evidence II

Level of Recommendation: A

Recommendation 8. In case the glycemic target is not achieved in 3 months, it is recommended to GPs and other PHC physicians in combination with the therapy of metformin, to add a second or and a third agent, including insulin.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 9. Patients with T2DM and established blood pressure ≥140/85mmHg are recommended in addition to lifestyle therapy, to have prompt initiation and timely subsequent titration of pharmacological therapy to achieve blood pressure goals.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 11. In addition to lifestyle changes in patients with T2DM, statin therapy is recommended regardless of baseline lipid levels with exception patients younger than 40 years old and without any cardiovascular risk factors.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 10. Pharmacological therapy for patients with T2DM and hypertension is recommended to be initiated with either an Angiotensin- Converting-Enzyme (ACE) inhibitor or an angiotensin receptor blocker (ARB).

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 12. It is recommended to GPs and other PHC physicians the subscription of aspirin (75–160 mg/day) in patients with T2DM at increased cardiovascular risk (with at least one risk factor and age above 50 years old for males and above 60 years old for females).

Level of evidence IV

Level of Recommendation: C

RECOMMENDATION 13. It is recommended to GPs and other PHC physicians the prescription of aspirin (75–160 mg/day) in patients with T2DM and established cardiovascular disease.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 14. In patients with T2DM who are overweight (BMI \geq 25 and $<$ 30 Kg/m²) or obese (BMI \geq 30Kg/m²) the GPs and other PHC physicians as well as other PHC professionals should recommend weight loss (5-10% annually).

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 15. In patients with T2DM the GPs and other PHC physicians as well as PHC professionals should recommend a diet of Mediterranean style, rich in dietary fibers and mono-saturated fats, low intake of saturated fat ($<$ 10% of total energy) and trans fat ($<$ 1% of total energy), low intake of sodium and moderate consumption of alcohol.

Level of evidence II

Level of Recommendation: C

RECOMMENDATION 16. In patients with T2DM the GPs and other PHC physicians as well as PHC professionals should recommend at least 150 min/week of moderate to vigorous intensity aerobic physical activity (50–70% of maximum heart rate), spread over at least 3 days/week with no more than 2 consecutive days without exercise.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 17. In patients with T2DM the GPs and other PHC physicians as well as PHC professionals should recommend immediate to stop smoking or use tobacco products and smoking cessation attempt should be guided by structured advice.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 18. For the better support of people with T2DM, it is recommended general practitioners' in Primary Health Care to collaborate with a team consisting of specialists and other healthcare professionals (nurses, health visitors, social workers dieticians/ nutritionists, psychologist, physiotherapist etc).

Level of evidence II

Level of Recommendation: A

RECOMMENDATION 19. It is recommended GPs and other PHC physicians to cooperate with registered dietitian-nutritionist for providing individualized medical nutrition therapy to patients with T2DM.

Level of evidence II

Level of Recommendation: B

Recommendation 20. It is recommended to the GPs and other PHC physicians to assess co-morbidity (Cardiovascular disease, mental health disorders etc) and undertake specific actions to monitoring and control.

Level of evidence IV

Level of Recommendation: C

Recommendation 21. It is recommended to GPs and other PHC physicians to work in partnership with other PHC professionals and patients to compile a written action plan and advocacy with self-management plan that contributes further to the diabetes regulation and control of the risk factors.

Level of evidence IV

Level of Recommendation: C

Recommendation 22. It is recommended to the GPs and PHC physicians as well as to other PHC professionals to assess the patients' awareness and skills that they are required for the diabetes management and their adherence to the given guidelines.

Level of evidence IV

Level of Recommendation: B

RECOMMENDATION 23. GPs and other PHC physicians are recommended to perform in 1-3 years (individualized per patient) opportunistic screening (venous fasting glucose) in patients who visit the PHC services and have one or more of the following factors:

- Overweight or obese BMI ≥ 25 kg/m²
- Physical inactivity
- First-degree relative with diabetes
- Women who delivered a baby weighing >9 lb (4,5Kg) or were diagnosed with GDM
- Hypertension ($>140/85$ mm/Hg or on therapy for hypertension) or CVD
- HDL cholesterol level <35 mg/dL (0.90 mmol/L) and/or a triglyceride level >250 mg/dL (2.82 mmol/L)
- Women with polycystic ovary syndrome
- Medications that predispose increase of blood glucose

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 24. General practitioners and other PHC physicians are recommended in cooperation with other healthcare professionals to encourage all individuals at high risk for developing T2DM and those with glucose metabolism abnormalities, structured programs that emphasize lifestyle changes including moderate weight loss (5-10%) and regular physical activity (150 min/week) and can reduce the risk for developing diabetes.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 25. GPs and other PHC physicians as well as PHC professionals should recommend all individuals at high risk for T2DM to adhere to Mediterranean diet, decrease the intake of total fat ($<30\%$ of total energy) and saturated fat (10% of total energy), minimize the consumption of sugar-sweetened beverages and increase the intake of mono-saturated fat, whole grains, dietary fiber and dairy low in fat, in order to prevent the onset of T2DM.

Level of evidence I

Level of Recommendation: A

RECOMMENDATION 26. GPs and other PHC physicians should check of the vaccine coverage for patients with T2DM which is suggested by the National Program of Vaccination with emphasis on influenza and pneumoniococcal disease.

Level of evidence III-2

Level of Recommendation: C

Recommendation 27. We recommend the use of proper and tested tools (clinical tests, questionnaires or devices) by GPs and other primary care physicians for the early recognition and the management of T2DM's complications.

Level of evidence IV

Level of Recommendation: B

Recommendation 28. GPs and other PHC physicians should refer patients to Emergency Room with T2DM who have life-threatening acute metabolic complications of diabetes (Diabetic ketoacidosis, Hyperglycemic hyperosmolar state, Hypoglycemia with neuroglycopenia).

Level of evidence IV

Level of Recommendation: C

Recommendation 29. GPs and other PHC physicians should refer to specialized centers patients with:

- Newly diagnosed diabetes type 1 (children and adolescents.)
- Substantial and chronic poor metabolic control that necessitates close monitoring of the patient to determine the etiology of the control problem, with subsequent modification of therapy.
- Severe chronic complications of diabetes that require intensive treatment or other severe conditions unrelated to diabetes that significantly affect its control or are complicated by diabetes.
- diabetes during pregnancy.
- Institution of insulin-pump therapy or other intensive insulin regimens.

Level of evidence IV

Level of Recommendation: B

Recommendation 30. GPs and other PHC physicians should refer patients with T2DM to ophthalmologists immediate after diagnosis and then annually .

Level of evidence IV

Level of Recommendation: B

Recommendation 31. GPs and other PHC physicians should refer patients with TDM to foot care specialists when it is required, for ongoing preventive care and lifelong surveillance.

Level of evidence IV

Level of Recommendation: C

Recommendation 32. GPs and other PHC physicians should keep patient record in order to monitor their care.

Level of evidence I

Level of Recommendation: A

Recommendation 33. It is recommended to GPs and other PHC physicians to cooperate with services and programs of domiciliary care.

Level of evidence IV

Level of Recommendation: C

Recommendation 34. It is recommended the GP and other PHC physicians as well as PHC professionals to use telemedicine and other technologies in order to improve the quality of life of patients with T2DM.

Level of evidence IV

Level of Recommendation: D

Recommendation 35. It is recommended to GPs and other PHC physicians as well as other PHC professionals to encourage patients with T2DM to participate in programs and actions of associations of non-governmental association in order to be motivated and improve their quality of life.

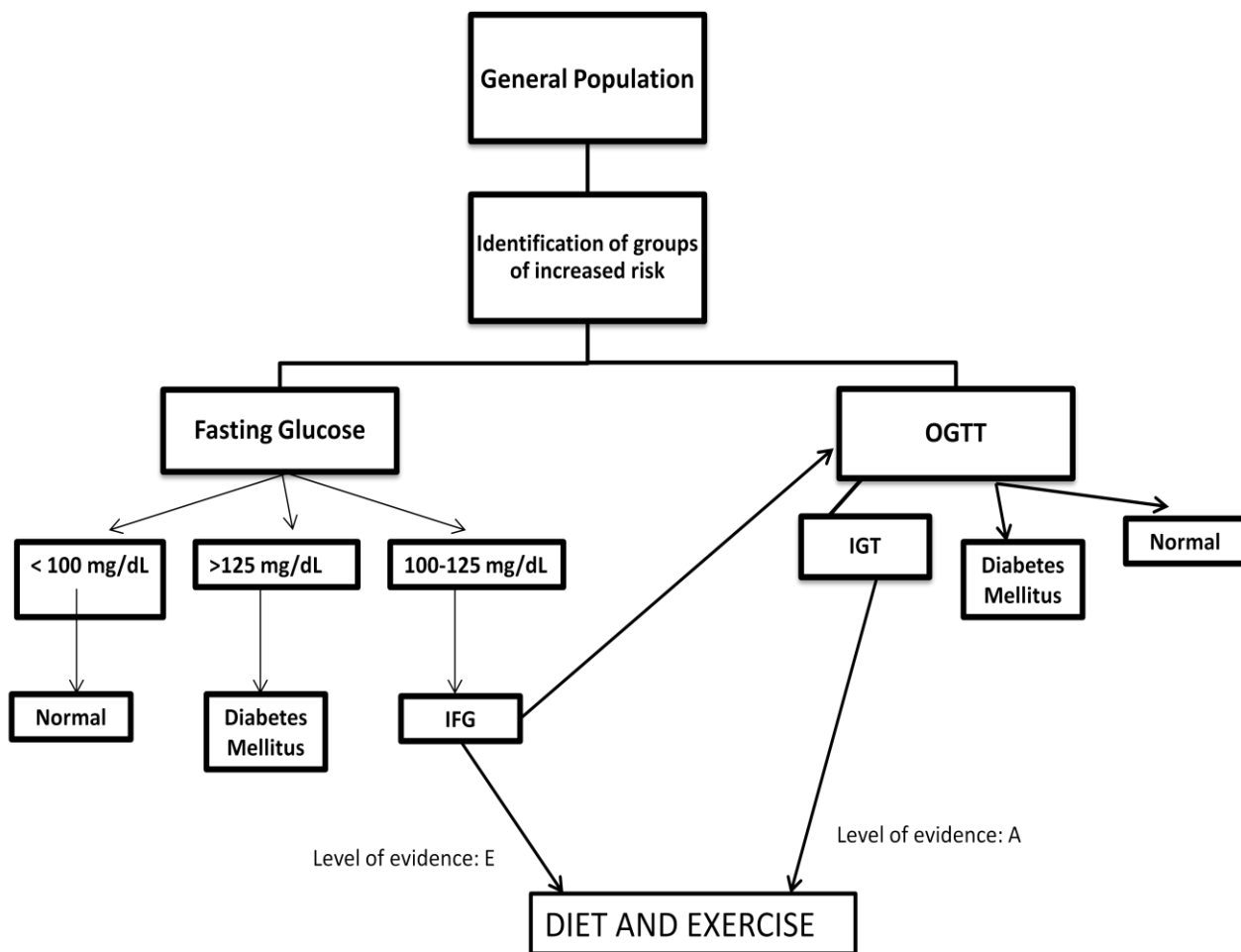
Level of evidence IV

Level of Recommendation: D

Recommendation 36. It is recommended to PHC general practitioners and other professionals to refer patients with T2DM to services and programs of psychosocial care, in order to deal with their psychosocial needs.

Level of evidence IV

Algorithm 1: Diagnosis of Diabetes Mellitus in Primary Care



Algorithm 2: Management of Diabetes Mellitus in Primary Care

Diet
Exercise
Body Weight management

+

Metformin



In failure , add one agent

SU

TZD

DPP-4

GLP-1

Basal Insulin



If the combination fail, add a third agent of a different category, if the triple combination is permitted

SU
+
Or TZD
Or DPP-4
Or GLP-1
Or Basal Insulin

TZD
+
Or SU
Or DPP-4
Or GLP-1
Or Basal Insulin

DPP-4
+
Or SU
Or TZD
Or Basal Insulin

GLP-1
+
Or SU
Or TZD
Or Basal Insulin

Basal Insulin
+
Or TZD
Or DPP-4
Or GLP-1