HALTING THE RISE IN OBESITY AND DIABETES
Life Stage: Older Adult (45 - 64 years)

INTERVENTION POINTS

1. Social Determinants/Health Promotion

National food and nutrition policies (accessibility and affordability of healthy food, vending machines, food labelling etc)

National policies on provision of community spaces for physical activity

Health Education/Promotion on avoidance of risk factors for obesity & diabetes

Adult Preventive Health Services and guidelines

Social mobilization and media & informational campaigns

Public awareness and education on obesity

2. Primary Prevention/Risk Reduction

Adult Preventive Health Services

Screening for risk factors for NCDs and referral for risk reduction

Lifestyle and behaviour change interventions

3. Screening & Early Detection

Adult Preventive Health Services protocols and standards

Work- and community-based weight and blood glucose screening guidelines (45-65 years)

Referral resources for behavioural intervention, family support and health education

Statutory reporting for Diabetes Register

4. Care and Treatment

Clinical Protocols for management of excessive weight gain, overweight and obesity; and management of impaired glucose metabolism

Referral resources for development of diabetes self-care skills, family support and health education

Accessible treatment and care services for obesity & diabetes

Statutory reporting of diabetes diagnoses for National Register

5. Quality of Care

Adherence to national guidelines for clinical management

Clinical Care Quality Reporting system with monitoring and accountability mechanisms

Defining Adult Overweight and Obesity

Weight Category	BMI	COMMENTS
Underweight	<18.5	*An individual is considered morbidly obese if he/she is **100 pounds over** his/her ideal body weight, has a **BMI of 40 or more**, or **35 or more and experiencing obesity-related health conditions**, such as high blood pressure or diabetes.*
Normal Weight	18.5 - 24.9	
Overweight	25.0 - 29.9	***Waist circumference** indicates higher risk of developing obesity-related conditions if:*
Obese	≥30	• *A male has a waist circumference of more than **40 inches*** • *A non-pregnant female has a waist circumference of more than 35 inches*

HEALTH PROMOTION	EVIDENCE
Supportive Policies • Policies - vending machine; food & menu labelling • Total Worker Health (TWH) programmes integrating injury and illness prevention; workplace interventions. • National comprehensive health promotion incl. campaigns & informational, behavioural/social and environmental/policy interventions and approaches. • Conditional incentives for behavior change (diet and physical activity). • Vouchers for fruit and vegetable purchases for low-income persons	• *Food labelling empowers consumers in choosing healthier products; and interpretive labels, (e.g. traffic light labels), are more effective.* • *Pricing and availability strategies are effective at improving the nutritional quality foods and beverages purchased from vending machines.* • *Conditional incentives/rewards provided for physical-activity behavior instead of attendance, had positive effects; however long-term effects of financial incentives are still unclear.* • *Positive association between incentives and dietary behavior change in the short term; with larger incentives associated with better outcomes* • *Subsidizing healthy behavior (e.g., fruit and vegetable consumption) in low-income households is preferable to taxation as a disincentive for unhealthy food choices* • *Proven effectiveness of TWH interventions for increasing rates of smoking cessation, increasing fruit and vegetable intake, and reducing sedentary work behavior.*

PRIMARY PREVENTION	EVIDENCE
• Total Worker Health (TWH) programmes • Measure height & weight; calculate BMI at all health care visits; waist circumference is also a useful measure. • Social media and app-based interventions to improve diet and physical activity. • Lifestyle/Behaviour Change Interventions for diet and physical activity • Behavioural Counseling Interventions (5-As): **A**ssess, **A**dvise, **A**gree, **A**ssist, **A**rrange.	• *Behaviour change interventions for diet and Physical Activity are modestly effective both at short and long term* • *Multi-component social media interventions can lead to improved diet, physical activity behaviours. Use of mobile phone apps showed reductions in participants' bodyweight, BMI, waist circumference and body fat, based on frequency of programme use. Important features of effective apps were frequent self-recording of weight, personalisation of the intervention (counselling and individualized feedback), and a social support system which acts as a motivational tool.* • *Lifestyle/behaviour change interventions for diet and physical activity, emphasizing motivational interviewing, and self-determination theory are associated with long-term effects.*

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SCREENING AND EARLY DETECTION	EVIDENCE
Obesity • All adults should be screened for obesity. • Adults with BMI of 30 or higher, should be offered referral to intensive multi-component behavioural interventions. **Diabetes** • **All asymptomatic adults**: Screen for type 2 diabetes with an informal assessment of risk factors, or use a validated tool. • Blood glucose testing in adult clients of any age considered if overweight or obese (BMI ≥25) and having one or more risk factors (test using either fasting plasma glucose, 2-hr plasma glucose after 75g oral glucose tolerance test, or HbA1c). • **All persons should be tested beginning at age 45 years**. If normal, repeat at a minimum 3-year interval. Those with prediabetes should be tested yearly.	*Referral to intensive behavioural intervention programs that include a variety of activities, are successful in helping people manage their weight. These programs:* • *include 12 to 26 sessions in the first year* • *include group and/or individual sessions* • *help people make healthy eating choices* • *include physical activity* • *address issues that make it difficult to change behaviors* • *help people monitor their own behaviors* • *help people develop strategies to maintain healthy eating and physical activity behaviors.* ***Patients with HIV** should be screened for diabetes and prediabetes (fasting glucose) every 6-12 months before starting ART; and 3 months after starting or changing ART. If normal, check fasting glucose annually. If prediabetic, measure fasting glucose every 3-6 months.*
CARE AND TREATMENT	**EVIDENCE**
• Obesity management: - Behavioural Interventions (minimum 12 weeks' duration) - Combined pharmacologic and behavioural intervention • A complete medical evaluation should be performed at the initial visit to confirm the diagnosis and classify diabetes. • Diabetes care and treatment should be provided by a team to improve lifestyle management. • Statutory reporting for Diabetes Register	*The comprehensive medical evaluation should ideally be done on the initial visit, although components can be done as appropriate on follow-up visits.* • *History, Physical examination and Laboratory investigations (e.g. HbA1C, lipids, microalbuminuria, GFR)* • *Referrals for initial care management* - *Eye care professional* - *Family planning for women of reproductive age* - *Registered dietitian for medical nutrition therapy* - *Diabetes self-management education and support* - *Comprehensive oral health examination* - *Mental health professional, if indicated.*
QUALITY OF CARE	**EVIDENCE**
• Routine vaccinations according to age-related recommendations - Annual influenza - Pneumonia vaccine (pneumococcal polysaccharide PPSV23 vaccine up to age 64 yrs). At 65 yrs of age, pneumococcal conjugate vaccine (PCV13) to be administered, as recommended. - Hepatitis B (to unvaccinated adults up to age 59 yrs).	*Complete medical evaluation of Diabetic:* • *Detect diabetes complications and potential comorbid conditions.* • *Review previous treatment and risk factor control in patients with established diabetes.* • *Begin patient engagement in the formulation of a care management plan.* • *Develop a plan for continuing care.* *Health professionals **treating obesity**, should utilize disciplines that offer expertise in dietary counseling, physical activity, and behavior change through direct, formal relationships or an indirect referral.*

KEY: BMI = Body Mass Index DOH = Department of Health GFR = Glomerular Filtration Rate

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