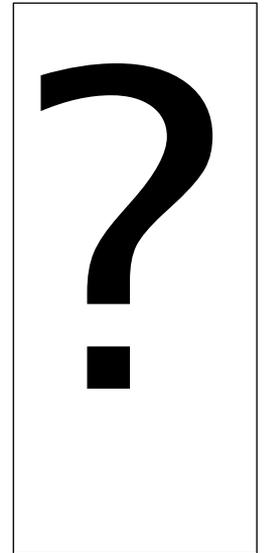
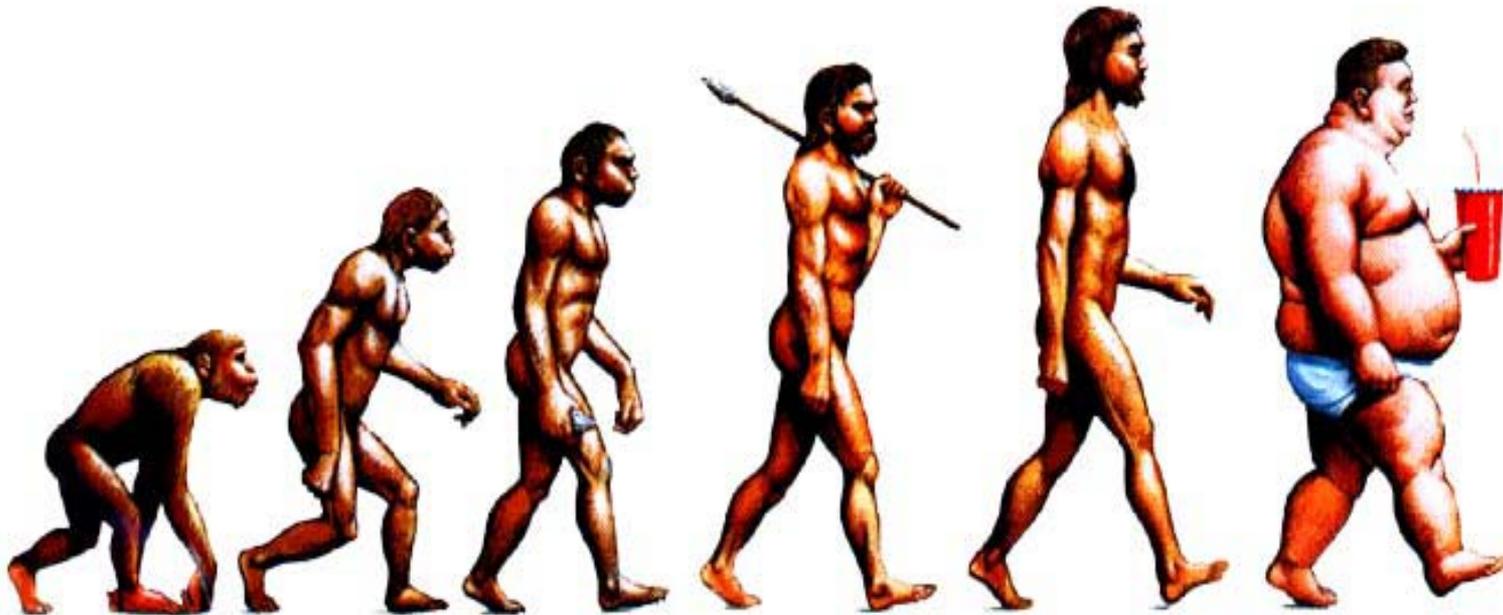


The Obesity Story?

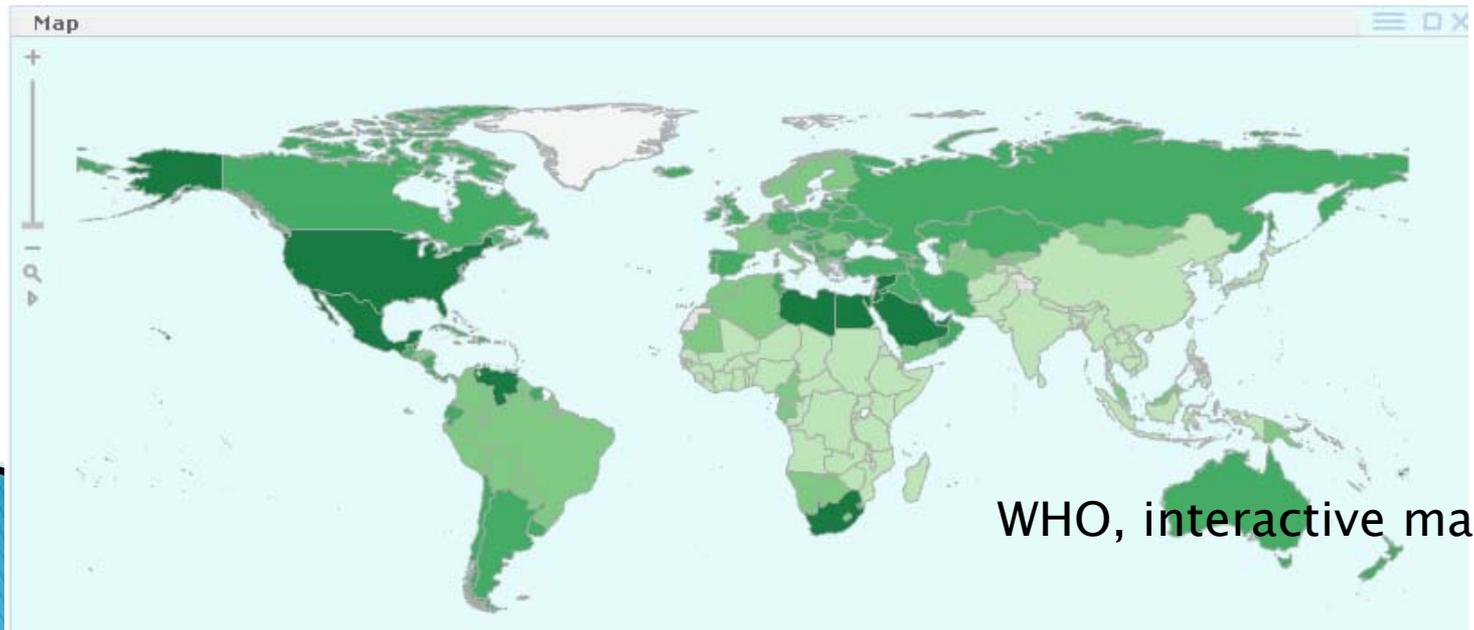


Presenter Disclosure

- **Presenters: Paula Brauer**
- **Relationships with commercial interests:**
 - Grants/Research Support: **CIHR, CDA, DC**
 - Speakers Bureau/Honoraria: **none**
 - Consulting Fees: **Brockton FHT**
 - Other: **Employee of University of Guelph**

Obesity

- ▶ Really started to increase in 1980s –
 - US has best data
- ▶ Not really noticed until 1990s
- ▶ Worldwide – now more obese than undernourished
- ▶ Lack clear direction on WHAT to do



WHO, interactive maps

Using the Obesity Services Planning Framework to Improve Team Practice

Paula Brauer, PhD, RD

pbrauer@uoguelph.ca
phcnutr@uoguelph.ca

Overview

Classification	Pregnancy to 2 years	3 -12 years	13-18 years	18+ Generally Healthy	18+ Medically Complex
Total # of Approaches	16	12	13	23	22
Raising Awareness					
Identification and Initial Management					
Follow-up Management					
Expanded Services					
Practice Initiatives					

Outline

- ▶ Review key features and possible uses of a planning framework for obesity services
 - ▶ Review benefits and challenges of using the planning framework
 - ▶ Concrete examples of possible services
- 

Acknowledgements

- Decision Makers – Nick Kates, Ross Kirkconnell
 - Co-investigators
 - John Dwyer, Michelle Edwards, Rick Goy
 - Heidi Smith, Tracy Hussey
 - Coordinator – Dawna Royall

 - Advisory group – Ruth Wilson, Anthony Livinson, Rick Tytus, Kay Watson-Jarvis, Linda Dietrich, Diana Lawlor
 - MSc – Olivia O’Young, Carol Haberman
 - Undergraduate students and other helpers!

 - Funding – CIHR Knowledge to Action and Supplement 2008–12
- 

Potential Uses

- ▶ Facilitates “made in PC” services development
- ▶ Respects configurations/populations/practice styles
- ▶ Team review of current services – gaps, goals
- ▶ Guide for discussion of possible enhanced services



What services to offer?

- ▶ Sparse evidence on how to implement in **routine practice**
- ▶ What **systems** may be necessary to ensure widespread adoption? – planning tools, training, incentives, etc.
 - The Centre for Obesity Management and Prevention
Research Excellence in Primary Health Care, Australia 2012
- ▶ FHTs have developed skills and experience in changing routine practice
 - Obesity services – another “chronic disease” issue?

Obesity “special”



Predictors of Weight Loss

Patient	Higher weight, male, higher RMR, adipocyte hyperplasia, self-efficacy	+
	Body fat distribution, personality, Dietary restraint, weight cycling, Binge eating	?
Process	Early weight loss, attendance	+
	Repeated previous attempts, experience of perceived stress	-
Treatment	Increased length of support, social support	+
Behaviour changes	Self monitoring, goal-setting, slowing rate of eating, physical activity	+

- ▶ Current lifestyle treatments
 - Mean wt change from trials ~ 3 kg (~5%)
 - LeBlanc Ann Intern Med 2011;155:434–47.
 - 1 in 5 can achieve 5% weight loss
 - 1 in 10 can achieve 10% weight loss
- ▶ Physical fitness?
 - Fit obese NOT at higher mortality risk
- ▶ Uncertain health benefits of efforts
- ▶ Multiple priorities – person-centred care
- ▶ Other?



Overview

Classification	Pregnancy to 2 years	3 -12 years	13-18 years	18+ Generally Healthy	18+ Medically Complex
Total # of Approaches	16	12	13	23	22
Raising Awareness					
Identification and Initial Management					
Follow-up Management					
Expanded Services					
Practice Initiatives					

Higher Priority for Health Impacts?

- Potential impact – pregnancy/early childhood
 - Pregnancy and well-baby care
- **Decrease diabetes incidence**
 - Age 40+ – CVD/DM risk – cardiometabolic syndrome
 - Gestational DM care



New emphasis emerging – DM risk

- ▶ Canadian Task Force on Preventive Health Care
 - <http://canadiantaskforce.ca/guidelines/2012-diabetes/>
- ▶ Canadian Diabetes Association
- ▶ Public Health Agency of Canada



Public Health Agency of Canada

www.publichealth.gc.ca

Français

Home

Contact Us

Help

Search

canada.gc.ca

Home > Chronic Diseases > Diabetes > The CANRISK questionnaire

Diabetes

Are you at risk?

Diabetes Questionnaire

My Risk Score

More Information

Share

Share the Questionnaire

Encourage your friends and family to take the **CANRISK** questionnaire. You may help prevent someone you care about from developing pre-diabetes or diabetes type 2.

Share the questionnaire and create awareness



[By e-mail](#) Send an e-mail and share the Canadian Diabetes Risk Questionnaire.



[Share the questionnaire](#) on your Facebook page



Send your Twitter followers a [link to the questionnaire](#).



If you would like a paper copy of the questionnaire, you can print the [PDF document](#).



CANRISK

<http://www.phac-aspc.gc.ca/cd-mc/diabetes-diabete/canrisk/#tabs-4>



Canadian Task Force on Preventive Health Care

Putting Prevention Into Practice

FINRISK

[Home](#)
[About Us](#)
[Guidelines](#)
[Methods](#)
[Resources](#)
[What's New](#)
[Contact](#)

Screening for Type 2 Diabetes

Summary of recommendations for clinicians and policy-makers

Recommendations are presented for screening asymptomatic adults for type 2 diabetes. They do not apply to people with symptoms of diabetes or those at risk of type 1 diabetes.

The CTFPHC will continue to carefully monitor the scientific development in diabetes screening and report back to Canadians within 5 years with an update of the 2012 Diabetes Screening guideline.

Recommendations

- **For adults at low to moderate risk of diabetes (determined with a validated risk calculator^{*†}), we recommend not routinely screening for type 2 diabetes.** (*Weak recommendation, low-quality evidence*)

ceptable alternatives. An A1C level of 6.5% or greater is recommended as the threshold for diagnosing diabetes, but values less than 6.5% do not exclude diabetes diagnosed using glucose tests. A1C should be measured using a standardized, validated assay.

Guideline Update

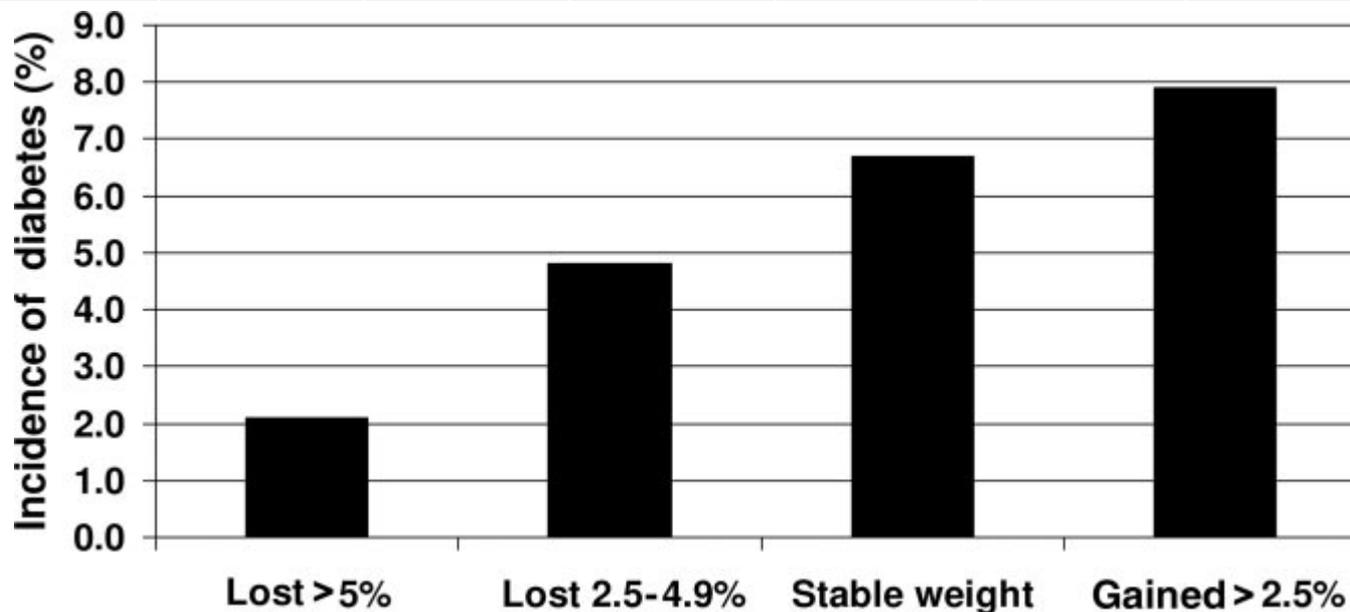
The guideline has been updated to incorporate the latest evidence from a large randomized controlled trial that was published on October 4, 2012—two weeks before publication of the print issue.

Although the electronic version of the Task Force guideline that is available on the Canadian Medical Association Journal (CMAJ) website is correct, the version that was included in the print issue of CMAJ on October 16, 2012 was already at the printers when the new trial was released and is now outdated.

Saaristo – 2010

- ▶ National Finnish study – 1 year results
 - ▶ >10,000 screened with Q in 400 Primary care centres
 - ▶ 55 yo, BMI ~ 31
 - ▶ Lifestyle interventions
 - Based on DPS – group or individual
 - Varied by centre
 - ▶ Results for 2,798 people
 - NGT – incidence of DM – 2% M, 1% F
 - IFG – incidence of DM – 14% M, 7% F
 - IGT – incidence of DM – 16% M, 11% F
- Saaristo T, et al. *Diabetes Care* 2010;33:2146–2151.

	Lost 5%		2.5–4.9%		Stable		Gained $\geq 2.5\%$	
Wt (kg)	490 (18%)	-8.5	471 (17%)	-3.1	1290 (46%)	-0.1	546 (20%)	4.5
SBP		-4		-3		-0.7		-0.5
LDL-C		-0.33		-0.22		-0.17		-0.07
Got DM		2.0%		4.8		6.7		7.9
RR		0.31		0.72		1.0		1.10



Current Services

- ▶ Is the team ready to review obesity services?
 - ▶ Agreement on messaging for current routines and approaches?
- 

Framework – starting point

- ▶ Many ways to categorize “populations”
- ▶ Aimed for least number of different groups
- ▶ In your local context – what are key groups?

Classification	Pregnancy to 2 years	3 -12 years	13-18 years	18+ Generally Healthy	18+ Medically Complex
-----------------------	-----------------------------	--------------------	--------------------	------------------------------	------------------------------

Target Group	Desired Outcomes	
Pregnancy to 2 yrs	<ul style="list-style-type: none"> • preconception health • appropriate weight gain • maintaining / increasing physical activity • healthy postnatal weight loss 	<ul style="list-style-type: none"> • active play • family healthy eating • Infant – Appropriate growth trajectory
3 to 12 years	<ul style="list-style-type: none"> • develop healthy habits • develop parental awareness of healthy lifestyles; good role modeling 	<ul style="list-style-type: none"> • physically active • family focused approach • healthy body image
13 to 18 years	<p>Same as 3 to 12 years plus:</p> <ul style="list-style-type: none"> • balance of academics and healthy lifestyle 	<ul style="list-style-type: none"> • knowledge of food budgeting and meal preparation • recognition and early intervention of disordered eating patterns
18+ years Generally Healthy	<ul style="list-style-type: none"> • weight loss or weight gain prevention • increase physical activity • self-management skills for disease 	<ul style="list-style-type: none"> • awareness of healthy weights / body acceptance • improved lifestyle balance • chronic disease prevention / health promotion • increased feelings of empowerment / confidence
18+ years Medically Complex	<ul style="list-style-type: none"> • achieving desired targets for chronic condition • self-management skills • weight maintenance/prevention of gain • improved mental health 	<ul style="list-style-type: none"> • quality of life / functional capacity • prevent or reduce risk of further complications • improve mobility, physical endurance / stamina; increase physical activity if able • avoid unintentional weight loss

Progress – Principles of Clinical Care

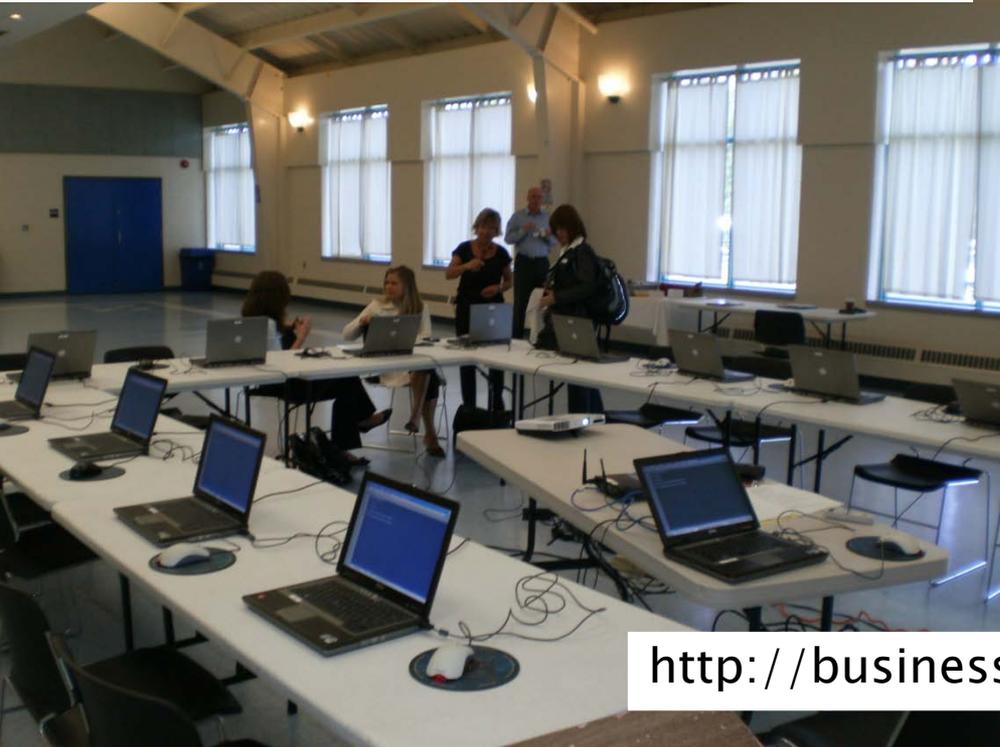
- ▶ CON has developed a 5As tool
- ▶ Focus on medical management
- ▶ Obesity is a chronic condition
- ▶ ‘Best’ weight, not ideal weight

“...success of obesity management should be measured in improvements in health and well-being..”

“...even modest reductions in weight can lead to significant improvements in health and well-being.”



Can consensus be achieved?



- Generate ideas
- Rank priority in each target group

<http://business.queensu.ca/centres/qedc/index.php>

Basic Bariatric Care

- ▶ Meet bariatric care needs?
- ▶ Connected to specialized obesity services?
 - For adults?
 - For children?
- ▶ Chronic dieters
 - Promotion of acceptance; better relationship with food; improved fitness

New Services?

Classification	Pregnancy to 2 years	3 -12 years	13-18 years	18+ Generally Healthy	18+ Medically Complex
Total # of Approaches	16	12	13	23	22
Raising Awareness					
Identification and Initial Management					
Follow-up Management					
Expanded Services					
Practice Initiatives					

Pre-diabetes / Metabolic Syndrome

	Expanded	Desirable
Build Awareness	Find pamphlet/teaching tools List Community facilities	+ web screening
Initial Identification	Create wellness check visit; <5 min Advice	+ Screening program
Follow-up Management	+ Group classes – overview	Coordinated team Program for 1 year
Expanded Services (team, specialist)	+ Some referred to RD (and for exercise advice)	
Practice Initiatives	+ Start to assess outcomes	+ YMCA partnership

Small group review

- ▶ Using CANRISK or FINRISK in practice?
 - ▶ How integrated into current practice?
 - ▶ Doing any “Raising awareness?”
- 

Small group feedback

- ▶ What did your group work on?
 - ▶ What strategies emerged from discussion?
 - ▶ Facilitators to using strategies?
 - ▶ Any challenges in organizing services?
- 

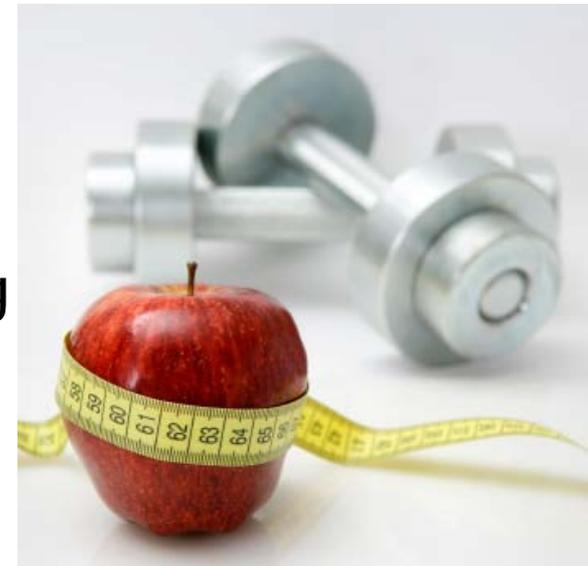
Next steps



Canadian Health Advanced by Nutrition and Graded Exercise CHANGE Health Paradigm

»» Lifestyle Intervention for
Metabolic Syndrome

Khush Jeejeebhoy, PI
Daren Heyland, Angelo
Tremblay, David Mutch, Doug
Klein, Paula Brauer



WHAT IS METABOLIC SYNDROME?

- Metabolic syndrome is a group of risk factors that raises your risk of developing health problems such as heart disease, stroke and diabetes.
- If you have 3 or more of the following conditions (refer to boxes), you are considered to have metabolic syndrome

Healthy Weight is Important

- Managing your weight can affect all other conditions, therefore, it is the first priority.
- If weight loss is not desirable or feasible, you can still work on improving the individual conditions listed below. Your healthcare team will discuss with you ways to improve these conditions.

Joint Goal Setting Fact Sheets

Abdominal Obesity

- This is also called having an "apple-shaped" figure.
- A large waistline is (more than 102cm/40 inches for men or 88cm/35 inches for women).



High Fasting Blood Sugar

You have high fasting blood sugar if:

- Your fasting blood sugar is 5.6 mmol/L or higher, or
- You take medicine to treat diabetes.



Low HDL Levels

- HDL cholesterol is sometimes called "good" cholesterol because it helps remove bad cholesterol from your blood vessels.
- HDL levels less than 1.0 mmol/L in men or 1.3 mmol/L in women are considered low

CONDITIONS

High Triglyceride Levels

- Triglycerides (TG) are a type of fat found in the blood.
- You have high TG if your TG level is 1.7 mmol/L or higher) or you're taking medicine to treat high TG.

High Blood Pressure

You have high blood pressure if:

- Your systolic (top number) is higher than 130, or
- Your diastolic (bottom number) is higher than 85, or
- You take medication to treat high blood pressure



Summary of Provider Priorities with Evidence to Support Strategies in Obesity Management Planning^a

Category	Target Group				
	Pregnancy to 2 years	3 -12 years	13-18 years	18+ Generally Healthy	18+ Medically Complex
Strategies					
Raising Awareness					
Providing information and resources on weight-health	[A] Raising awareness about the weight-health connection			[B] Waiting room pamphlets etc.	[D] [Waiting room resources not mentioned by providers]
Providing information on community services	[D] Community resource information [not mentioned by providers]	[B] List of community resources / activities	[A] Providing information on community programs and resources		
Identification and Initial Management (MD and/or RN)					
Wellness Care /Health Check	[A] Consideration and management of weight within a wellness visit rather than episodic care [not explicit in evidence - in research would have an additional visit]			[A] Screening and management as part of a wellness or prevention visit	
Episodic Care	[B] Episodic visit to identify and manage risk	[D] [Episodic care to identify and manage risk not mentioned by providers]		[C] Episodic visits for screening and management	[C] Screening for depression
Drop-in clinics	[B] Drop-in clinics (baby weigh-ins, parental support)	[D] [not mentioned by providers]	[C] Drop-in clinics	[D] [not mentioned by providers]	
Follow-up Management					
Group Program Specific	[A] Group education: pre & post natal classes, parent and baby groups	[A] Parental education / family education focused on raising awareness and healthy development	[A] Teen group education [B] Family support system / parent groups	[A] Group education for weight issues	[A] Support programs [no evidence for weight loss]
Ongoing Support by	[C] System navigation	[D] [Ongoing support not mentioned by providers]		[D] Ongoing support (i.e.	[A] Routine visits for chronic

Category	Target Group				
	Pregnancy to 2 years	3 -12 years	13-18 years	18+ Generally Healthy	18+ Medically Complex
Strategies					
Practice	guide; ongoing support			telephone, mail) for treatment in evidence <i>[not mentioned by providers]</i> [C] System navigation for marginalized [C] Improved access to exercise by practices	disease check-ups; [A] Case-management to navigate system <i>[no evidence]</i>
Social and Peer Support	[C] Some support through group programs		[C] Teenage peer support group with peer leaders	[D] Peer support groups with other opportunities for group <i>[not a separate strategy by providers]</i>	[B] Peer led self-management support groups
Expanded Services					
Availability of Team Services in Practice	[A] Access to diet and physical activity specialist [C] Lactation specialist services	[D] Access to team <i>[not mentioned by providers - may already have expertise in teams? may not be seeing many children?]</i>	[C] Access to team services	[D] Adding expertise in diet and physical activity to team <i>[not mentioned by providers - may already have a team?]</i>	[B] Increased access to mental health expertise, diabetes specialists, chiropractist, social work and heart health <i>[expertise already available?]</i>
Access to External Specialist Services	[D] External specialist services <i>[not mentioned by providers - assumption of connection to other services so did not emerge as a priority?]</i> <i>[may have been hidden in evidence as conducting a research study would provide access to specialist services]</i>			[C] Integration with bariatric programs [D] Separate commercial lifestyle programs	[D] External specialist services <i>[not mentioned by providers]</i>
Practice Initiatives					

Category	Target Group				
	Pregnancy to 2 years	3 -12 years	13-18 years	18+ Generally Healthy	18+ Medically Complex
Strategies					
Team Practice /Education	[B-C] Age-specific provider education on differing roles; care maps for practice, common language, team function <i>[would be included in any evidence]</i>			[B] Provider education with algorithms and formal programs [D] Practice facilitation; [D] RN expanded scope	[C] Provider education <i>[have focused on chronic disease management over last several years]</i>
Patient Outcomes Review /Use EMR	[D] EMR tracking <i>[not mentioned by providers]</i>	[B] Develop EMR for plotting child growth	[D] EMR tracking <i>[not mentioned by providers]</i>	[C] EMR long term tracking of changes;	[C] EMR tracking
Coordination /Collaboration /Partnerships / Advocacy	[B] Establish partnerships (e.g. parent and baby groups, public health)	[A-B] Work with the community and schools		[B] Partnerships with workplaces; [C] Community partnership	[C] Partnerships with community agencies <i>[not a high priority as already partnered?]</i>

^a **Bolded and underlined** = strategies from clinically relevant studies and also endorsed by providers; **Bolded in black** = strategies from clinically relevant studies, but not identified by providers; Regular font = strategies prioritized by providers; [A] = high priority (ranked 1-5); [B]= moderate priority (ranked 6-10); [C]= limited priority (ranked >10th); [D] = not mentioned; *Italics* = researcher comment