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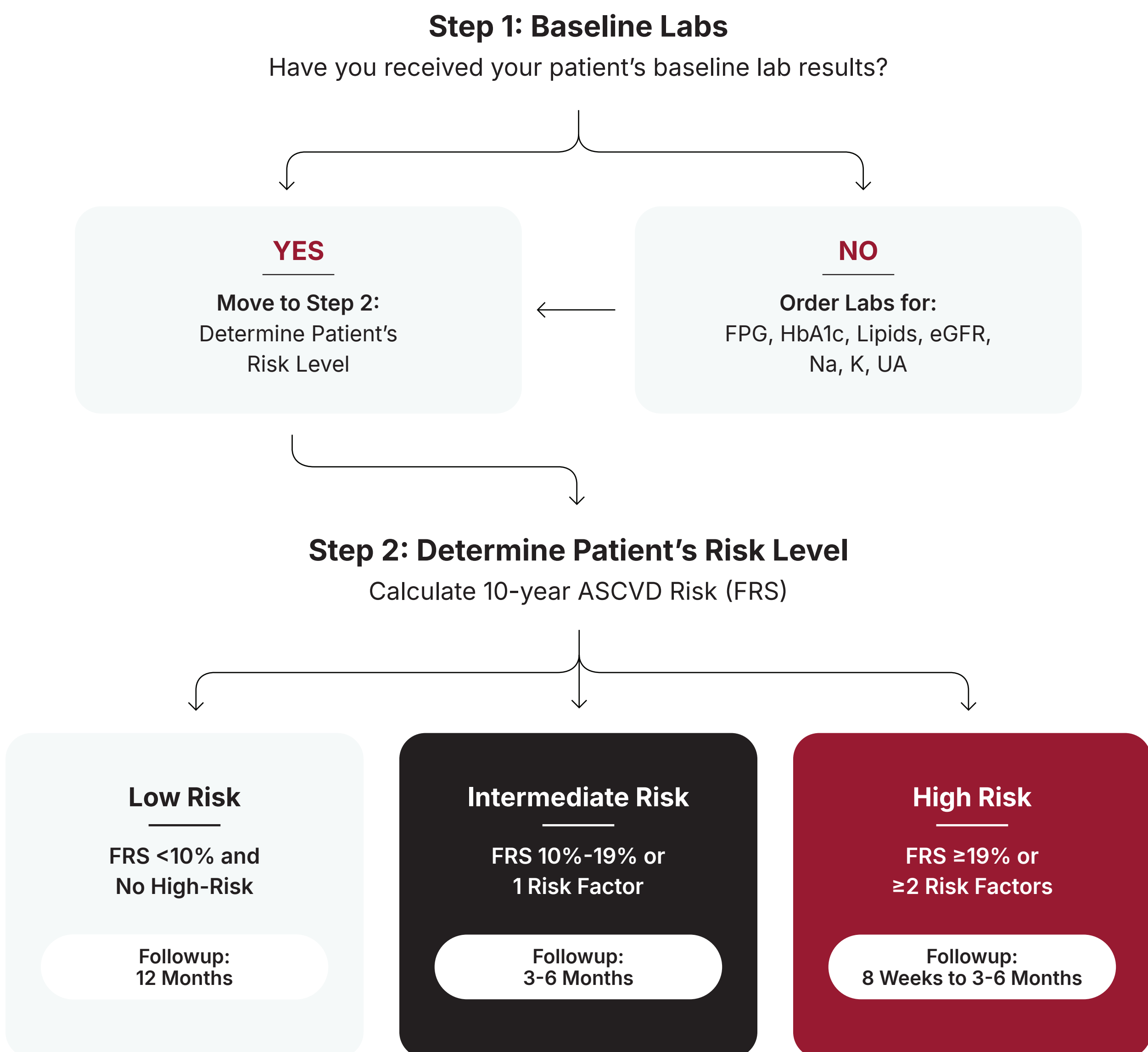
C-Change Decision Tree

You can use this Decision Tree (based on the C-CHANGE Guideline 2022) to assist you in the management of identified risk factors. To start, you can determine the risk category using the Framingham Risk Score (FRS). The link to the FRS can be found in the CASP Screening Checklist or Step 4 on the CASP Website.



Step 3: Recommended Course of Action

Treatments matched with lab results

BP elevated → Initiate Rx based on clinical scenario >130/80

First Line: Thiazide / CCB / β-blocker / ACEi / ARB (for new diagnosis of HTN in Primary Care Settings use combination therapy- HTN Canada Guidelines 2025).

LDL-C above target on max tolerated statin → Intensify

Primary prevention: > 2.0 mmol/L → add Ezetimibe (first-line) or bile acid sequestrant
Secondary prevention (CVD): > 1.8 mmol/L → add Ezetimibe ± PCSK9-i
If TG > 1.5, use non-HDL-C or ApoB instead of LDL-C

Diabetes diagnosed (FPG ≥ 7.0 or A1C ≥ 6.5% or 2hPG ≥ 11.1)

Target: A1C ≤ 7.0% (≤ 6.5% if low hypo risk — for CKD/retinopathy)
Rx: Individualize by clinical priority:
ASCVD / HF / CKD: add GLP-1 RA or SGLT2i with proven CV/renal benefit
Age ≥ 60 + ≥ 2 CV risk factors: consider GLP-1 RA or SGLT2i
Weight loss priority: GLP-1 RA or SGLT2i
Hypo risk priority: incretin agents, SGLT2i, acarbose, or pioglitazone
BP target with diabetes: < 130/80 (ACEi or ARB preferred)

Obesity — assess root causes, complications, and barriers

Pharmacotherapy (with nutrition therapy, PA, and psychological support):
BMI ≥ 30, or ≥ 27 with adiposity-related complications
Agents: liraglutide 3.0 mg, naltrexone-bupropion, orlistat
Bariatric surgery — consider if:
BMI ≥ 40, or ≥ 35 with ≥ 1 adiposity-related disease
Use non-judgmental, culturally informed approach

HFrEF (LVEF < 40%) → Quadruple therapy

ARNI + β-blocker + MRA + SGLT2i
(ACEi or ARB if ARNI not tolerated)
Loop diuretics for congestion/edema
SGLT2i indicated with or without diabetes
Confirm LVEF by echo or nuclear imaging

AF detected → Stroke prevention + Rate control

OAC: use CHAD-65 algorithm; DOAC preferred (apixaban, dabigatran, edoxaban, rivaroxaban

Exception: warfarin for mechanical prosthetic valve or moderate-to-severe mitral stenosis

Rate control target: resting HR < 100 bpm

LVEF > 40%: β-blocker or ND-CCB (diltiazem/verapamil)

LVEF ≤ 40%: evidence-based β-blocker only (bisoprolol, carvedilol, metoprolol)

Renal function: assess at baseline and annually for all AF patients on OAC

Prescribe OAC for most frail elderly with AF

Suspected acute stroke/TIA → ED within 48 h (brain imaging, capacity for acute stroke care)

BP target: consistently < 140/90 mmHg

Antiplatelet (long-term secondary prevention):

ASA 80–325 mg, OR clopidogrel 75 mg, OR ASA + ER-dipyridamole 25/200 mg BID

Unless indication for anticoagulant therapy

(if AF present → OAC, not antiplatelet — see AF pathway)

Prolonged ECG ≥ 2 weeks if embolic stroke of undetermined source, age ≥ 55, and candidate for anticoagulation

Screen for cognitive concerns, depression, and vascular risk factors

Cognitive concerns or history of stroke/TIA → Screen

Tools (any one): Mini-Cog, AD8, 4-item MoCA (cut-off < 10), MIS + Clock Drawing, GPCOG

Include functional impairment assessment

If positive → refer for further evaluation

Screen all at-risk and ASCVD patients → PHQ-2; if positive → PHQ-9

Treatment (moderate-to-severe):

SSRI: sertraline or escitalopram (monitor QTc)

CBT / stress management

Exercise and cardiac rehabilitation

Health Behaviour Change

ALL patients, ALL risk levels

Nutrition:

Water as beverage of choice; avoid sugar-sweetened beverages

Vegetables, fruit, whole grains; emphasize plant-based protein more often among protein foods

Also includes fish, shellfish, eggs, poultry, lean red meat, lower-fat dairy

Limit processed foods (excess sodium, free sugars, saturated fat)

Sodium ≤ 2000 mg/day

Alcohol:

abstain or ≤ 2 drinks/day

Physical activity:

Any activity is beneficial vs. remaining inactive (greatest relative benefit)

Target: 30–60 min moderate-to-vigorous, most days of the week

Individualize; encourage gradual increase in duration and frequency

Smoking:

update status regularly; advise quit; combine counselling + pharmacotherapy (NRT, varenicline, bupropion)

Cardiac rehab:

recommended for most patients with documented CVD