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## Introduction

- 80% of women and individuals assigned female at birth (AFAB)** experience vasomotor symptoms (hot flashes, night sweats); other challenges include sleep disruption, sexual concerns, and emotional (depression, anxiety) symptoms during the **menopausal transition** (ages 40-60)
- 3 in 4** report symptoms that interfere with daily life; **1 in 10** leave the workforce due to unmanaged symptoms
- Unmanaged symptoms** linked to reduced quality of life, sleep disruption, depression and anxiety, risk of suicide, productivity loss, and economic burden (**\$3.5B/year**)
- Pharmacotherapy (hormone therapy, SSRIs, NKBs) is **effective but often limited** by contraindications, preference, or residual symptoms despite use
- CBT is a guideline-recommended (NICE, NAMs) gold standard** for vasomotor symptoms, but **<20% receive evidence-based care**; barriers include cost, time, geography, and therapist shortages
- iCBT offers a scalable, flexible alternative, yet no therapist-guided, menopause-specific program currently exists**

## Objective

To evaluate the **feasibility, acceptability, and preliminary efficacy** of a therapist-guided ICBT program tailored for menopause-related vasomotor symptoms (**iCBT-Meno-VS**) compared to a wait-list control

## Methods

- Design:** Pilot randomized controlled trial with a wait-list control
- Sample:** N= 50; Recruitment from the Women's Health Concerns Clinic within St. Joseph's Healthcare Hamilton, outpatient menopause or women's health clinics across Canada, community networks (e.g., menopause society, primary care offices), and social media
- Analysis:** Intent-to-treat; mixed-effects models for group differences
- Inclusion criteria:**
- 1) Women and AFAB aged ~40-60 years old
  - 2) Significant vasomotor symptoms (≥ 30 Hot Flash Daily Interference Rating Scale)
  - 3) English speaking, residing in Canada
  - 4) Access to, and comfort with, the internet and a computer
  - 5) Stable medication/ hormonal regimen (if taking)
- Exclusion criteria:**
- 1) Present with severe depression or anxiety (PHQ-9/GAD-7),
  - 2) Active suicidal ideation or psychiatric conditions requiring in-person care
  - 3) Significant cognitive impairment or unstable medical condition
  - 4) Current use of other psychotherapeutic intervention

**Feasibility:** Recruitment, fidelity, attrition, adherence, efficacy via symptom level

**Acceptability:** Treatment satisfaction, treatment credibility, exit interviews will explore treatment barriers and facilitators to engagement

**Primary Symptom Outcome:** Vasomotor Symptoms (HFDRIS), **Secondary:** Depression (PHQ-9) and Anxiety (GAD-7), Quality of Life (MENQOL), Sleep (ISI)

## The ICBT-Meno-VS Program

- Lesson 1 - Understanding Menopause & Your Symptoms**  
Psychoeducation on the menopausal transition and vasomotor symptoms
  - Lesson 2 - Taking Control: Behavioural Strategies for Hot Flashes & Night Sweats**  
Teaching concrete behavioural and physiological coping strategies to reduce intensity, distress, frequency, duration, and interference of vasomotor symptoms
  - Lesson 3 - Changing How You Think: Cognitive Strategies for Vasomotor Symptoms**  
Teaching cognitive restructuring and self-compassionate coping statements specific to vasomotor symptoms and recognizing unhelpful thoughts that amplify distress
  - Lesson 4 - Building on Initial Gains: Consolidating Your Skills & Moving Forward**  
Review and consolidate key knowledge and skills, develop personalized long-term coping plan, introduce relapse prevention
- Total program length: 4 weeks, 45-50min per lesson**  
**Based on CBT-Meno protocol (Green et al., 2019)**

**How the CBT Model Shows Up in Daily Life**  
Watch this short video to see examples of how the CBT cycle plays out for different women experiencing hot flashes or night sweats.

**Case Vignette: 'Gloria' applies cognitive reframing to sleep-related VMS**

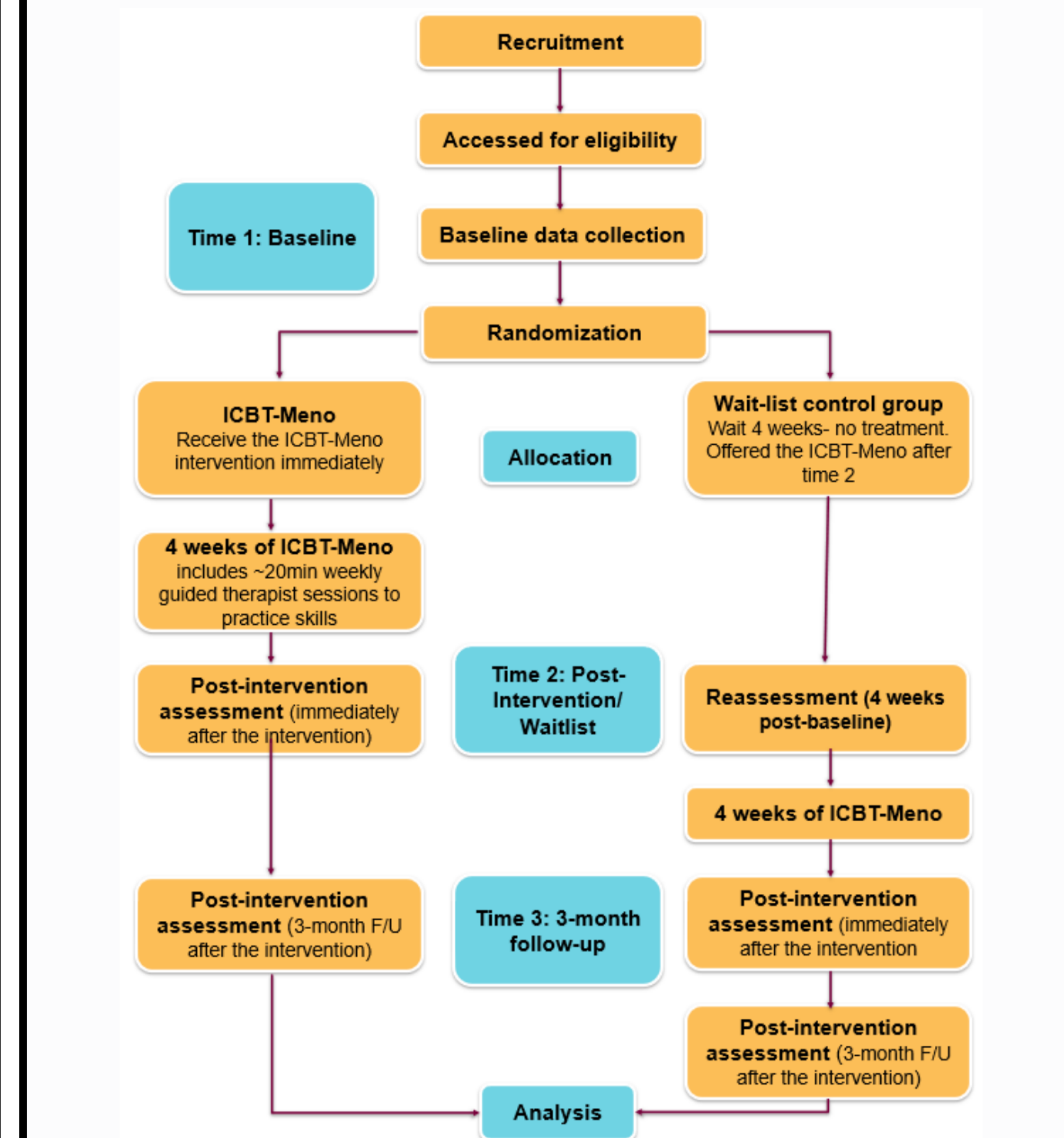
Physical sensation: Drenched  
Thought: "I'll never get a good night's sleep again."  
Emotions: Frustrated, hopeless  
Behaviour: Stays up worrying

**Case Vignette: 'Jane' applies cognitive reframing to work-related VMS**

Physical sensation: heat/sweating  
Thought: "Everyone is staring"  
Emotions: Embarrassed, anxious  
Behaviour: Leaves the room

Instructional Design Principles	
<b>Multimedia Principle</b>	Integration of narrated text, visual diagrams, and patient case vignettes to reduce cognitive load
<b>Personalization</b>	Content delivered via a relatable coach (video/audio) using a supportive, conversational tone
<b>Knowledge Checks</b>	Interactive knowledge checks and weekly "Home Practice" assignments to reinforce skill acquisition

## Procedural Flow



## Implications

- ICBT-Meno is the first-ever therapist-guided, menopause-specific ICBT program in Canada**, addressing a major gap in accessible menopause care
- With **fewer than 20% of women experiencing disruptive menopause symptoms receiving evidence-based treatment**, scalable digital interventions may help close a critical treatment gap
- If feasible and acceptable, **ICBT-Meno could expand access to evidence-based, non-pharmacological treatment** for managing distressing menopause symptoms, particularly for individuals facing barriers to in-person care or who cannot use/obtain adequate relief from hormone therapy/pharmacological options
- Tailored digital interventions may help address resource constraints in the Canadian mental health system, including therapist shortages and limited publicly funded services, while supporting scalable and cost-efficient care delivery

## References

- 1 Menopause Foundation of Canada. (2023). Menopause and work in Canada.
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- 3 Andersson, G., Cuijpers, P., Carlbring, P., Riper, H., & Hedman, E. (2014). Guided internet-based vs. face-to-face cognitive behavior therapy for psychiatric and somatic disorders: a systematic review and meta-analysis. *World Psychiatry*, 13(3), 288-295.

## Additional Information

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