

CHL 5114 - Health Communications

HIV INFECTION AND INFLAMMATION

A FACT SHEET FOR PEOPLE LIVING WITH HIV



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Our Team



Georgia Mavrikou

Explaining
inflammation



Beata Cheng

Clinical tests &
screenings for people
living with HIV



Tiffany Maleki

Healthy eating & anti-
inflammatory
nutrition strategies



Josephine Fang

Wellness, mental
health, end of fact
sheet checklist



Devan Nambiar

Our mentor
Sr. Lead, KTE and
Science

Our Community Partner

- Provincial organization supporting gay, bisexual, queer, two-spirit, and other men who have sex with men
- Strengthens sexual health and HIV care across Ontario
- Supports HIV organizations and frontline providers with current science and best practices
- Creates community-focused resources and campaigns
- Works toward accessible, affirming healthcare free from stigma, discrimination, and new HIV transmissions

Our Guiding Values



Evidence-based
information



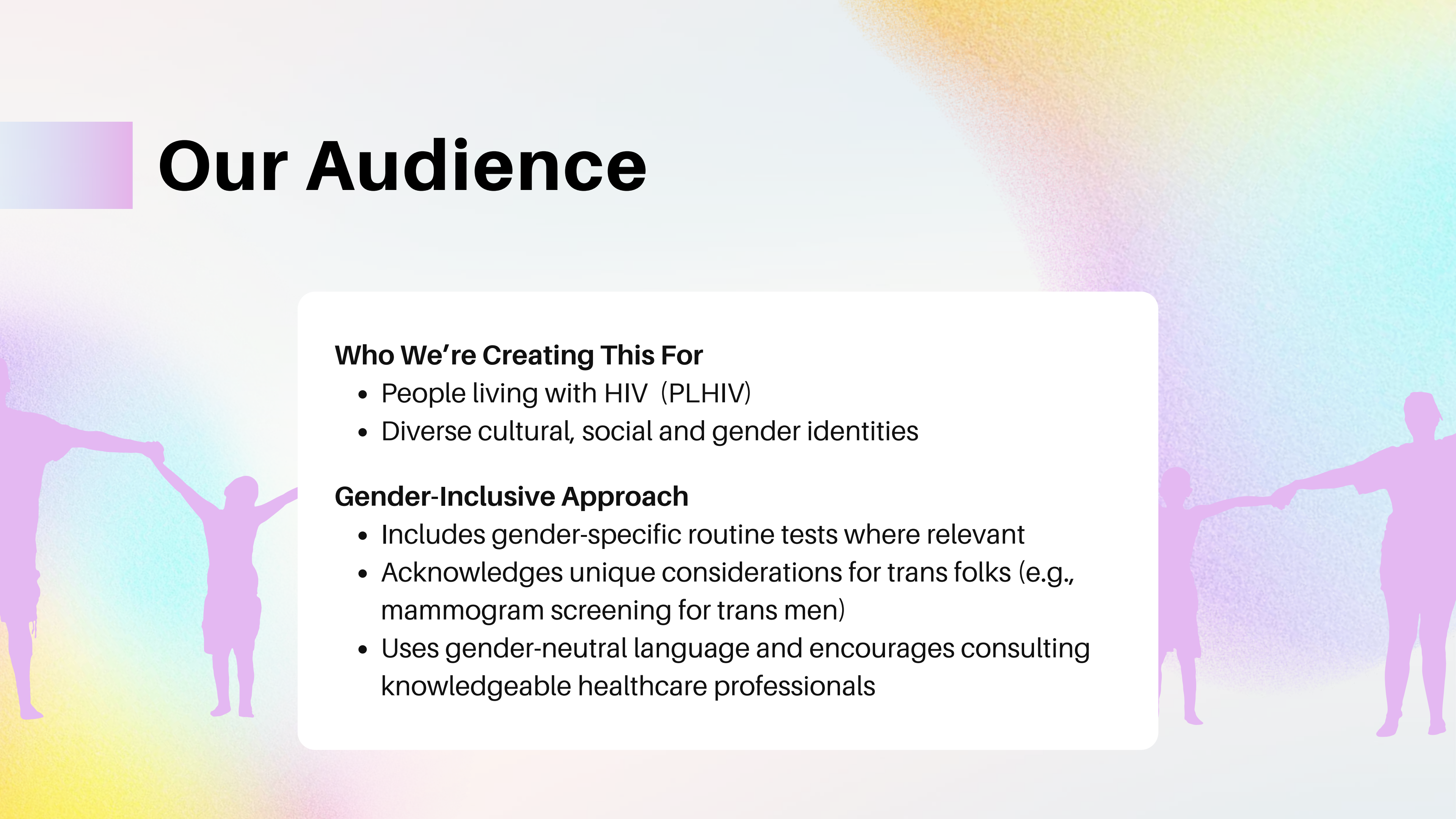
Person-centered
care



Empathy



Health Equity &
Accessibility



Our Audience

Who We're Creating This For

- People living with HIV (PLHIV)
- Diverse cultural, social and gender identities

Gender-Inclusive Approach

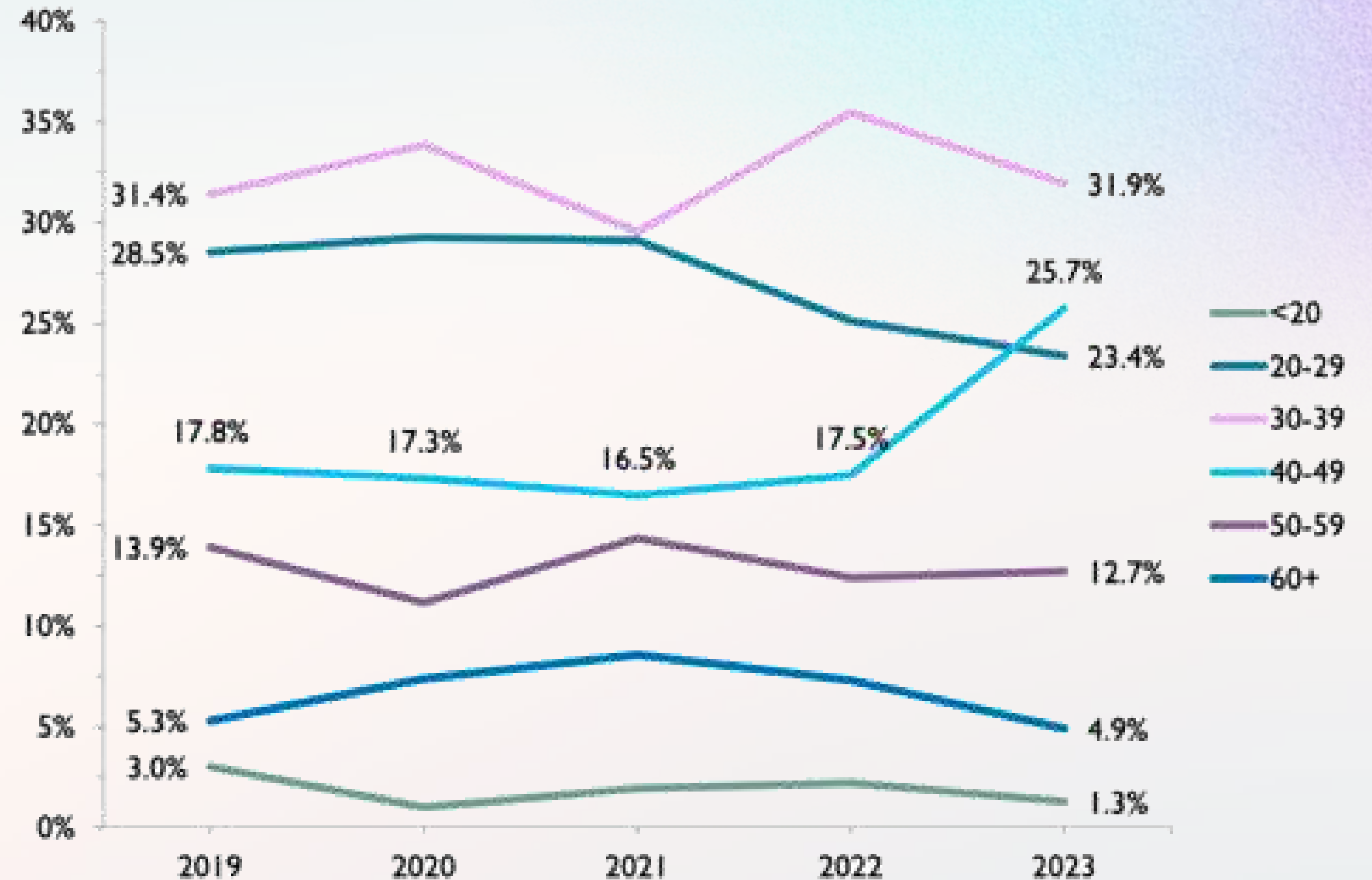
- Includes gender-specific routine tests where relevant
- Acknowledges unique considerations for trans folks (e.g., mammogram screening for trans men)
- Uses gender-neutral language and encourages consulting knowledgeable healthcare professionals

WHY THIS FACT SHEET MATTERS

HIV & Aging

- PLHIV are living longer with effective treatment, and more are being diagnosed later in life
- Almost half of PLHIV in Canada are over 50 and this number is rising [1]
- One in five new HIV diagnoses is in people over 50 [1]

Proportion of first-time HIV diagnoses by age group, overall, Ontario, 2019 to 2023 [2]



HIV & Inflammation

- HIV causes ongoing inflammation, even with an undetectable viral load
- **Chronic inflammation**
 - Accelerates ageing
 - Increases risks for heart disease, high blood pressure, diabetes and some cancers
- Most PLHIV are **not aware** of these long-term risks
- Current care focuses on viral suppression, not broader long-term health

[3]



Audience-centered Design



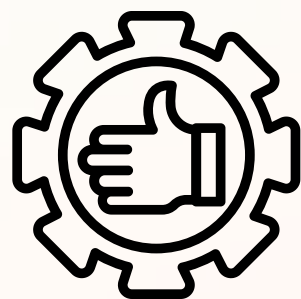
Structured around
real needs of PLHIV



Plain language &
health literacy-friendly



Inclusive, non-
stigmatizing tone



Practical, realistic
recommendations



Mental health addressed
as part of care



Easy to navigate
and skim

THEORY APPLICATION

Health Belief Model (HBM)

What is it?

- A psychological model that explains how people make decisions about their health **based on their beliefs about risk, benefits, and barriers**

Why HBM?

- Our fact sheet encourages people aging with HIV to take preventive steps such as regular checkups, healthy eating, and exercise to reduce or prevent complications of chronic inflammation

[4]



Health Belief Model

HBM Component	Example in our Factsheet
Perceived Susceptibility	Chronic inflammation affects people aging with HIV increasing risks for health issues (e.g., heart diseases)
Perceived Severity	Long term inflammation is strongly linked to heart disease, diabetes, weaker bones, brain issues and early aging
Perceived Benefits	Diet, exercise, and regular check ups can reduce health risks
Perceived Barriers	1) Checklist helps overcome information overload; 2) Plain language and OHIP coverage info to reduce confusion; 3) Increase awareness of chronic inflammation even with ART treatment
Cues to Action	Encourage people to talk to their provider, use the checklist, and get annual labs
Self-Efficacy	Empower readers to ask questions and make informed choices. We added achievable, empowering steps (tips for diet, goals for exercise, lab tests)

Elaboration Likelihood Model (ELM)

What is it?

- **ELM** is a communication theory that describes **two ways people engage with health information**:
 - **Central route**: Deep thinking and analysis
 - **Peripheral route**: Quick cues, visuals, and emotional triggers

Why ELM?

- Our fact sheet is designed for **both types of readers**:
 - Those who want detailed info (central route)
 - Those who prefer quick, visual guidance (peripheral route)

Elaboration Likelihood Model (ELM)

ELM Route	Example in our Factsheet
Central	Detailed explanations of inflammation, HIV mechanisms, lists of clinical tests, anti-inflammatory foods and embedded hyperlinks for more info for readers who want to understand the science
Peripheral	Visual diagrams, icons, plain language, and final checklist for readers who skim or prefer fast, actionable info
Both	Empowering tone and layout that supports both engagement and accessibility

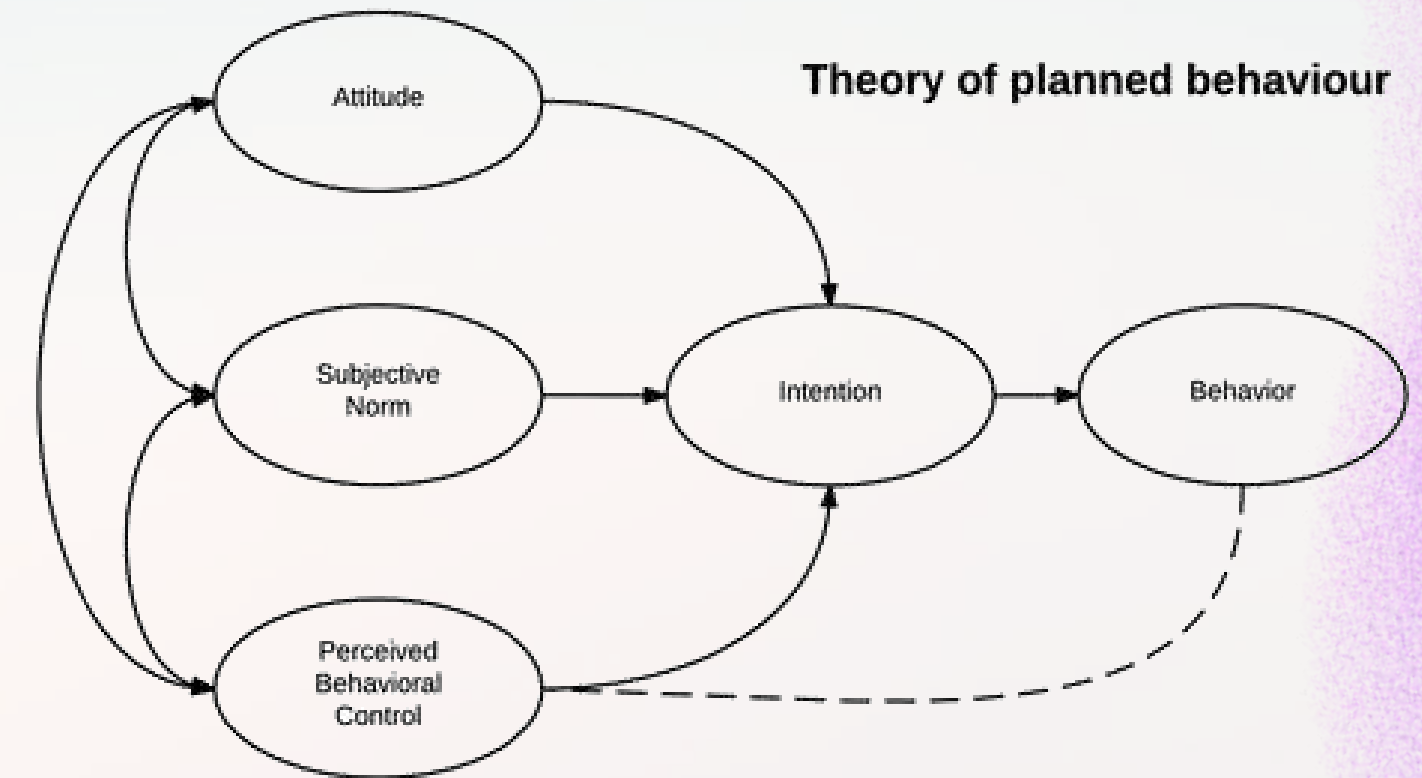
Theory of Planned Behavior (TPB)

What is it?

- A behaviour-change model that explains what motivates people to take action

Behaviour is shaped by three factors:

- **Attitudes** (believing the behaviour is helpful)
- **Subjective norms** (feeling supported by others)
- **Perceived behavioural control** (feeling capable of doing it)



Why TPB?

- Our fact sheet promotes ongoing self-management rather than one-time decisions
- TPB explains well how attitudes, support, and confidence drive daily health behaviours

Theory of Planned Behavior (TPB)

1. Attitudes → Highlighting the Benefits

- Our fact sheet explains why balanced eating, regular movement, and routine check-ups help lower inflammation and support immune health

2. Subjective Norms → Making Healthy Habits Feel Supported

- We reinforce that healthcare teams encourage these habits, helping create a sense of support

3. Perceived Behavioural Control → Making Actions Feel Doable

- Our fact sheet offers simple, low-cost, realistic tips
(e.g., 10-minute walks, cook affordable anti-inflammatory foods, coming prepared to appointments)

REFERENCES

1. CATIE. (2024, April). HIV and aging. <https://www.catie.ca/managing-your-health/hiv-and-aging>
2. Ontario HIV Epidemiology & Surveillance Initiative. (2025, November 4). HIV diagnoses in Ontario, 2023 [PDF]. https://www.ohesi.ca/wp-content/uploads/2021/12/HIV_diagnoses_in_Ontario_2023_11-4-2025.pdf
3. Deeks, S. G., Tracy, R., & Douek, D. C. (2013). Systemic effects of inflammation on health during chronic HIV infection. *Immunity*, 39(4), 633–645. <https://doi.org/10.1016/j.immuni.2013.10.001>
4. Rosenstock, I. M., Strecher, V. J., & Becker, M. H. (1988). Social learning theory and the Health Belief Model. *Health Education Quarterly*, 15(2), 175–183. <https://doi.org/10.1177/109019818801500203>
5. Petty, R. E., Barden, J., & Wheeler, S. C. (2009). The Elaboration Likelihood Model of persuasion: Developing health promotions for sustained behavioral change. In R. J. DiClemente, R. A. Crosby, & M. C. Kegler (Eds.), *Emerging theories in health promotion practice and research* (2nd ed., pp. 185–214). Jossey-Bass/Wiley
6. Ajzen, I. The theory of planned behavior. *Organizational Behavior and Human Decision Processes*. 1991;50(2):179–211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)