

# Considerations for Developing and Implementing an Online Community-Based Exercise (CBE) Intervention with Adults Living with HIV: a qualitative study

## Introduction

- People Living With HIV (PLWH) face unique challenges to health and aging. Engagement in regular exercise can vary influenced by physical barriers, discomfort with gym environments, and the episodic nature of HIV.
- Community-based exercise (CBE) can provide an opportunity to address psychosocial needs of PLWH, however, interpersonal, structural, financial and geographical barriers may persist with exercising in traditional gym environments for some PLWH.
- Tele-coaching, defined as exercise at home with the remote supervision of trained personnel, may be an ideal alternative to address barriers to CBE for PLWH.
- Translation of tele-coaching to an HIV context, as well as specific considerations and recommendations for developing and implementing an online CBE program for people living with HIV, is unknown.

## Purpose & Objectives

**Purpose:** To describe considerations for developing and implementing an online CBE intervention with adults living with HIV, from the perspectives of key stakeholders with a role in online CBE implementation with adults living with HIV.

**Objectives:**

1. To describe the need for, and utility of, online CBE interventions with adults living with HIV.
2. To identify key factors to consider in developing and implementing an online CBE intervention with adults living with HIV.

## Methods

**Study Design:** Cross-sectional qualitative descriptive study.

**Participants:** Stakeholders who represent  $\geq 1$  of:

- Persons Living with HIV (PLWH)
- Rehabilitation or healthcare professional (RP)
- Fitness personnel (FP)
- Educators with experience in eLearning (eL)
- Representatives from HIV community-based organization (CBO)

**Sampling:** Purposive and snowball sampling approach to ensure we captured diversity of stakeholder groups.

**Recruitment:** Multi-step recruitment technique via email, sampling frame generated by the research team.

**Data Collection:**

- Semi-structured one-on-one interviews using Zoom.
- Interview Guide with questions pertaining to need and utility (Objective 1), key factors (Objective 2), and overall recommendations for online CBE.
- Tailored probing questions used for each group.
- Demographic data included: age, gender, stakeholder group(s) identified with, experience with PLWH.

**Data Analysis:**

- Group-based descriptive thematic analysis.
- NVivo (v.12) for data management.

## Results

Figure 1. Need for and Utility of online Community Based-Exercise in the context of HIV

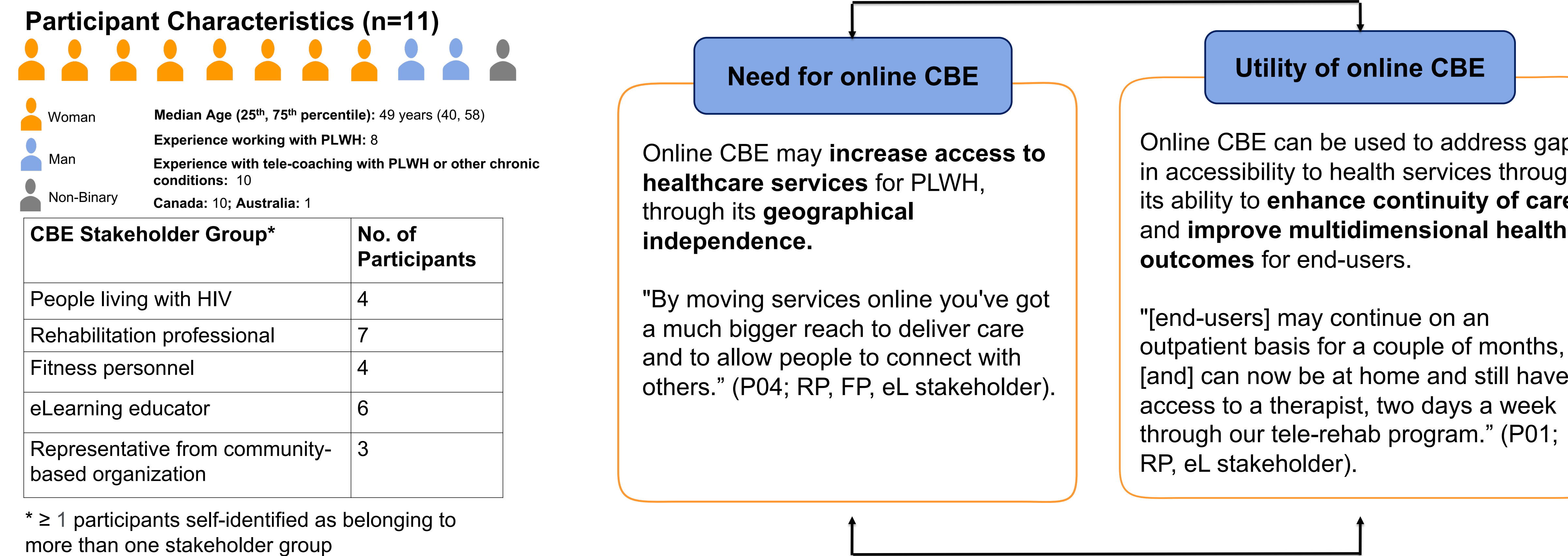
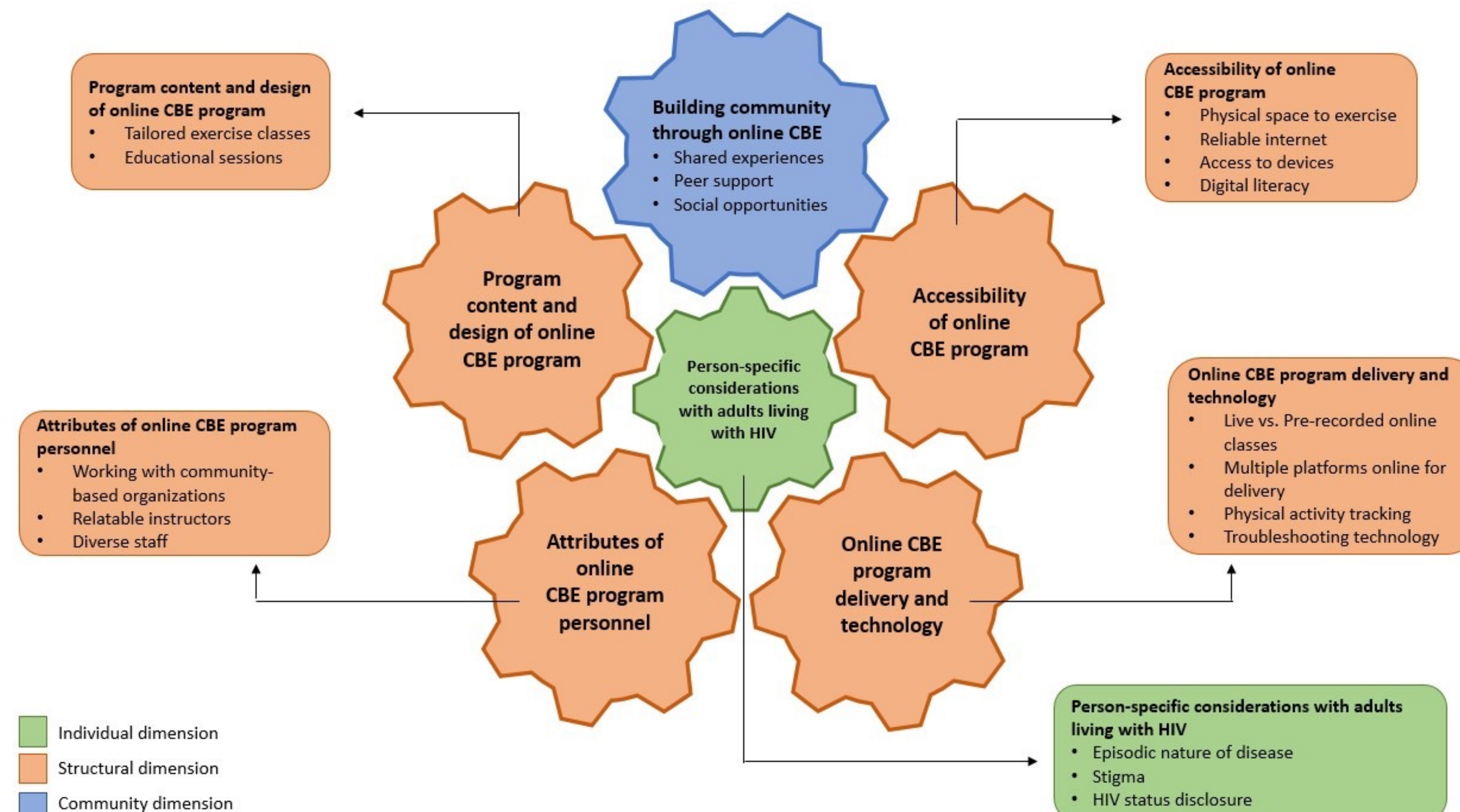


Figure 2. Six factors to consider in developing and implementing an online Community-Based Exercise intervention with adults living with HIV



## Discussion

**Need for and utility of online CBE with people living with HIV:**

- Online CBE may be a means to improve health in the physical, mental and social dimensions; particularly with social health linked to building community (a strength within the HIV community).
- Creation of online CBE should include engagement of people living with HIV at all stages of development.

**Navigating person-specific considerations with adults living with HIV:**

- There may need to be an online CBE designed exclusively for PLWH, for end-users to be surrounded by those with shared understanding and experiences.
- The risk of HIV disclosure could be mitigated through designing a generalized online CBE for individuals living with chronic conditions, including PLWH - more research is needed.

**Addressing digital literacy:**

- Previous studies have suggested there may be unequal access to remote health services based on the end-users' level of digital literacy, and the prospect of learning new technologies was met with resistance from many rehabilitation professionals.
- A multi-disciplinary team (including specifically those with technological knowledge) may be needed for successful online CBE.

**Forming social connections in online settings:**

- Some aspects of socialization (e.g. informal conversations) may not occur naturally in online settings; thus, we recommend including designated social time for online CBE programming.

**Implications for future research:** Evaluation of the impact of online CBE on physical, mental, and social health-related outcomes following an online CBE intervention, as well as research into the cost-effectiveness and sustainability of an online CBE intervention is needed.

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