# Improving the HIV Care Continuum—Developing a Compendium of Observed Evidence-Based Practice

E Le Fevre,<sup>1</sup> J Cox,<sup>2</sup> M Wolfheiler,<sup>3</sup> D Hardy,<sup>4</sup> C Katlama,<sup>5</sup> G Rizzardini,<sup>6</sup> J Beckett,<sup>7</sup> H Jessen,<sup>8</sup> J Mallolas,<sup>9</sup> K Alcorn<sup>10</sup>

<sup>1</sup>ViiV Healthcare, Global Medical Affairs, London, UK; <sup>2</sup>McGill University, University Health Centre, Montreal, QC, Canada; <sup>3</sup>AHF Clinics Los Angeles/Miami, Miami, FL, USA; <sup>4</sup>Whitman-Walker Centre, Washington, DC, USA; <sup>5</sup>Hospital Universitaire Pitie Salpetriere, Paris, France; <sup>6</sup>Ospedale Sacco Milano, Milan, Italy; <sup>7</sup>Chelsea and Westminster Hospital, London, UK; <sup>8</sup>Praxis-Jessen, Berlin, Germany; <sup>9</sup>Hospital-Clinic Barcelona, Barcelona, Spain; <sup>10</sup>NAM Publications, London, UK



**BPD1/10** 

#### Introduction

- Strategies to address the challenges of the UNAIDS 90-90-90 targets<sup>1</sup> from WHO, IAPAC, ECDC, and CDC all emphasize the need to
  - Increase disease awareness, improve HIV screening rates in priority populations, improve access to ART, engagement and retention in care, and address stigma and discrimination
- Even in high-income settings, virologic suppression levels are less than optimal, with only 49% of HIV-infected individuals on ART estimated to be virologically suppressed in the United States<sup>2</sup>
- We undertook the following:
  - Identified evidence-based interventions (EBIs) in current HIV care in order to develop a compendium of interventions to improve the HIV care continuum
  - Utilized an implementation science framework to understand the implementation strategies that result in the transfer of EBIs to routine care to address the gaps that exist across the HIV care continuum

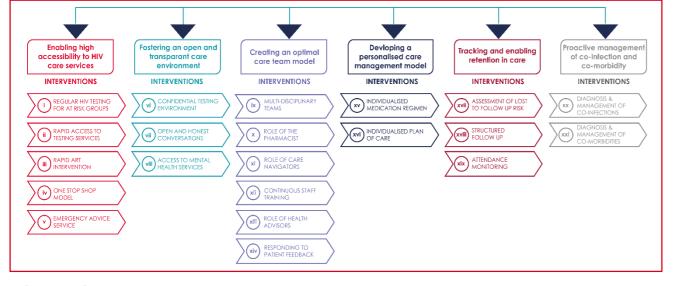
#### **Objectives**

- The Positive Pathways initiative aims to accelerate the UNAIDS 90-90-90 targets through:
  - Identification and characterization of themes of current EBIs along the HIV care continuum
  - Development of an HIV care and management self-assessment questionnaire for HIV care centers allowing the identification of areas for improvement along the patient care pathway
  - Development of a compendium of EBIs offering centers a resource to consider and replicate interventions for the purpose of improving patient care
  - Based on the identified center gap(s), centers will plan and undertake an
    implementation science study to generate further evidence on real-world adoptions
    of EBIs and contribute to the implementation science knowledge base for HIV care

#### Results

- Each center evaluated its performance relative to the 90-90-90 targets (mean HIV RNA <50 was 80% [range: 69%-92%] across the 8 centers)</li>
- A compendium of 21 EBIs, prioritized across 6 key themes within current practice, was developed (Figure 2)
- A questionnaire (publicly available soon) will enable care centers to self-assess and identify areas for improvement in the care pathway (Figure 3)
  - Upon completion of this first phase of Positive Pathways, all participating centers identified ≥1 intervention to improve their HIV care cascade data
- Centers will use an implementation science study approach to deploy and evaluate these interventions

# Figure 2. Themes Developed Within Current Practice From 21 Prioritized Evidence-Based Interventions



- An extensive literature review (2010-2016) of peer-reviewed publications (≥200), international guidelines (WHO, IAPAC, CDC, ECDC, NICE, and DHHS) and conference presentations was used to identify EBIs along the HIV care continuum
- Data (semi-structured interviews [≥100] and information on HIV care cascade indicators) were collected during observational site visits of 8, well-established HIV centers (North America and western Europe)
- Based on the literature review and thematically analyzed data, 10 key experts from participating centers, a health economist, a patient advocacy group representative, and a healthcare systems manager reviewed and determined a final list of priority HIV EBIs (Figure 1)
- Findings were reviewed via 3 advisory boards, with experts to prioritize the key categories and EBIs captured during the literature review and site visits
- Priority EBIs were ranked based on potential impact and ease of implementation
- Based on this, a compendium and clinic self-assessment questionnaire were developed

#### Figure 1. Methodology

**Methods** 

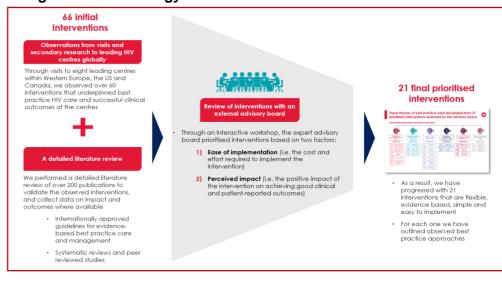
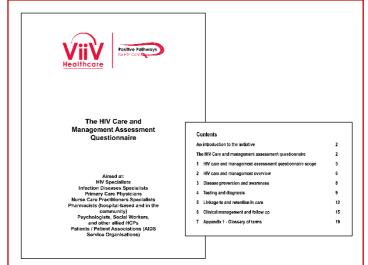


Figure 3. Self-Assessment Questionnaire



### **Discussion**

- Acceleration of the UNAIDS 90-90-90 targets will be guided by responding to gaps along the HIV care continuum
- EBIs should be tailored to the specific needs of the key affected populations and healthcare environments
- This compendium intends to be a "toolbox" rather than a "one-size-fits-all" approach and can be tailored to suit specific needs/gaps

#### **Limitations**

- Due to time constraints, 8 site visits were conducted during the initiative
- Centers all operated in different healthcare environments with different risk populations and profiles under their care
- Site visits were conducted at select centers that were interested in the initiative and able to participate
- Site visits were conducted across select geographies that represent more advanced healthcare economies
- Despite these limitations, the fact that centers operated in different healthcare environments serving a variety of HIV at-risk/priority populations highlights the potential generalizability of interventions identified and prioritized

# Conclusions

- The compendium resource represents a promising approach toward optimizing HIV care
- Currently, participating centers and future partner sites are planning to evaluate the impact of several EBIs by utilizing an implementation science study approach
- These findings will contribute to a knowledge base of implementation of EBIs in a real-world setting that will accelerate the UNAIDS 90-90-90 targets and can be shared across the HIV community

## **Calls for Action**

- If we are going to achieve the UNAIDS 90-90-90 targets, we need a more consistent and coordinated approach
- We need to identify gaps in the HIV care continuum and utilize an implementation science study approach to drive consistency, information sharing, and ultimately improve outcomes for people living with HIV infection

Acknowledgments: This study was sponsored by ViiV Healthcare. The authors would like to acknowledge the Positive Pathways Steering Group and all the participating centers that made this possible. KPMG LLP UK ViiV Healthcare - Anna Lawson, Michele Robbins, and

References: 1. Joint United Nations Programme on HIV/AIDS (UNAIDS). 90-90-90: An Ambitious Treatment Target to Help End the Aids Epidemic. Geneva: UNAIDS; 2014. http://www.unaids.org/sites/default/files/media\_asset/90-90-90\_en\_0.pdf. Accessed October 19, 2017.

2. Centers for Disease Control and Prevention. HIV continuum of care, U.S., 2014, overall and by age, race/ethnicity, transmission route and Sex. Published July 27, 2017. https://www.cdc.gov/nchhstp/newsroom/2017/HIV-Continuum-of-Care.html. Accessed October 19, 2017.