CUHRRC
CANADA-UK HIV AND REHABILITATION RESEARCH COLLABORATIVE

3rd International Forum on HIV and Rehabilitation Research

Advancing HIV, Aging and Rehabilitation Research and Practice

Thursday May 12th, 2016
Ballroom B, Delta Winnipeg
350 St. Mary Avenue, Winnipeg, Manitoba

Canadian Working Group on HIV and Rehabilitation
Groupe de travail canadien sur le VIH et la réinsertion sociale

Canadian Association for HIV Research
L'association canadienne de recherche sur le VIH

ACKNOWLEDGEMENTS

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Physical Therapy UNIVERSITY OF TORONTO

CIHR IRSC Canadian Institutes of Health Research / Instituts de recherche en santé du Canada

Canadian Working Group on HIV and Rehabilitation
Groupe de travail canadien sur le VIH et la réinsertion sociale

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MAIN MESSAGES

- The objectives of the Forum were:

    1. To facilitate **knowledge transfer and exchange (KTE)** on HIV and aging research, clinical practice and service delivery, among people living with HIV, researchers, clinicians, representatives of community organizations, and policy makers in Canada, UK and the US.
    2. To establish new research and clinical **partnerships** in HIV and aging internationally.
    3. To foster **mentorship and training** in HIV and aging research.
    4. To identify new and emerging **research priorities** in HIV, aging and rehabilitation.

- The international Forum brought together 69 stakeholders, including community leaders, clinicians, students and people living with HIV from Canada (n=62), the UK (n=5), the US (n=1) and Australia (n=1) to exchange research evidence related to HIV, aging and rehabilitation.

- The Forum was organized into two Research Evidence Panel Sessions and a Plenary Panel Session. Nineteen speakers were invited to present on research and program evaluation related to HIV, aging and rehabilitation carried out in Canada, the UK and the US. The first Research Evidence Panel Session focused on successful aging with HIV and multi-morbidity. The second Research Evidence Panel Session focused on rehabilitation interventions and strategies for older adults living with HIV. The Plenary Panel Session focused on bridging research into practice in areas of HIV, aging and rehabilitation.

- The evidence presented at the Forum highlighted a need for: 1) further research in HIV, aging and rehabilitation as people age with HIV and experience multi-morbidity; 2) research evidence to inform policy and programming; 3) collaborative approaches to research and practice; 4) strategies to address demand and complexity as a greater number of people reach older age with HIV and concurrent health conditions (e.g. mental health conditions, cardiovascular disease); and 5) increased access to services and rehabilitation interventions to allow for successful aging with HIV.

- Evaluations of the Forum indicated that a majority of participants agreed or strongly agreed (86%) that the Forum achieved its goal of translating recent research evidence on HIV, aging and rehabilitation.

    1. Strengths of the Forum included: variety of speakers and topics focusing on HIV, aging and rehabilitation; engaging and excellent presenters; well organized, diverse nature of attendees and perspectives; and a great opportunity for networking and collaborations.
    2. The majority of participants (88%, 28/32) were able to apply the content covered in the Forum to their work and envision collaborating with other Forum participants on future HIV and rehabilitation initiatives.

- Twitter Updates were provided throughout the event: **#RehabHIV**

EXECUTIVE SUMMARY

The Canada-UK HIV and Rehabilitation Research Collaborative (CUHRRC), in partnership with the Canadian Working Group on HIV and Rehabilitation (CWHGR) and the Canadian Association for HIV Research (CAHR) hosted the *3rd International Forum on HIV and Rehabilitation Research: Advancing HIV, Aging and Rehabilitation Research* on Thursday May 12th, 2016 in Winnipeg, Manitoba at the Delta Winnipeg. The Forum was funded by a Canadian Institutes of Health Research (CIHR) Meeting, Planning and Dissemination Grant.

What were the Objectives of the Forum?

1. To facilitate **knowledge transfer and exchange (KTE)** on HIV and aging research, clinical practice and service delivery, among people living with HIV, researchers, clinicians, representatives of community organizations, and policy makers in Canada, UK and the US;
2. To establish **new research and clinical partnerships** in HIV and aging internationally;
3. To foster **mentorship and training in HIV and aging** research, and;
4. To identify **new and emerging research priorities** in HIV, aging and rehabilitation.

Who Attended? The Forum brought together 69 stakeholders, including community leaders, clinicians, students and people living with HIV (PLWH) from Canada (n=62), the United Kingdom (UK) (n=5), the US (n=1) and Australia (n=1) to exchange research evidence related to HIV, aging and rehabilitation.

This report provides an overview of the 3rd *International Forum on HIV and Rehabilitation Research* and our process of summarizing the research evidence on priorities in HIV, aging and rehabilitation research. The Forum was organized into two Research Evidence Panel Sessions with 11 presentations (11 speakers) and one Plenary Panel Session with 4 speakers and 1 moderator from Canada (n=13), the United Kingdom (UK) (n=2), and the United States (US) (n=1). Speakers addressed issues related to: 1) successful aging with HIV and multi-morbidity; and 2) rehabilitation interventions and strategies for older adults living with HIV. The Forum provided an opportunity for a broad range of stakeholders to respond to current research evidence and present new and emerging research evidence and experiences related to HIV, aging and rehabilitation. Structured discussions and Q&A segments enabled participation throughout the day and a facilitator was in place to engage attendees while adhering to the agenda. Please view the Forum Program at a Glance: http://cuhrrc.hivandrehab.ca/docs/CUHRRC-Forum-Program-Glance-Feb-5-16.pdf

How Do I Access the Forum Materials? To access the Forum films and slide presentations, please go to the 3rd Forum Knowledge Translation and Exchange (KTE) Library (http://cuhrrc.hivandrehab.ca/2016-forum.php).

What were the Strengths and Challenges of the Forum? Evaluation of the Forum (n=35 respondents) indicated that the presentations were extremely informative for participants, engaging and covered a wide breadth of topics. Speakers and participants represented a broad range of interdisciplinary and international stakeholders which contributed to diverse perspectives being brought forward and fruitful discussions. Overall respondents appreciated the knowledge and engagement of the speakers, the opportunities for building collaborative partnerships and the applicability of the Forum content to their current work. Respondents also noted that they would have appreciated more time for questions and

interaction, more participation and speakers and a stronger focus on holistic interventions to improve quality of live for individuals aging with HIV. Overall, respondents found the Forum to be well organized and a great event.

Who Do I Contact for More Information? For more information about the Forum, please contact Kelly O'Brien (kelly.obrien@utoronto.ca), Francisco Ibáñez-Carrasco (francisco@universitieswithoutwalls.ca) or Kate Murzin (kmurzin@hivandrehab.ca).

CONTEXT

HIV is now considered a chronic illness in countries such as Canada, UK, the United States, and Ireland.[1] Approximately 30% of people living with HIV (PLWH) in Canada are over 50 years of age. This proportion is expected to increase over the next decade.[2] This pattern may appear in other similarly developed countries that have access to treatment. People are aging with a range of physical, cognitive, mental and social health challenges associated with HIV and comorbidities, despite improvements in survival and increased access to treatment.[3-6] The rising prevalence of cardiovascular disease, diabetes,[7] bone and joint disorders,[8 9] neurocognitive disorders,[10] and cancers[11] further add to the complexity of disability experienced by PLWH over the life course.[12-15] Adults aging with HIV can face additional challenges of ageism, stigma, mental health challenges, income insecurity and lack of social support.[16-19] *Therefore, it is essential that the community respond to the changing needs of adults aging with HIV, specifically by increasing the role of rehabilitation*.[20]

Rehabilitation in the context of HIV includes any prevention or treatment activities and services that address body impairments, activity limitations and social participations restrictions experienced by an individual.[20] Rehabilitation services such as physical therapy can help address disability.[21 22] It is hypothesized that the demand for rehabilitation will increase for those with HIV and other chronic and episodic illnesses as the population ages.[23 24] *However, the field of HIV and aging is still emerging, with Canada, Ireland, the United Kingdom (UK) and the United States (US) growing as leaders in the field.* In these countries, people aging with HIV can face similar issues related to retirement and income support, challenges accessing rehabilitation services, and increasing complex multi-morbidity. [7 9 25-28] Canada is an international leader in mobilizing the dynamic field of HIV rehabilitation research however, the provision of rehabilitation for older adults with HIV remains limited.[29] In contrast, in some areas of the UK, HIV rehabilitation service delivery is more established and accessible across the continuum of care.[30] Forming partnerships and exchanging knowledge with others in countries where individuals experience similar issues related to HIV and aging is essential to addressing research priorities in this emerging field.

Canada-UK HIV and Rehabilitation Research Collaborative (CUHRRC)

In October 2009, a group of UK and Canadian researchers and clinicians, in partnership with the Canadian Working Group on HIV and Rehabilitation (CWHGR), obtained funding from the CIHR Meetings Planning and Dissemination Grants competition to conduct a research meeting in London, UK.[31] The goal of this meeting was to develop a collaborative research agenda to address the research priorities in HIV and rehabilitation. At this meeting, the Canada-UK HIV and Rehabilitation Research Collaborative (CUHRRC) was formalized as the first international research collaborative on HIV and rehabilitation (http://cuhrrc.hivandrehab.ca/).[32] CUHRRC is now comprised of 68 PLWH, researchers, clinicians,

representatives from community organizations and policy stakeholders in Canada, the UK and the US with an interest in HIV and rehabilitation research. Members meet biannually by teleconference to share knowledge and collaborate on research initiatives. CUHRRC members have collectively pursued initiatives in each of the research priority areas, such as: exploring the prevalence of comorbidities, disability and rehabilitation service use among PLWH in Canada; conducting a comparative policy analysis of rehabilitation services access between Canada and the UK[33]; evaluating the uptake of an electronic e-module for rehabilitation professionals on HIV[34]; developing evidence-informed practice recommendations on rehabilitation for older adults with HIV[35]; and developing and assessing the measurement properties of a new HIV disability questionnaire.[45]

CUHRRC, in partnership with CWGHR, planned and hosted the *International Forum on HIV and Rehabilitation Research,* on June 13-14th, 2013 in Toronto, Ontario, Canada. The Forum brought together 92 stakeholders to share current research evidence related to the six priority areas. The priority areas aligned with six key research priorities established by CWGHR in an earlier scoping study.[36] The Forum also offered an opportunity to review and update the research priorities to respond to new and emerging issues related to HIV and rehabilitation.[37]

CUHRRC, in partnership with the Rehabilitation in HIV association (RHIVA), planned and hosted the *2nd International Forum on HIV and Rehabilitation Research: Advancing International Partnerships to Address Key Research Priorities in HIV and Rehabilitation,* on October 11, 2014 at the Chelsea and Westminster Hospital in London, England. The Forum brought together 51 stakeholders to facilitate knowledge transfer and exchange (KTE) on HIV and rehabilitation research, clinical practice and service delivery, among PLWHIV, researchers, clinicians working in HIV care, representatives of community organizations, and policy makers in Canada, UK and Ireland; and to foster new research and clinical partnerships in HIV and rehabilitation internationally. The Forum provided an opportunity for a broad range of stakeholders to respond to current research evidence and present new and emerging evidence and experiences related to HIV and rehabilitation.

3rd INTERNATIONAL FORUM ON HIV AND REHABILITATION RESEARCH

On May 12th, 2016, CUHRRC in partnership with the Canadian Working Group on HIV and Rehabilitation (CWGHR) and the Canadian Association for HIV Research (CAHR) hosted the 3rd International Forum on HIV and Rehabilitation Research.

The goals of this CIHR-funded meeting were 1) to facilitate knowledge transfer and exchange (KTE) on HIV and aging research, clinical practice, and service delivery among PLWHIV, researchers, clinicians, representatives of community organizations, and policy makers in Canada, UK and the US; 2) to establish new research and clinical partnerships in HIV and aging internationally; 3) to foster mentorship and training in HIV and aging research, and; 4) to identify new and emerging research priorities in HIV, aging and rehabilitation.

The Forum was organized into two Research Evidence Panel Sessions and a Plenary Panel Session. The topics for the two Research Evidence Panel Sessions included:

1) Successful Aging with HIV and Multi-Morbidity; and 2) Rehabilitation Interventions and Strategies for Older Adults Living with HIV

Each session was comprised of 5 to 6 speakers (total of 11 speakers) who provided an overview of research and program evaluation related to HIV, aging and rehabilitation in the above topic areas.

The Plenary Panel Session titled "*Bridging the Evidence with Real World and Identifying Research Priorities in HIV, Aging and Rehabilitation: Community and Clinical Perspectives*," consisted of four panelists and one moderator, including PLWHIV, researchers and clinicians from the community who had the opportunity to comment and reflect on the research evidence presented throughout the day.

The Forum was followed by a special invited symposium on HIV, Aging and Rehabilitation at the 25th Annual Canadian Conference on HIV/AIDS Research (CAHR 2016) on Friday May 13th entitled: '*Living Longer and Living Well with HIV: Reaching New Heights in Healthy Aging'*. The objectives of this 1.5 hour long session were: 1) to demonstrate the role and evidence for rehabilitation in the context of HIV and aging; 2) to profile the evidence on HIV and aging rehabilitation research and practice in Canada and internationally; 3) to discuss strategies for enhancing access to rehabilitation for people aging with HIV; and 4) to discuss opportunities for new collaborations in HIV, aging and rehabilitation research and practice. This session was moderated by Patty Solomon (McMaster University) and speakers Richard Harding (King's College London), Darren Brown (Chelsea and Westminster Hospital NHS Trust), Stephanie Nixon (University of Toronto), Chris Lucas (Nine Circles Community Health Centre) and Kate Murzin (CWGHR) presented on HIV, Aging and Rehabilitation in Canada and the United Kingdom. Click here to view the video of the Symposium.

APPROACH

The 3rd International Forum on HIV and Rehabilitation Research was supported by a Meeting, Planning and Dissemination Grant from the Canadian Institutes of Health Research (CIHR), Aging Institute. Additional support was provided by Three Flying Piglets (filming) and the Department of Physical Therapy, University of Toronto. CUHRRC acknowledges the financial support of the Canadian Working Group on HIV and Rehabilitation (CWGHR). The Forum involved an intensive process of planning and development leading up to the event. Upon receiving notification of funding, members of the Forum Core Planning Team had their first meeting via teleconference in August 2015 to begin planning for the Forum.

Forum Core Planning Committee

In August 2015, a Core Planning Committee was formed which included co-principal applicants and principal knowledge users of the CIHR Planning Grant. The purpose of the Core Planning Committee was to oversee the planning and implementation of the Forum. This Committee met three additional times leading up to the Forum to discuss advancements made in the planning of the Forum. Specific activities included: developing a timeline for Forum preparation; advertising the Forum; preparing for the Special CAHR Plenary Session; planning the Forum agenda and program; connecting with potential speakers and panelists; finalizing catering, travel and accommodation details; developing a filming and media plan; discussing the evaluation process; discussing registration options; finalizing and distributing participant and speaker invitations; establishing opportunities and planning for rapporteurs; liaising with Forum speakers prior to the Forum; determining the specific outcomes of the Forum and developing a

knowledge transfer and exchange strategy post-Forum. The team updated the broader CIHR Planning Grant team on relevant updates via e-mail.

In November 2015, the Core Planning Committee met with the larger CIHR Planning Grant Team via teleconference. The meeting goal was to refine the agenda and speakers for the Forum and Special Symposia Session on HIV, Aging and Rehabilitation at CAHR 2016.

Invitations and Advertisement of the Forum

The Core Planning Committee developed a list of invitees which included: PLWHIV, clinicians, academics, representatives from AIDS Service Organizations (ASOs) and Community-Based Organizations (CBOs), community members, CWGHR and CUHRRC members, and representatives from funding organizations. A Save-the-Date was distributed in December 2015. An EventBrite registration page was developed and launched in February 2016. Personal invitations were sent to the invitees encouraging them to register on the EventBrite page. Through snowballing, additional individuals registered for the Forum.

In addition, the Forum was broadly advertised by circulating an E-Blast announcement to the CWGHR, CUHRRC and OHTN membership in February 2016. Forum program at a glance (Appendix A) and Forum posters (Appendix C) were also displayed on the OHTN website, CUHRRC website and CUHRRC Twitter account. CUHRRC's Twitter account (@CUHRRC) was used to promote the Forum, introduce the speakers, as well as provide reminders regarding the registration closing date. There was no registration fee for the Forum.

Registration closed on Thursday May 5th. Sixty-eight individuals registered on the EventBrite page, and 59 of those who registered attended the Forum. On the morning of the Forum, an additional 10 individuals registered last minute on site, resulting in a final total of 69 Forum attendees.

Invited Speakers and Volunteers

Nineteen researchers, clinicians and community members engaged in the field of HIV, aging and rehabilitation were invited to present as part of the Forum program. Sixteen speakers presented across one (1) Plenary and two (2) Research Evidence Panel Sessions while four presented during the Welcome and Introductions, Overview and Wrap-Up Sessions (overlap of one presenter). Three (3) graduate students were involved as rapporteurs.

Forum Program

The Core Planning Committee developed a Forum Program which contained the agenda, title of each speaker's presentation, key messages and biographies. The purpose of the program was to give participants the opportunity to familiarize themselves with the work of the speakers, and also to prepare them to be involved in discussions held during the Forum. The final Forum program was available in hard copy at the Forum. An electronic copy of the Forum program was made available online http://cuhrrc.hivandrehab.ca/2016-forum.php.

Pre-Forum Planning Teleconferences

In April 2015, the Core Planning Team held four pre-Forum teleconferences, one for the Panelists, one for the Rapporteurs, one for the speakers in Research Evidence Panel Session 1, and one for the speakers in Research Evidence Panel Session 2. Four additional planning teleconferences involving members of the Core Planning Team were held throughout the year. The purpose of these teleconferences was to enable speakers, panelists and rapporteurs to get acquainted with each other and discuss their topics of presentation (if applicable) before the Forum and to discuss the logistics and proceedings of the Forum.

Forum Filming and Media Team

A Forum Filming and Media Team was assembled by the Core Planning Team in August 2015. The purpose of this team was to enhance knowledge translation and exchange of the evidence presented at the Forum. The team implemented a social media strategy leading up to, during, and after the Forum via Twitter: #RehabHIV. To access the Twitter feed from the Forum go to: https://twitter.com/search?f=tweets&vertical=default&q=%23RehabHIV&src=typd

The Filming and Media Team was also responsible for filming the Forum sessions. Three Flying Piglets supplied filming services for the Forum presentations in-kind. The videos were edited and uploaded onto the CUHRRC website as part of the 3rd Forum Knowledge Translation and Exchange (KTE) Library to enable further dissemination of research knowledge on HIV, aging and rehabilitation. Click here to access the current 3rd Forum KTE Library.

Post-Forum Activities

The Core Planning Team met twice via teleconference after the Forum. During the first teleconference, the Core Planning Team met with the Rapporteurs to debrief about the Forum. During the second teleconference, the Core Planning Team met to debrief on the overall Forum process, discuss next steps for the knowledge translation strategy, and address post-Forum activities such as distributing thank you letters and the Forum evaluation. We sent out thank you letters to all speakers and rapporteurs within one week after the Forum. We compiled the evaluations from the Forum into a report provided to CWGHR.

FORUM OVERVIEW

The one day Forum was held on Thursday May 12th, 2016. The Forum was organized into two Research Evidence Panel Sessions and one Plenary Panel Session. The Forum included a Facilitator who facilitated question and answer sessions. The first **Research Evidence Panel Session** focused on *Successful Aging with HIV and Multi-Morbidity* and consisted of 1 Keynote presentation and 4 presentations. The second **Research Evidence Panel Session** focused on *Rehabilitation Interventions and Strategies for Older Adults Living with HIV* and consisted of 1 Keynote presentation and 5 presentations. Each individual presentation was followed by a 5 minute question and answer session. The aim of the **Plenary Panel Session** was to describe ways in which research has been implemented into real world practice and to identify research priorities in HIV, aging and rehabilitation. The panel consisted of four speakers who presented their perspectives on i) their experience and the impact of HIV and aging research in their real world practice and community; ii) their opinion on where we should focus our research priorities on HIV

and aging over the next 2-5 years; iii) recommendations on how to better integrate, translate, and share research evidence to better enhance clinical and community practice for adults aging with HIV; and iv) advice on what's needed next in the context of HIV, aging and rehabilitation in Canada. The Panel Session was followed by a Q&A period and group discussion which was moderated by the Facilitator. All presentations were filmed and uploaded to the 3rd Forum Knowledge Translation and Exchange (KTE) Library to broaden the reach of the Forum.

Discussion was encouraged through Q&A as well as informal discussions during break and lunch. The Forum included a number of features to enhance knowledge transfer and exchange. Participants were provided a hard copy of the Forum Program which included the agenda and key messages from each presentation, as well as biographies of all speakers. Prior to the 3rd International Forum, the media team launched the official conference hashtag, #RehabHIV. All attendees were encouraged to use Twitter throughout the day to further translate highlights from the Forum. Forty Twitter accounts tweeted, retweeted, or 'liked' a tweet with the hashtag #RehabHIV. Of the 40 accounts that were tweeting, retweeting or liking posts, 18 (45%) were from attendees at the Forum.

Speakers, Panelists and Participants

Sixty-nine participants convened in Winnipeg to discuss research evidence on HIV, aging and rehabilitation. Participants represented a broad range of stakeholders. The majority of participants indicated that they worked at a university (or other academic institution) (26%, n=18), and identified as a researcher (21%, n=15) or 'Other' which included Coordinators, Biostatisticians and Program Implementers (23%, n=16). Forum participants represented a broad range of stakeholders. See **Table 1** for an overview of characteristics of Forum participants based on information gathered at Forum registration.

Table 1 Characteristics of Forum Participants (N=69)

Participant Affiliation	Forum Participants N (%)	Participant Role	Forum Participants N (%)
Research/Knowledge Production Organization	10 (14%)	Researcher	15 (21%)
Hospital	6 (9%)	Clinician	4 (6%)
University (or other Academic Institution)	18 (26%)	Academic (e.g. located in an Academic Institution)	6 (9%)
Community-Based Healthcare	5 (7%)	Educator	6 (9%)
Service Provider Organization (community)	5 (7%)	Service Provider	9 (13%)

Participant Affiliation	Forum Participants N (%)	Participant Role	Forum Participants N (%)
Community-Based Organization	8 (12%)	Community Member	4 (6%)
Community Health Centre	0 (0%)	Graduate Trainee (e.g. MSc, PhD, Postdoc)	9 (13%)
Non-Governmental organization	7 (11%)	Other (including Coordinators, multiple roles, Biostatistician, Product Manager, Program Implementer)	16 (23%)
Other (including Federal Government, Pharma, Independent Researcher)	10 (14%)		

SUMMARY OF EVIDENCE

The Forum began with Research Evidence Panel Session 1, followed by Research Evidence Panel Session 2, and ended with the Plenary Panel Session. Nineteen invited speakers presented on current research studies, interventions, and/or programming in Canada, the UK and the US.

There were eleven individual presentations and a panel session, with small and large group discussions integrated throughout. Please see **Appendix A** for the Forum Agenda.

Richard Harding, Reader in Palliative Care at the Cicely Saunders Institute, presented on **What's New with the Evidence on HIV and Aging and Multi-Morbidity?**

- Harding and colleagues conducted a qualitative study to assess what is needed to achieve quality of life for PLWHIV. Investigators recruited 347 gay men living with HIV to participate. The key themes that emerged from this study included the need for better clinical care/medications, the importance of maintaining general health and the need for personal skills (i.e. confidence)[38]; According to a study published by Harding and colleagues in 2010, the ten most prevalent symptoms in PLWHIV in the UK (n=778) included: lack of energy, drowsiness, difficulty sleeping, difficulty concentrating, diarrhea, challenges with sexual activity, pain, worry, sadness, feeling irritable[39];
- Results from research conducted by Harding and colleagues indicated that pain and symptom burden is associated with risk-taking behaviour, poor adherence to medications, viral rebound, poorer quality of life, suicidal ideation and ART discontinuation/change[46-49];

- Harding and colleagues measured Patient Reported Outcome Measures (PROMs) utilizing the Palliative Outcome Scale (POS) with 682 patients living with HIV and 427 family carers in Africa. Measuring the quality of care provided by providers was identified as problematic without validated outcome measures. PROMs provide an opportunity to enhance the person-centredness of HIV treatment and care[40];

Julian Falutz, Director of the Comprehensive HIV and Aging Initiative of the Chronic Viral Illness Service at McGill University Hospital Center presented on **HIV, Multimorbidity, and Frailty: What's This All About?** Key messages from Julian's presentation included:

- Long-term survival of treated HIV patients is almost the same as in uninfected persons. The life expectancy of people newly diagnosed with HIV is >70 years while the life expectancy of people not infected with HIV is ±80[41];
- Smith and colleagues investigated trends in death for PLWH by utilizing data from the Data Collected on Adverse Events of Anti-HIV Drugs Study (D:A:D). Investigators found that causes of death for PLWHIV were mostly due to non-AIDS related conditions. Out of the 3909 deaths among PLWHIV assessed in this cohort study 1123 (29%) were AIDS related while 2786 (71%) were non-AIDS related[42];
- Multi-morbidity due to common aging-related conditions including frailty may occur more often in younger adults living with HIV. Frailty can be defined as a "state of increased vulnerability to stressors occurring in the elderly." Consequences of frailty in the general population include hospitalization, multimorbidity and disability, malnutrition, loss of independence, dementia and increased mortality;
- Frailty can be operationalized in different ways including the Frailty Phenotype, the Frailty Index and the Veterans Aging Cohort Study (VACS) – Index. Currently, there is no gold standard or best tool to diagnose frailty;
- PLWHIV and frailty require an interprofessional team (social workers, physiotherapists etc.) and an interdisciplinary approach to deal with their multiple health concerns and comorbidities. The traditional medical care model alone is not sufficient to manage complex multi-morbidity;
- Strategies to assure successful aging of HIV patients are actively being investigated by Julian and his colleagues.

Francisco Ibáñez-Carrasco, Director of Education and Training at the Ontario HIV Treatment Network (OHTN), presented **A Qualitative Study of the Lived Experience of HIV-Associated Neurocognitive Disorder.**

- In Francisco's community based research (CBR) study, 25 adults living with HIV in Toronto and Vancouver were screened for HIV Associated Neurocognitive Disorder (HAND), given feedback on their screening assessment by a neuropsychologist, and then interviewed about their experience living with and being diagnosed with HAND. Using a CBR approach, 20 members of the research team collectively carried out the research process that involved developing the interview questions, conducting the qualitative data analysis, and engaging in knowledge transfer and exchange;

- Investigators found that i) participants found it difficult to start conversations with health care providers, family and friends about HAND ii) getting screened for HIV Associated Neurocognitive Disorder (HAND) is important iii) PLWHIV who are experiencing HAND may find it helpful to be methodical and habitual (i.e. make lists about items that they often forget) iv) it is important for PLWHIV to take charge of their health by working in partnership with health care providers and community based organizations v) PLWHIV may find it helpful to have a network to support them with memory difficulties (i.e. remembering names, appointments);
- It is important for providers to be informed about HAND and its effect on memory and attention since this can help PLWHIV to understand the source of their cognitive difficulties;
- Health care providers should build partnerships with patients, make their practices more HAND friendly (i.e. sending appointment reminders, large font) and start conversations with patients about neurocognitive difficulties by discussing topics such as memory, attention, missed appointments and other cognitive challenges.

Patty Solomon, Professor and Associate Dean in the School of Rehabilitation Science at McMaster University presented **"I'll Bop till I Drop": Preliminary Findings from a Longitudinal Qualitative Study on Aging with HIV.** Key messages from Patty's presentation included:

- Longitudinal study designs can provide insight into aging and episodic disability. It is important to better understand episodic disability, the health consequences of co-morbidities, the influence of environment on health and the strategies that participants use to cope. Uncertainty related to aging is often a consequence of episodic illness;
- Patty's longitudinal qualitative study utilized a disability and rehabilitation lens to understand the experiences of aging with HIV over time. Investigators interviewed 24 adults (50 or older) living with HIV on 4 occasions over 18 months;
- Analysis of the interview transcripts confirmed the episodic nature of symptoms, day to day activities and social participation restrictions among older adults living with HIV. Common episodic symptoms included pain (79%), fatigue (79%), memory challenges (79%), depression/negative thoughts (71%), and sleep disturbances (63%). Social participation was episodic in nature (unstable employment, impacts on social engagement and support). Participants identified many sources of uncertainty including housing availability, weather, caregiver burden etc.;
- Researchers also examined how the episodic nature of both physical and cognitive symptoms influenced activity levels for participants. Many participants identified walking as an enjoyable activity that kept them both physically and socially active. Participants also identified the importance of exercise;
- Solomon and colleagues identified the following components of successful aging 1) accepting the reality of aging 2) remaining positive 3) maintaining social support and connectedness 4) maintaining a healthy lifestyle 5) engaging in meaningful activities 6) taking responsibility for their health concerns;
- There is a need to support PLWHIV in understanding what triggers their episodes of illness and emphasize self-management and self-efficacy.

Amrita Ahluwalia, Lecturer at Ryerson University and the Director of Research and Evaluation at Fife House Foundation presented on **Aging, HIV and Housing: Identifying the Issues of Older Women Living with HIV.** Key messages from Amrita's presentation included:

- Housing is an important determinant of health; poor housing has been associated with higher mortality rates, substance use issues, lower CD4 counts, higher viral loads and higher prevalence of depression and stress in PLWHIV[43];
- Amrita and colleagues conducted a community-based qualitative study with older women (≥40 years) living with HIV in Toronto or the Greater Toronto Area (GTA) to understand the housing experiences of women aging with HIV (including barriers to support services, stigma, variation in experiences of minorities). Amrita and colleagues conducted 39 in-depth interviews over a period of 12 months. This presentation focused on data collected from women >50 years of age;
- Reasons for dissatisfaction with housing were high rent, small spaces, lack of cleanliness, limited income support, safety concerns, violent family situations and abusive relationships. These all impact the quality of life of older women living with HIV;
- Reasons for satisfaction with housing were safety, proximity to services, affordability and cleanliness;
- Common barriers to adequate housing included waitlists for subsidized housing, affordability and health anxieties. Women also expressed anxieties about future health, ability to maintain housing due to mobility, and housing discrimination;
- Older women face: housing concerns; multiple levels of stigma and discrimination due to ethnicity, gender and age; challenges in forming new intimate relationships; and financial hardships;
- It is important for housing service providers to advocate for affordable housing, explore creative solutions to house multi-generational households, accommodate accessibility issues affecting women, and collaborate with service providers, AIDS Service Organizations and Long Term Care facilities to engage older women as well as inform society about the issues that older women with HIV face.

Charles A. Emlet, Professor of Social Work at the University of Washington, Tacoma and Affiliate faculty with University Center for AIDS Research, presented on **Aging Well with HIV Infection: Lessons from Long Term Survivors in Ontario Canada.** Key messages from Charles's presentation included:

The number of adults living with HIV in Canada has doubled over the past 20 years. It is important to recognize the diversity of the populations living with HIV. For example, individuals who are aging with HIV and diagnosed pre-HAART versus those diagnosed post-HAART (after 1996) have had very different experiences;

- Emlet and colleagues conducted in-depth interviews with 30 older adults living in Ontario to examine personal characteristics and resources that contribute to successful aging with HIV in older adults (≥ 50) ;
- Resilience was a major theme that emerged in the analysis. Challenges to resilience included substance use, sexual trauma, suicidal risks and attempts, loss of peers and being told by providers to prepare for end of life. Strategies for resilience included self-care, spirituality, identity and mastery of illness, and generativity;

- Social support was an important element of successful aging. Participants recognized the importance of connection, support and relationship quality. Environmental context (HIV community support, benefits from government, financial limitations, stigmatizing society etc.) was also an important a key determinant that may can influence successful aging;
- Long term survivors have developed intrapersonal and interpersonal strategies for aging well with HIV infection. Successful aging includes the formation of social networks that promote self-fortification, resilience and positivity.

Gayle Restall, Associate Professor in the Department of Occupational Therapy, College of Rehabilitation Sciences, Faculty of Health Sciences at the University of Manitoba presented on **Self-Management Interventions for Adults Aging with HIV.**

- Gayle and colleagues conducted a scoping review of self-management strategies and found that self-management includes the tasks that people do to manage their medical condition, meaningful activities and life roles, and emotional well-being. In addition, self-management skills include problem solving, decision making, resource utilization, forming partnerships with health care providers and taking action;
- Content of self-management interventions may include development of interpersonal skills, planning for the future, honing cognitive skills and self-care. A small body of literature on the effectiveness of self-management interventions for adults living with HIV shows evidence of positive short-term outcomes for physical health status, emotional status and health knowledge and behaviour[44];
- Participants who engaged in these self-management interventions expressed that it was an important intervention and a positive experience. Challenges were that specific concerns were not addressed by these interventions and that self-management interventions were not culturally tailored;
- Individuals designing self-management interventions need to take into account the social determinants of health and diversity in populations of adults aging with HIV related to gender and social roles, age, length of time since diagnosis, literacy, co-morbidities, culture, geography and access to health services; and
- In addition, PLWHIV should be involved in the planning of self-management interventions and there should be a diversity of content, methods and formats of self-management interventions.

Tammy Reimer, Director of Allied Care and Health Promotion at Nine Circles Community Health Centre, presented on **Lessons Learned: Community Health and the Integration of OT in an Interdisciplinary Team.** Key messages from Tammy's presentation included:

- In 2009, results from a client survey at Nine Circles Community Health Centre (CHC) identified a need for self-management tools and a focus on aging for PLWHIV. With advice from the Canadian Working Group on HIV and Rehabilitation (CWGHR), Nine Circles CHC revised their Health Promotion program to focus on social integration, mental health support and HIV comorbidities;

- In 2010, Nine Circles CHC piloted an Occupational Therapy (OT) program by embedding an OT into their interdisciplinary team. Based on the success of this program, the role was made permanent in 2013;
- In the first couple of years, to secure support from clients and service providers, Nine Circles CHC conducted educational sessions and distributed pamphlets to inform the community about the role and scope of an OT; and
- Overall programmatic changes related to rehabilitation should begin with a client-centered approach and their voice at the centre of program-related decisions.

Darren Brown, Specialist Physiotherapist in Infectious Diseases, Oncology and Palliative Care at the Chelsea and Westminster Hospital, presented a **Review of the Specialist HIV Outpatient Physiotherapy Service in the UK.** Key messages from Darren's presentation included:

- At the Chelsea and Westminster Hospital, the Outpatient Special HIV Physiotherapy Service offers both individual (one-to-one specialist HIV physiotherapy clinic) and group (Kobler Rehabilitation Class) rehabilitation interventions;
- Brown and colleagues conducted a service evaluation to assess who was accessing the services, what interventions were provided and the outcomes of receiving specialist HIV physiotherapy;
- In the clinic, over the two year period, there were 137 patients. The patients had a median age of 52, were primarily male (83%), had an undetectable viral load (97%) and were diagnosed with HIV >10 years ago (80%). In addition, 87% were inactive, 61% were unemployed and the average number of comorbidities was 5. The most common comorbidities were depression (42%) and chronic lower back pain (25%);
- Brown and colleagues administered the EQ-5D-5L pre and post intervention and found that there were improved median scores in all domains (mobility, self-care, usual activities, pain/discomfort, and anxiety/depression). In addition, 53% of those who attended the clinic accessed the Kobler Rehabilitation Class;
- The Kobler Rehabilitation Class consists of a twice weekly supervised group exercise and self-management program with the aim to improve physical health, mental health and social well-being, reduce barriers to addressing these health issues and refer individuals to available support services for adults living with HIV; and
- Brown and colleagues took participant measurements at 0 and 10 weeks and found that there were improvements in locomotor performance, strength, health related quality of life, flexibility and goal attainment.

Rosalind Baltzer Turje, Director of Clinical Programs, Research and Evaluation at the Dr. Peter AIDS Foundation, presented on **Strategies for Service Provision in an Integrated Setting for Complex Health Issues, Mental Illness, and Addiction.** Key messages from Rosalind's presentation included:

- The Dr. Peter Centre provides three programs: 1) day health program; 2) 24-hour specialized nursing care residence; and 3) enhanced supportive housing program;
- It is important to understand the complexity of the health issues faced by the individual that services providers are working with. This is done by observing, conducting formal assessments and understanding the lived experience of service users;

- It is also important to understand the implications for service provision including the risks, opportunities for capacity building and opportunities to improve skills and knowledge; and
- The Dr. Peter Centre is shifting their services to meet the mixed needs and issues of safety, comfort, and predictability among PLWHIV in the community.

Patrick McDougall, Knowledge Translation and Evaluation Coordinator at the Dr. Peter AIDS Foundation, presented on **Employment as Rehabilitation: Peer Research Associates at the Dr. Peter Centre Share Their Experience.** Key messages from Patrick's presentation included:

- In the past 4 years, the Dr. Peter Centre has employed 12 Peer Research Associates (PRAs). Patrick interviewed three PRAs (≥50 years of age) about their experience. Participants identified that returning to work was a return to normalcy and routine while allowing them to gain pride and respect;
- HIV and aging places individuals at the intersection of multiple points of stigma in terms of re-entering the workforce;
- Re-entering the workforce as a paid employee after a lengthy gap as a result of health challenges associated with HIV and other comorbidities can bring multiple challenges in the areas of: adapting to advances in technology, language and terminology; sick time; and workload capacity. Participants identified that considering returning to work was stressful and that returning to full time work had to be a gradual process; and
- Working in a supportive environment can help to mitigate internalized stigma linked to HIV and aging.

The Plenary Panel Session titled "*Bridging the Evidence with Real World and Identifying Research Priorities in HIV, Aging and Rehabilitation: Community and Clinical Perspectives*," consisted of four panelists and one moderator including PLWHIV, researchers and clinicians from the community. Each had the opportunity to comment and reflect on the research evidence presented throughout the day.

Larry Baxter (Community Member) was the Panel Moderator. Larry posed the following three questions to panelists: 1) What is your experience and the impact of HIV and aging research in your real world practice and community? 2a) Based on your experience with HIV rehabilitation, where do you think we should focus our research priorities in HIV and aging over the next 2-5 years? 2b) Based on your experience with HIV rehabilitation, what recommendations do you have for ways we might better integrate/translate/share research evidence to better enhance clinical and community practice for adults aging with HIV? 3) What's needed next? Where do we go from here when it comes to the future of HIV, aging and rehabilitation in Canada?

Chris Lucas, Community Member at Nine Circles Community Health Centre spoke from the perspective of an individual aging with HIV in the community. Key messages from Chris' presentation included:

- Chris has been positive for over 30 years and has found that aging with HIV is a struggle;
- Chris suffered a secondary illness in 2007 that increased his need for rehabilitation services. The inpatient physiotherapy service at the hospital was accessible however, in Manitoba, individuals are restricted to 12 visits to a community-based physiotherapist each year which he found to be quite limiting;

- Chris emphasized the importance of housing and having an accessible and safe place where individuals can age with HIV; and
- Individuals living with HIV need direction when it comes to the Canadian healthcare system. There are many services and options available and health care providers need to help people navigate the system.

Alan Casey, Physical Medicine and Rehabilitation physician at the Health Sciences Centre in Winnipeg, spoke from the perspective of a health care provider. Key messages from Alan's presentation included:

- Alan primarily works with people with spinal cord and neuromuscular diseases in his practice;
- Alan finds that communication is often challenging for PLWHIV. It is important for providers to ask the right questions to ensure that patients inform them of the health care issues that they are facing; and
- It is important to demonstrate successful models of care across communities so that other service provider organizations and communities can utilize them.

Puja Ahluwalia, Project Coordinator, Access to Rehabilitation at the Canadian Working Group on HIV and Rehabilitation (CWGHR), spoke to the need to collaborate, educate, and innovate to increase access to rehabilitation for people living with HIV and other chronic health conditions. Key messages from Puja's presentation included:

- Based on the research presented at the forum, the general population is aging, people living with HIV are aging, rehabilitation is invaluable in maximizing function for people living with chronic health conditions, and that there are not enough publicly-funded rehabilitation options for people who would benefit.
- The Pan-Canadian Equitable Access to Rehabilitation Network is in the early stages of development. It will bring together researchers, policy-makers, people living with chronic health conditions, practitioners etc. to discuss and advance the agenda of increasing access to publicly-funded rehabilitation for people living with chronic health conditions and/or episodic disability, including HIV
- Changes are needed federally and provincially in terms of how rehabilitation is funded and allocated. Until policy change happens, there is a need to work within the current system towards;
- Creative solutions to the current gap in access to rehabilitation services include telemedicine, group based programs and working with community service providers on transition and maintenance programs
- Education is key for future health professionals. At CWGHR, connections are facilitated between HIV organizations and universities through role-emerging placements for occupational therapy students. In addition, CWGHR has recently expanded the program to offer physiotherapy placements.

Soo Chan Carusone, Research Lead at Casey House, presented on her experience with program evaluation. Key messages from Soo's presentation included:

- Clients visiting Casey House are typically living with 5 or more comorbidities in addition to living with HIV and dealing with mental health issues, substance use issues (~80%) and unstable housing. PLWHIV and complex comorbidity tend not to be included in common forms of research evidence such as Randomized Controlled Trials (RCTs);
- Soo co-supervised a group of Masters of Science in Physical Therapy (MScPT) students with Kelly O'Brien (University of Toronto). These students were exploring readiness to exercise among PLWHIV. Results identified the need to consider the complex facilitators and barriers to exercise and better understand ways to support and encourage physical activity among PLWHIV; and
- The findings from this project helped provide information for clinicians to inform their practice patterns and Casey House is now looking at ways to best integrate an OT and PT into their team. It is important to see how clinical practice and research influence each other.

To access the Forum Speakers' presentation slides and videos go to:
http://cuhrrc.hivandrehab.ca/2016-forum.php

EVALUATION

Thirty-five of the 69 participants (51%) completed the evaluation form.

Six (17%) respondents had attended both the first and second Forum; three (9%) had attended only the first Forum but not the second; and 21 (74%) of respondents were new attendees to the Forum. The evaluation highlighted strengths and successes for this event and provided valuable feedback to CUHRRC, CWGHR and the planning team.

The top five topics that participants articulated as "take home messages" from the Forum were:

- Frailty and the impact of comorbidities are important concepts within HIV and aging,
- There is a need for collaborative, person-centered and integrated care for people aging with HIV,
- Stigma continues to impact older adults and must be addressed to improve quality of life for older people living with HIV,
- Rehabilitation services and interventions are effective in the context of HIV and aging,
- There is a need for services providers and rehabilitation professionals to improve access to and better educate PLWHIV about rehabilitation services and their benefits.

Of the respondents who submitted an evaluation:

- ✓ 31 (89%) agreed or strongly agreed that the Forum achieved its goal of translating recent research evidence on HIV and rehabilitation;

- ✓ 20 (57%) agreed or strongly agreed that they made new contacts which will be helpful to their work;
- ✓ 32 (92%) agreed or strongly agreed that the presenters were knowledgeable and communicated their ideas clearly;
- ✓ 31 (89%) agreed or strongly agreed that it was useful to learn about the rehabilitation research and programming carried out in other countries;
- ✓ 28 (80%) agreed or strongly agreed that there was adequate time allocated for informal discussion among Forum participants; and
- ✓ 17 (49%) agreed or strongly agreed that their needs were accommodated.

Of the 32 Forum evaluation respondents, 28 (88%) indicated that they would be able to apply the content covered in the Forum to their work and 23 (89%) of 26 respondents indicated that they envision collaborating with fellow Forum participants on HIV and rehabilitation initiatives in the future.

Table 2 - To what degree did participants gain new and relevant knowledge/insight in each of the content areas listed below? (n=35)

Topic	Meeting Participants (N(%)) who Agreed or Strongly Agree
Disability and episodic disability	20 (58%)
Living with the complexity of HIV and multi-morbidity	31 (89%)
Strategies for aging successfully with HIV	23 (66%)
Access to rehabilitation for PLWH	22 (63%)
The role of rehabilitation for people with HIV	25 (71%)

Respondents provided informative and encouraging comments with regard to strengths and drawbacks of the Forum. The responses indicated that participants appreciated the organization of the Forum; found the presentations to be engaging, informative, and of high quality; and enjoyed the variety of topics explored by the speakers from various disciplines. Additionally, the respondents indicated that there was a diverse group of attendees who contributed to a variety of interesting perspectives. Respondents enjoyed the opportunities provided for informal discussion and networking.

Respondents indicated that, in the future, they would prefer if there were more opportunities for small group discussion (e.g. with table groups), questions, networking, and active participation. In addition, participants found that a lot of information was presented in a short amount of time and would prefer for the Forum to be presented over the course of two days. Finally, feedback indicated that respondents would have appreciated more breaks to allow time to process new information. Overall, respondents found the Forum to be well organized and a great event.

CONCLUSION

This report summarizes the process and content of the *3rd* International *Forum on HIV and Rehabilitation Research.* The need for research in HIV, aging and rehabilitation continues to increase as people live longer and age with HIV. The field of HIV, aging and rehabilitation research is evolving to meet the current needs of PLWHIV, with Canada, the UK and the US as leaders in this field. Rehabilitation in the context of HIV is an integral area of inquiry and practice that effectively bridges academic disciplines, clinical practice areas and community efforts. Overall, the Forum was successful in translating research evidence, and fostering new research partnerships among stakeholders in HIV, aging and rehabilitation across Canada and internationally.

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Appendix A: Forum Agenda

Advancing HIV, Aging and Rehabilitation Research and Practice	
Time	**Topic**
8:00-8:30am	**Light Breakfast and Registration**
8:30am-8:45am	**Welcome and Introductions / Overview of Agenda**
8:45am-9:15am	**Overview of Canadian Working Group on HIV and Rehabilitation (CWGHR) & the HIV and Aging Initiative** **Introduction to the Canada-UK HIV and Rehabilitation Research Collaborative (CUHRRC) & Framework of Research Priorities in HIV, Disability and Rehabilitation**
9:15am-10:30am	**Research Evidence Panel Session 1 – Successful Aging with HIV and Multi-Morbidity** This session will include a series of presentations followed by interactive discussion focused on emerging research evidence related to HIV, aging and multi-morbidity in the context of disability and rehabilitation. Speakers will include community members, clinicians and researchers. **Keynote Speaker:** Richard Harding, King's College London, United Kingdom
10:30am-10:45am	**Wellness Break**
10:45am-11:45am	**Research Evidence Panel Session 1 - Successful Aging with HIV and Multi-Morbidity (Continued)** **Speakers**: Julian Falutz (McGill University), Francisco Ibáñez-Carrasco (Ontario HIV Treatment Network), Patty Solomon (McMaster University), Amrita Ahluwalia (Fife House Foundation)
11:45am-12:30pm	**Lunch**
12:30pm-2:30pm	**Research Evidence Panel Session 2 - Rehabilitation Interventions and Strategies for Older Adults Living with HIV** This session will include a series of presentations followed by interactive discussion focused on research evidence related to rehabilitation interventions and living well strategies for older adults living with HIV. Speakers will profile evidence on models of rehabilitation and the impact of interventions for healthy aging with HIV. **Keynote Speaker**: Charles Emlet, University of Washington, United States **Session Speakers**: Gayle Restall (University of Manitoba), Tammy Reimer (Nine Circles Community Health Centre), Darren Brown (Chelsea and Westminster Hospital, London, UK), Rosalind Baltzer Turje & Patrick McDougall (Dr. Peter AIDS Foundation, Vancouver)

2:30pm-2:45pm	**Wellness Break**
2:45pm-3:30pm	**Panel Session - Bridging the Evidence with Real World and Identifying Research Priorities in HIV, Aging and Rehabilitation: Community and Clinical Perspectives** This session will include a series of panelists including people living with HIV, researchers, and clinicians from the community who will comment on the research evidence, identify key priorities in the field, and discuss opportunities to enhance service delivery for adults aging with HIV. **Moderator:** Larry Baxter (Community Member) **Panelists**: Chris Lucas (Community Member), Alan Casey (University of Manitoba), Soo Chan Carusone (Casey House), Puja Ahluwalia (Canadian Working Group on HIV and Rehabilitation)
3:30pm-3:50pm	**Bringing it all Together – Research Priorities in HIV and Aging** In this session we will discuss ways to identify and address new and emerging issues in HIV, aging and rehabilitation, highlighting new opportunities for collaboration in research and practice. In this session we will also discuss strategies to enhance Knowledge Transfer and Exchange on HIV and rehabilitation research.
3:50pm-4:00pm	**Wrap-Up and Evaluation / Closing Remarks**

Appendix B: Forum Evaluation Questionnaire

3rd International Forum on HIV and Rehabilitation Research – HIV and Aging
Thursday May 12th, 2016
Delta Winnipeg, Winnipeg, Manitoba

Thank you for taking the time to complete our Forum Evaluation. We encourage you to complete this form with honesty and with confidence that the results are anonymous and confidential. We use evaluations to inform the ongoing development of CUHRRC and CWGHR activities and initiatives.

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1. **Which stakeholder groups do you represent/identify with? (please select the one that best describes your stakeholder group)**

☐ Person Living with HIV (Please specify): _____
☐ Clinician (Please specify your discipline): _____
☐ Educator
☐ Academic (i.e. Located in an Academic Institution)
☐ Service Provider
☐ Researcher
☐ Policy Maker
☐ Volunteer
☐ Funder
☐ Student / Trainee (Please specify your discipline): _____
☐ Other (Please specify): _____

2. **Where do you live? (city, country) _____**

3. **What type of setting do you work in? (check the one that best applies)**

☐ Hospital
☐ University / Academic Institution
☐ Knowledge Broker/ Translation Organization
☐ Research Organization
☐ Community-Based Organization
☐ Community Health Centre
☐ Government Organization
☐ Other (please specify) _____

4. **What are the three most important "take-home messages" that you heard at the Forum?**

a) _____

b) _____

c) _____

5. **Please rate on a scale of 1 to 5, how much you agree with the following statements.**

	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
a) The Forum achieved its goal of translating recent research evidence on HIV, aging and rehabilitation.	1	2	3	4	5
b) I made new contacts which will be helpful in my everyday work.	1	2	3	4	5
c) The presenters were knowledgeable and communicated their ideas clearly.	1	2	3	4	5
d) It was useful to learn about the rehabilitation research and programming carried out in other countries.	1	2	3	4	5
e) There was adequate time allocated for informal discussion amongst Forum participants.	1	2	3	4	5
f) My needs were accommodated (if applicable).	1	2	3	4	5
Comments?					

6. To what degree have you gained new and relevant knowledge/insight in each of the content areas listed below?

	Little to None	Limited	Somewhat	Considerable	Extensive
a) Disability and episodic disability	1	2	3	4	5
b) Living with the complexity of HIV and multi-morbidity	1	2	3	4	5
c) Strategies for aging successfully with HIV	1	2	3	4	5
d) Access to rehabilitation for people living with HIV	1	2	3	4	5
e) The role of rehabilitation for people with HIV	1	2	3	4	5
Comments?					

7. **Will you be able to apply the content covered in the Forum to your work? (circle one) Yes No**

   7a) If yes, how so? If not, please explain.

8. **Do you envision collaborating with any of the Forum participants on HIV and Rehabilitation initiatives in the future? If Yes, how do you envision collaborating with the Forum participants?**

9. **What were some strengths of the Forum (if any)?**

10. **What were some limitations of the Forum (if any)?**

11. **Do you have any recommendations for improving the Forum content or structure?**

12. **Are there topics or issues that were raised today that you would like to see covered in future CUHRRC or CWGHR Forums, workshops, or webinars?**

13. **Please indicate whether you attended previous Forums in the table below.**

	Yes	No
a. Did you attend the 1st International Forum held in June 2013 in Toronto?	☐	☐
b. Did you attend the 2nd International Forum held in October 2014 in London, England?	☐	☐

14. **Do you have any other comments, recommendations or reflections?**

Thank You for your Feedback!

Appendix C: Forum Poster