Healthcare Providers Insight into Barriers to Antiretroviral Treatment Adherence in **British Columbia Correctional Facilities** Rince Wong¹, Caitlin Olatunbosun², Linda Akagi^{2,3}, Jack da Silva², Silvia Guillemi³, Junine Toy³ 1. Jim Pattison Outpatient Care and Surgery Centre, Surrey, BC, 2. Ambulatory Pharmacy Department, St. Paul's Hospital, Vancouver, BC. 3. B.C. Centre for Excellence in HIV/AIDS. Vancouver, BC...

Background

- Incarceration has been associated with a high risk of antiretroviral therapy (ART) interruption at various points of the incarceration process and unfavourable viral load and CD4 cell count outcomes.
- Prevalence of persons living with HIV in provincial prisons is reported to be 2-20%, up to 10 times higher than the general population, posing an elevated risk of HIV transmission through high risk behaviours if patients are untreated or non-adherent to ART.
- ART adherence is affected by various factors. Incarceration is

Results

A total of 17 key informants were interviewed between August 2013 and February 2014 (Table 1)

• 10 themes were identified and categorized (A - C):

A. OPERATIONS

ART available for immediate use is reliant upon an outdated contingency supply

"the only time where there is an instance is when there's a new drug that has been approved and we just have nothing there." – Nurse

Procedures are highly variable between sites

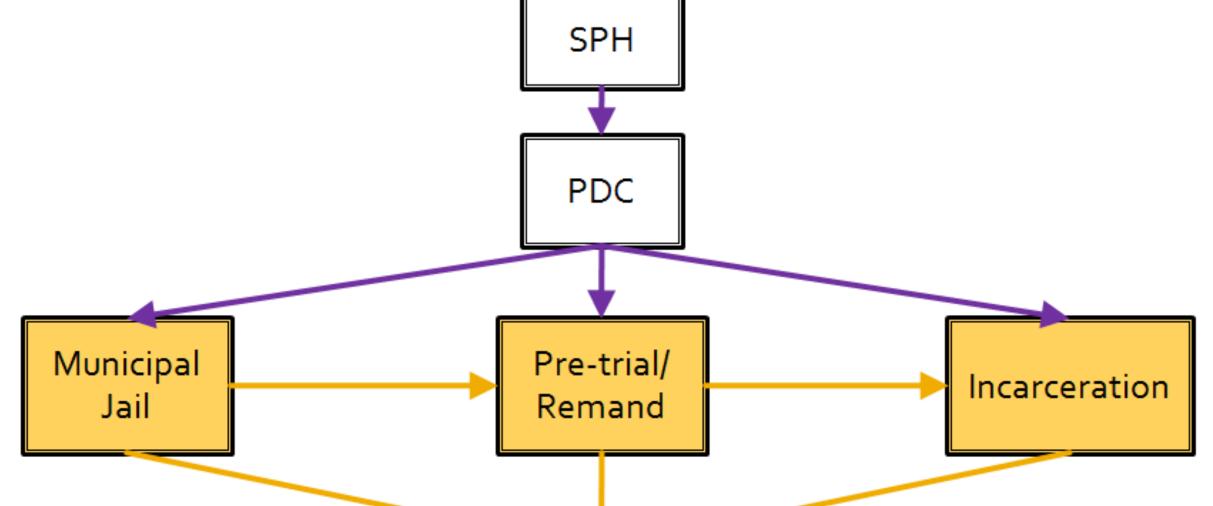
Role	Number of key informants by site						
	Vancouver Jail	Forensics Hospital	SPH	PDC	Oaktree Clinic	Positive Living BC	CCPHE
Nurse	4	1			1		
Pharmacist		2	5	1	1		
Outreach worker						1	1

Table 1: Key informant demographics. CCPHE = Collaborative Centre for **Prison Health and Education**

associated with a 2-5 fold increase in treatment interruption compared to non-incarcerated HIV patients

In BC, ART distribution is managed by St. Paul's Hospital (SPH) Ambulatory Pharmacy and several satellite pharmacies on behalf of the BC Centre for Excellence (CFE) in HIV/AIDS. Product Distribution Centre (PDC) Pharmacy distributes ART to provincial correctional sites and to Vancouver City Jail. (See Figure 1)

There is a paucity of data on operational and provider barriers to ART adherence in correctional facilities. This study aimed to gain insight into these barriers and provide recommendations to relevant stakeholders.



"Some centres crush everything, some centres don't, it's not a uniform process... I find that corrections is not consistent because one centre will do things one way because of some sort of security thing." – *Pharmacist*

Length of stay affects monitoring and ART administration

"I'll go through the process to get the medication ordered and the person is then released or they've been sent on to an institution...so they're no longer in the building for me to dispense the medication." – Nurse

Continuity of care is a challenge because of multiple transfers across different care providers and unplanned release

"transition time, whether it's from the community to the prison or prison to the community, is...lots of things get lost." – Outreach worker

"Healthcare is completely separate from the legal and judicial system so we have no idea if they are being released or where they're going until it actually happens or after the fact." - Nurse

C. PATIENT

Patient initiative and self-disclosure are key to HIV care "the only thing that would prevent them from getting their medications in jail would be their own desire for not disclosing their medical status" – *Nurse*

Confidentiality and stigma remain barriers to disclosure "there are people that don't disclose during their whole [stay], especially if they don't serve a very long prison term. You can't keep confidentiality in prison, there's just no way to do it." – Outreach worker

"the interview that you're doing with the inmate is never without an officer present. They're always in the care of the officer so it's not private, confidential like having it in your doctor's office behind closed doors, right?" -Nurse

Medication refusal leads to interruption

"We have them available, we offer it, we encourage them to take it, we will ask them why they're not taking it. But ultimately we have to respect their decision."

– Nurse

"They all have the right to deny any contact with us... we're not there in a punitive way...They may be protesting because sometimes they will refuse all of their medication, they don't want to eat or drink. It's a protest or it is due to mental illness." - Nurse

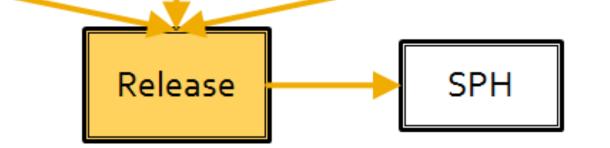


Figure 1: Schematic of movement of ART and inmates through the correctional system. Yellow arrows = movement of inmate. **Purple arrows = movement of ART.**

Methods

- Study design: Qualitative methods consisting of semistructured interviews with key informants.
- Recruitment : Front line healthcare and outreach workers at correctional and ART distribution facilities in BC were recruited. An initial convenience sample of key informants was obtained through SPH's contact list then snowball sampling was employed.
- Analysis: Interviews were audio-recorded and transcribed verbatim. Transcripts were de-identified and thematically analyzed using NVivo10.

B. PROVIDER

Level of HIV experience varies among health care staff "...when I asked it, one of my colleagues he actually said: well I probably would have missed it too, because I'm not familiar with the HIV stuff right?" – *Pharmacist*

HIV is high priority but security is prioritized over health care

"security trumps everything...but they just don't use HIV meds as a punishment." – Outreach worker

Discussion

• This study reveals insight into adherence barriers at operations, provider and patient levels from the perspective of corrections healthcare providers and external agencies involved with the continuity of care for individuals within the BC correctional system • There is opportunity for inmates living with HIV to access healthcare services while incarcerated but multiple barriers exist • More frequent review of ART contingency supplies in correctional facilities should be conducted by both PDC and SPH • A collaborative approach between BC Corrections and external HIV resources may be beneficial in ensuring continuous care during incarceration and upon release

SPH Ambulatory Pharmacy has specialized knowledge in HIV treatment and is available for clinical support to patients and health care providers. Increased awareness of this service to BC corrections and inmates could facilitate care and continuity

Patient priorities upon release do not align with HIV care "The only time they've ever been on ART is in prison. In the community, they don't seek any medical help... So that's

really where the canyon is, when people walk out the

doors of jail."

– Outreach worker



Limited correctional facilities recruited

Potential for selection bias

CONFERENCE



Though concerns of lack of confidentiality and stigma remain in the correctional system, all persons with the capacity to create

a safe environment for treatment should continue to do so

• Further research is required to develop insight into adherence barriers for remote and longer term stays in correctional facilities in B.C.

I have no conflicts of interest

