

Understanding antiretroviral treatment distribution in B.C.'s correctional facilities and identifying potential barriers to treatment adherence

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Background

- Antiretroviral therapy (ART) effectively reduces mortality, morbidity, and transmission of human immunodeficiency virus (HIV) but requires high adherence rates. Suboptimal adherence contributes to treatment resistance and negatively affects viralological and immunological outcomes.
- In BC, ART is centrally distributed by St. Paul's Hospital (SPH) Ambulatory Pharmacy on behalf of the BC Centre for Excellence (CFE) in HIV/AIDS to various sites, including Product Distribution Centre (PDC), the pharmacy for BC Corrections.
- Adherence is affected by various factors with incarceration associated with a 2-5 fold increase in treatment interruptions.
- Current literature is lacking on identification of system and provider adherence barriers. This study aims to investigate these barriers and provide recommendations to relevant stakeholders.

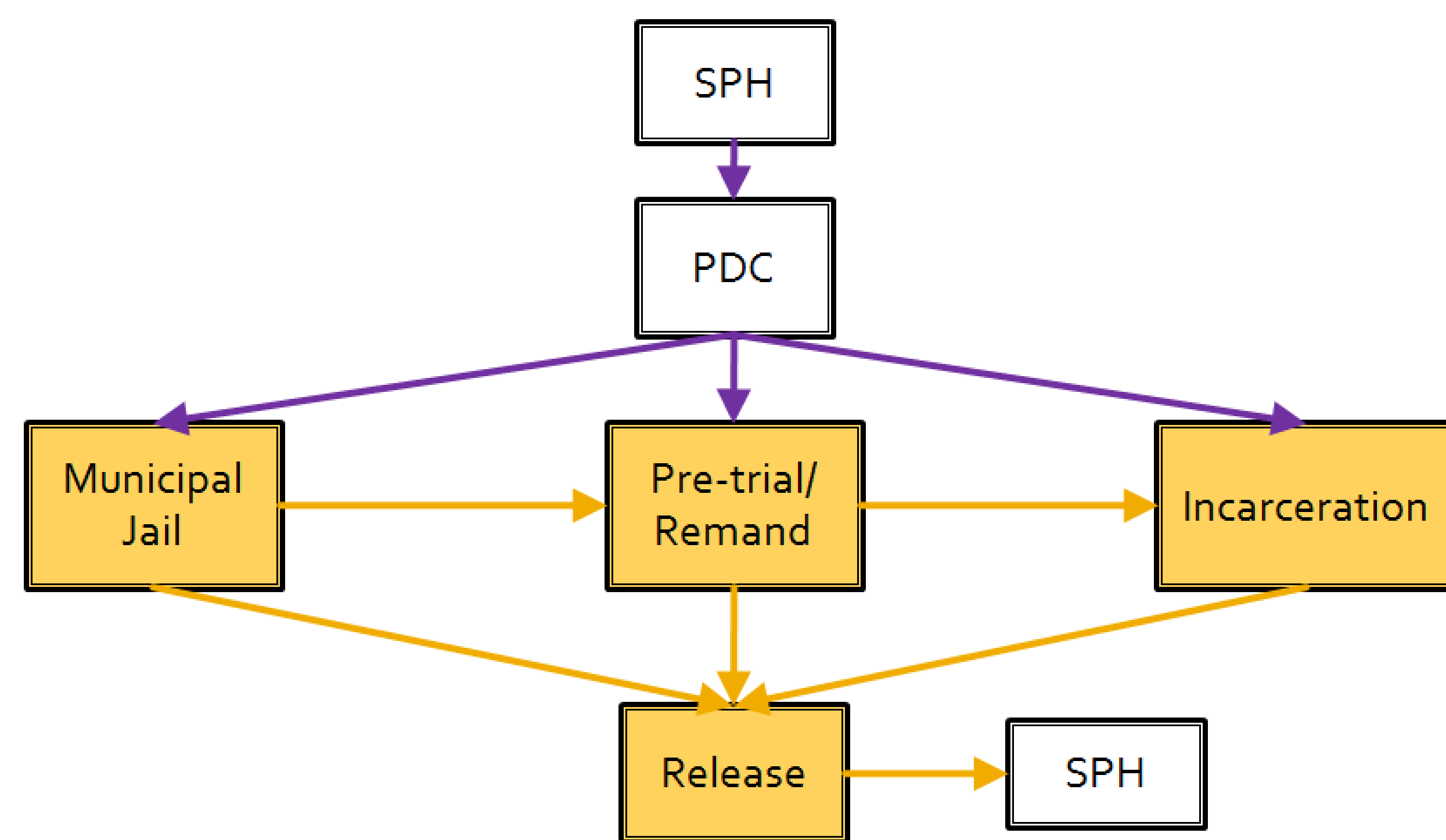


Figure 1: Schematic diagram of movement through the correctional system. Yellow arrows denote movement of accused. Purple arrows denote movement of ART.

Methods

- Study design:** Qualitative methods consisting of semi-structured 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.

Results

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

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

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

A. OPERATIONS

Distribution of ART is reliant on an outdated contingency supply for immediate use.

"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

"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

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

C. PATIENT

Patient initiative and self-disclosure is 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, 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

Voluntary medication refusal leads to interruptions

"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

Patient priorities on 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

Limitations

- Limited correctional facilities recruited
- Potential for selection bias

Conclusions and Recommendations

- There is opportunity for HIV positive inmates to access healthcare services while incarcerated, however, multiple barriers exist.
- A collaborative approach between BC Corrections and external HIV resources may ensure continuous care during incarceration and upon release. For example, the BC CFE in HIV/AIDS can provide HIV education and expertise for disease management.
- SPH pharmacy can help address HIV treatment and adherence knowledge gaps amongst corrections staff. SPH should also increase awareness of its clinical pharmacy services to BC corrections and HIV positive inmates.
- Periodic review of ART contingency supplies in correctional facilities by both PDC and SPH should be conducted.
- Further research is required to develop insight into adherence barriers for remote and longer term correctional facilities in the province.