**Prioritizing an Out of HIV Medical Care List[[1]](#footnote-1)**

**Introduction**

The Clinic-Based Surveillance-Informed (CBSI) intervention is conducted at the Harbor View Medical Center’s Madison HIV Clinic in Seattle, Washington. The purpose of the CBSI intervention is to provide a guide for HIV medical care providers to access the information in their jurisdiction’s health department HIV surveillance database to update the list of their clients who appear to be out of HIV medical care (OOC).

The CBSI intervention was piloted in the spring of 2020 by Howard Brown Health (HBH) Centers in Chicago, IL. The initial experience of HBH was similar to the experience of health departments and clinicians when producing a not-in-care list[[2]](#footnote-2) for a [Data to Care](https://www.cdc.gov/hiv/effective-interventions/respond/data-to-care/index.html) intervention—that is, the number of people on the list is too high for the number of staff who are available to contact them for assistance with re-linking to HIV medical care.

Health department HIV surveillance programs have access to databases and procedures[[3]](#footnote-3) that can be used to determine if a client is in care with another HIV medical provider, is incarcerated, moved out of the jurisdiction, or has died. Submitting the provider’s OOC list (compiled from entries in their electronic medical records system) to the health department for matching with the HIV surveillance database, produces a final list of clients who are more likely to be out of care, alive, living in the jurisdiction, and not incarcerated. The purpose of matching the provider list with the HIV surveillance data is to maximize provider efficiency in locating and linking clients back into HIV medical care. However, the resulting list may still be too large for the number of provider staff to contact.

The purpose of this document is to provide a method for prioritizing the list of OOC clients that remains from the health department’s data cleaning procedures. This list based on variables selected by the provider, possibly in consultation with the health department.

**Potential Variables for Prioritization**

The variables for prioritization are based on the provider and, possibly, health department priorities for prevention and care. The overarching goal of prioritization is to, given the available resources, provide the most effective HIV medical care to the highest number of eligible clients. This should ultimately result in a positive impact on overall public health outcomes.

Examples of the variables selected for prioritization include those related to:

1. Likelihood of finding the person (e.g., prioritizing those who have been out of care the shortest amount of time, or those whose most recent address is in the clinic/provider’s catchment area);
2. The greatest need for relinkage services (e.g., when they were in care their most recent viral load was high/not suppressed and/or their CD4 count was below normal);
3. The health department’s prevention priorities (e.g., young Black or Latino gay, bisexual, and other men who have sex with men);
4. Diagnosis of gonorrhea, syphilis, or chlamydia within the last six months, with accurate locating information (dependent on availability from the health department); and
5. Clients who are out of care and can utilize available support services. These could include housing services, substance use or mental health services, and support for survivors of intimate partner violence.

Please keep in mind that high-quality data are essential. If a potential prioritization variable is missing a substantial number of observations or is of questionable quality, then it should not be considered. Examples of possible prioritization variables include:

1. Value of last viral load (VL) – e.g., focus on those with an unsuppressed or high viral load on the last measure.
2. The last CD4 count – e.g., focus on those with a CD4 count of less than 500 on the last measure.
3. Time since last medical care visit as measured by time since last CD4/VL result – e.g., focus on clients whose last CD4/VL was 15 to 24 months ago, then 25-36 months ago.
4. The recency of infection – e.g., looking at more recent infections (acute infections, for instance).
5. Time since any new information was reported to the surveillance program – e.g., focus on those with most recent information updates.
6. Geography – e.g., focus on specific provider catchment areas that linkage staff can efficiently reach or that the health department wants to prioritize based on incidence, prevalence, and resources available for outreach.
7. Client characteristics – e.g., focus on groups of individuals based on age, transmission category, race, or ethnicity.

In determining which variables a clinic in a particular jurisdiction will use for prioritizing the OOC list, it might be helpful for the clinic to consider the following questions:

1. Who is the health department’s HIV prevention and care priority population(s) or area(s)?
	1. Example: Young Black gay, bisexual, and other men who have sex with men (GBM) are a priority population for health department prevention activities as incidence rates are growing. Thus, the health department may focus their linkage and re-engagement efforts on those OOC who identify as young Black GBM.
2. Given the time that it may take to locate people on the OOC list, who would be the most feasible to locate?
	1. Example: People with HIV (PWH) who had a CD4/VL 15 to 24 months ago are more likely to still reside in the jurisdiction, compared to PWH whose last CD4/VL was more than three

years ago. The clinic may conclude that it is easiest to locate those with a previous CD4/VL result from 15 to 24 months ago.

The [*Prioritization of Variables Worksheet*](#Worksheet) (Table 1) is a useful tool for documenting potential prioritization variables based on the number and percent of PWH.

After the surveillance database is updated, the new information is also used to update the provider’s OOC list. Once the provider has applied the prioritization schema, managers may decide to sort further or prioritize the list based on internal outreach practices. For example, if most of the work is done by phone, text messaging, or social media outreach, the geographic location may be less important.

**Preliminary Analyses**

After identifying a list of variables to explore as possible prioritization variables, we suggest that the clinic run frequencies on their generated OOC list for each of the selected variables to get a sense of their respective representation on the OOC list. The *Prioritization of Variables Worksheet* below can support this effort. If the provider has a large OOC list, and a prioritization variable captures most of the OOC population (80-90%), it may not make sense to prioritize since the list is not reduced to a more manageable workload.

The provider should document and review preliminary analysis results of the OOC list before finalizing their list of prioritization variables. The *Prioritization of Variables Worksheet* provides guidance on how to document results. The worksheet also includes formulas to automatically calculate percentages based on data entered. Again, not all variables need to be explored. Providers can focus on variables that match their priorities**.**

**Table 1:** **Prioritization of Variables Worksheet**

*Instructions: Double click on the table to edit. Formulas are included for your convenience.*

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*Potential prioritization variables for the OOC list: Number of PWH within each category and percentage of the overall OOC population.*

**Example with Mock Data**

A large clinic in a medium-sized city in the U.S. produces a list of their clients who appear to be OOC. Their definition of OOC is anyone without a laboratory result or medical appointment in the last 15 months but has completed at least one medical visit in the previous three years. They produce a list of 2,200 clients. They send their OOC list to their health department, who, using their access to databases and procedures, lets them know which clients can be removed from the list. The list is then reduced to 1,500 clients.

The clinic has three Linkage Specialists (LS), but they are not sure how long it will take them to conduct outreach, linkage, and re-engagement (OLR). They decide to pilot the process for one month, dividing up the list by prioritization variables. During the pilot month, staff may want to keep track of their time and effort to determine FTE needed to successfully implement the intervention.

About 900 of the clients on their list of 1,500 had a high viral load and/or low CD4 count at their last visit, so they decide to randomly split the list of those 900 clients in thirds. They then prioritize the list further based on the recency of the last clinic visit. This narrows the list to 200 clients, enabling them to complete the pilot.

After one month passes, the LS evaluate how many clients they can successfully re-engage in care monthly and reconsider their prioritization criteria based on what they have learned.

Below is the table developed to document the initial selection of prioritization variables:

**Table 2: Example of a completed table of potential pilot prioritization variables for a clinic**

|  |  |  |  |
| --- | --- | --- | --- |
| **Potential prioritization variable** | **Definition of the prioritization variable** | **Number included on the OOC list** | **Percentage of the OOC list** |
| Total PWH included on the OOC list returned from the health department | Total meeting the OOC definition: *No CD4/VL reported >15 and <36 months*  | *1,500* | *100%* |
| High viral load and/or low CD4 count  | *Viral load >100,000 and/or CD4 count <500 at last visit* | *900* | *60%* |
| The recency of the last visit | *Last medical visit/lab in the last**16-24 months* | *200* | *13%* |
| Use this area to add additional variables after a one-month pilot |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Chart 1: Example flow chart documenting the relationship between variables for a prioritized OOC list pilot

OOC list

N=1,500

High viral load/low CD4 count

 n=900

**LS #1**

n=300

**LS #2**

n=300

Last med visit/lab

16-24 months

n=60

Last med visit/lab

16-24 months

n=60

**LS #3**

n=300

Last med visit/lab

16-24 months

n=80

**Jurisdiction’s Final Prioritization Schema**

Finalizing the OOC prioritization variables is an iterative process, based on the size of the list, available resources, and experience using a set of prioritization variables. The clinic may work with the health department, if possible, to help them revisit the prioritization schema after they have had a chance to apply it and use it in the field. They may select a different set of prioritization variables in the next iteration based on changes in the epidemic, available staff, and resources, size of the OOC list, etc.

Space below can be used to record the clinic’s final decisions regarding the prioritization schema that they intend to use. It is important to document decisions along the way to provide background data and rationale for why certain decisions were made and to inform future decisions regarding prioritization of the OOC list.

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Date: \_\_\_\_\_\_\_\_\_\_\_\_\_

1. This document is based on a Data to Care Prioritization tool developed by John Snow, Inc. (JSI) in 2014 as a part of a Data to Care technical assistance contract JSI had with the CDC/DHAP/Capacity Building Branch. It was edited by NASTAD’s Center for Innovation and Engagement for replication of the evidence-based CBSI Intervention to adapt it for healthcare provider use. [↑](#footnote-ref-1)
2. Data to Care calls these lists “not in care”; CBSI calls these lists “out of care”—the two terms are interchangeable. [↑](#footnote-ref-2)
3. Database examples include Ryan White HIV Program data, state vital records, and the Social Security Death Index. Procedures include routine reporting from all providers in the jurisdiction, conducting surveillance in the department of corrections, and deduplication with other state health departments. [↑](#footnote-ref-3)