The slide features a red horizontal bar at the top left and a grey square with a white line graph at the top right. The main text is centered in blue and black. At the bottom, there is a footer bar with four colored segments: grey, olive green, light blue, and red. The red segment contains the text "Abt Associates | pg 1".

**Data Tools for the Updated Unmet  
Need Estimates and Analyses**

**April 15, 2021**  
**Abt Associates, Inc.**

Abt Associates | pg 1

**Anne. [3 minutes before the start of the webinar]** Hello everyone, thanks for joining, we'll get started in a few minutes.

**[at the start of the webinar]** Hi, good morning or afternoon, everyone. My name is Anne Rhodes and my company, Abt Associates, is contracted by HRSA HAB to deliver a series of webinars to support the implementation of the Updated Framework for Estimating Unmet Need for HIV Primary Medical Care. This is the last of six webinars that we are presenting to ensure that you all have proper guidance and information as you seek to implement the updated framework. Today's webinar is focused on the data tools available for completing the Unmet Need estimates and analyses.

## About these slides



### Please note:

- The live webinar included a live demo of the Optional Calculation Tables and Reporting Templates. This slide deck contains images of them instead.
- The HIV Surveillance slides included in this slide deck are a shorter version of what is posted on the HIV Surveillance sharepoint site. That deck has more instructions. This version you are looking at is what was presented in the webinar.

**Anne:** When you have questions during the webinar, please only use the Q&A feature for this purpose. This allows us to keep track of each question so we can review them at the end. Your questions will be used to update the Unmet Need Frequently Asked Questions (FAQ) document that is currently available on TargetHIV. We will respond to questions twice during this webinar: once after the Excel file review and then again after the SAS program review.

## Introductions and Project Team



### HRSA HAB

- LCDR Andy Tesfazion, HRSA HAB Project Lead, DMHAP
- CDR Cathleen Davies, HRSA HAB, DSHAP

### Abt Team / RWHAP Unmet Need Training and TA Team

- Jane Fox, Project Director
- Tara Earl, Training and TA Lead
- Diane Fraser, Project Manager
- Debbie Isenberg, Subject Matter Expert
- Anne Rhodes, Subject Matter Expert

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### Introductions (Anne)

I would like to take a few minutes to introduce key members of this project. Our senior advisors at HRSA HAB are Andy Tesfazion from the Division of Metropolitan HIV/AIDS Programs and Cathleen, or Cat, Davies from the Division of State HIV/AIDS Programs. Together, they will guide this work as well as serve as a resource to the HRSA HAB Project Officers.

**our team includes Jane Fox**, Tara Earl, Diane Fraser, Debbie Isenberg and myself. Today, you'll hear from both me and Debbie.

## CDC Team on today's call



### CDC Team

- Baohua Wu, MS, Statistician
- Jianmin Li, PhD, Public Health Data Analyst
- Shacara Lyons Johnson, MSPH, Epidemiologist

### Introductions (Anne)

We are extremely fortunate to have experts from the CDC HIV Incidence and Case Surveillance Branch (HICSB) with us today. They include Baohua Wu, who will be reviewing the SAS program today. We also have Dr. Jianmin Li and Shacara Lyons Johnson on the call. I want to thank the CDC team for all their work and for presenting on this webinar.

## Training Objectives



- Briefly review required and enhanced estimates and analyses
- Review the tools available to you for completing the Unmet Need Estimates and Analyses
  - Review the Required Reporting Templates and Optional Calculation Tables
  - Provide step-by-step instructions for using the SAS program developed by CDC

### Training Objectives (Anne)

Today we are going to:

Briefly review the required and enhanced estimates and analyses and then review two tools that have been developed to help in completing the Unmet Need requirement. First, we'll review the Excel tools that were developed by the Abt team and will be used to submit your estimates and analyses to HRSA HAB as part of your application. Then we'll have Baohua Wu from CDC who will go through the the SAS program that CDC developed to help with completion of the Unmet Need estimates and analyses for HIV surveillance data, including the required estimates and the subpopulation analyses. The CDC presentation is intended for staff who will be running the SAS program, so just a heads up that it is pretty technical. We'll also have a brief Q & A after each part of the webinar.

Since we won't go into the definitions or data elements in great detail today, just a reminder that you can find detailed descriptions in the *Methodology for Estimating Unmet Need Instruction Manual*. The manual, additional implementation support materials, today's slides, and today's audio-recording will be available on TargetHIV. Diane has also included a link to the manual and existing implementation materials in the chat box, for reference.

## Poll # 1: TA



Which of the following best describes where your jurisdiction is regarding unmet need?

- We're in a good place and don't think we'll need any assistance
- We're just starting to figure it out and may need assistance
- We haven't really started focusing on it yet so we're not sure what we need
- We're waiting for the NOFO to come out before we start

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### Poll 1: Unmet Need (Anne)

Before we get started, let's start with a poll.

Which of the following best describes where your jurisdiction is regarding unmet need?

- We're in a good place and don't think we'll need any assistance
- We're just starting to figure it out and may need assistance
- We haven't really started focusing on it yet so we're not sure what we need
- We're waiting for the NOFO to come out before we start

## RWHAP Unmet Need Resources

Recap of TA Materials and Resources



- TargetHIV website: <https://targethiv.org/library/topics/unmet-need>
  - Methodology for Estimating Unmet Need Instruction Manual
  - Estimating Unmet Need: Key Steps for RWHAP Parts A and B Recipients High Level Workflow Infographic
  - Frequently Asked Questions (FAQs)
  - Webinar recordings
- Request TA by emailing us at [RW\\_Unmet\\_Need@abtassoc.com](mailto:RW_Unmet_Need@abtassoc.com)
- Check out the May office hours!

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### RWHAP Unmet Need Resources: TA Materials (Anne)

Technical Assistance materials are posted on the TargetHIV website and the link is in this slide and Diane will also put that in the chat. These resources include:

- The manual which contains detailed information on how to complete the estimates and use the Excel files. There is a section for the required estimates and analyses and a different section for enhanced estimates and analyses. Once you determine which one you are doing, you can just use that section of the manual.
- The infographic which provides a high level overview of completing the Unmet Need requirement.
- An FAQ document that is being continuously updated


We've also completed five webinars which are posted on TargetHIV – these included ones that detail the data elements for both the required and enhanced estimates and analyses and considerations for which types of estimates and analyses to run and how to prepare for completing Unmet Need.

There will also be specific training videos posted to the TargetHIV website in May for recipients to view at anytime that include a walk through of the Excel reporting templates and optional calculation tables, as well as a video focused on all of the resources available to help with completing the Unmet Need requirement.


If you need TA, contact us at the email listed on this slide. Diane will also put it in the chat.

If you think of something now or later, please email us. We are here to help! We are also hosting May office hours-go to TargetHIV to learn more about these.





# Overview of the Updated Unmet Need Requirement and Framework



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RWHAP Unmet Need Framework Transition Slide (Anne)

Now we're going to briefly review the Updated Unmet Need Requirement and Framework. For those of you who have joined previous webinars, this will be a little bit of a review.

## Reporting Unmet Need Estimates and Analyses HRSA HAB FY 2022 Submission Requirements



- Beginning in FY 2022 (CY 2021), RWHAP Part A and Part B recipients will be required to submit Unmet Need estimates as part of the application in response to the Notice of Funding Opportunity (NOFO)
  - Required Reporting Templates will be submitted as Attachments in the application
  - Recipients will also need to respond to Unmet Need-related narrative questions in the NOFO
  - Updated Unmet Need estimates will be required to be submitted annually as part of the NOFO or Non-Competing Continuation (NCC)

### Reporting Unmet Need Estimates and Analyses (Anne)

Beginning in FY 2022, recipients will be required to submit Unmet Need estimates as part of the application in response to the Notice of Funding Opportunity, also referred to as a NOFO.

Only the required estimates and analyses have to be submitted but recipients can submit enhanced estimates and analyses. There will also be narrative questions related to unmet need that will need to be addressed based on the data in the reporting template. The Unmet Need estimates will be required to be updated annually and submitted as part of the Part A and Part B NOFOs and/or non-competing continuations.

## Updated Unmet Need Framework

### Required Estimates and Analyses



- Meets the minimum Unmet Need requirement
- Uses HIV surveillance data
  - Most recent calendar year available except for population size which is most recent five calendar year period
- Has three main components:
  - Late Diagnoses
  - Unmet Need
  - In Care, Not Virally Suppressed
- Includes estimates and analyses for the HIV population and three priority populations
- Linked databases are not required

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### Updated Unmet Need Framework: Required Estimates and Analyses (Anne)

As we've discussed in previous webinars, the required estimates and analyses meet the minimum requirement for all Part A and B recipients. The required estimates and analyses use HIV surveillance data for the most recent calendar year except for population size which uses the most recent five calendar year period. There are three main components: Late Diagnoses, Unmet Need and In Care Not Virally Suppressed.

Recipients are expected to complete estimates and analyses for the HIV population (including all new diagnoses and people living with diagnosed HIV infection) and three priority populations that are selected by the jurisdiction. These may be the same as Early Identification of Individuals with HIV/AIDS (EIIHA) or Minority AIDS Initiative (MAI) target populations but this is not required. Additional guidance will be included in the NOFO.

Linked databases are not required for the required estimates and analyses.

## Updated Unmet Need Framework

### Enhanced Estimates and Analyses



- Meets the minimum unmet need requirement (also known as the Required Estimates and Analyses) and includes additional analyses and estimates
- Uses HIV surveillance and RWHAP data
  - Most recent calendar year available except for HIV surveillance data population size as previously noted
- Can be completed using linked databases
- Includes the three main components for the required estimates plus:
  - Unmet Need for RWHAP clients
  - In Care, Not Virally Suppressed for RWHAP clients
- Includes estimates and analyses for the HIV population, RWHAP clients, three priority populations and subpopulation analyses

### Updated Unmet Need Framework: *Enhanced* Estimates and Analyses (Debbie)

While the **required** estimates and analyses using HIV surveillance data are very helpful, they can be limiting for RWHAP planning or resource allocation purposes for jurisdictions. The enhanced estimates and analyses include ALL of the requirements I just reviewed PLUS additional estimates and analyses that can be useful for RWHAP planning and resource allocation. These additional estimates and analyses are optional but are recommended if feasible; how much of the additional estimates and analyses are completed is also up to the recipient.

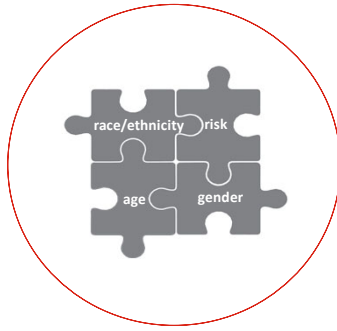
The additional estimates and analyses use both HIV surveillance AND RWHAP data for the most recent calendar year except for population size. The most recent calendar year must be the same for all data sources. Jurisdictions can also choose to use linked databases but that is not required. The additional estimates and analyses includes all of the key components that we just reviewed for HIV surveillance data plus two others for RWHAP data—unmet need and in care not virally suppressed.

This means that recipients are expected to run estimates and analyses for the HIV population (all new diagnoses and people living with diagnosed HIV infection) and priority populations. In addition, they can run estimates and analyses for RWHAP clients including the same three priority populations they ran for HIV surveillance data. Additional subpopulation analyses (by age, current gender identity, etc) are also recommended for both HIV surveillance and RWHAP data.

## Required or Enhanced



- By using the CDC SAS code, all recipients can complete at least some of the enhanced estimates and analyses




Subpopulation analyses, but excludes health planning areas


### Required or Enhanced (Anne)

So one thing that I wanted to make sure was clear is that the CDC SAS program that you'll hear more about later in the webinar enables you to complete at some of the enhanced estimates and analyses. That's because it provides the code to run subpopulation analyses. The two analyses that the SAS program does not calculate are priority populations and health planning areas.

If you have any questions, please enter them using the Q&A feature and we'll address them. Okay, now, I'll pass the discussion over to Debbie to review the Excel files.



# Required Reporting Templates and Optional Calculation Tables



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RWHAP Unmet Need Framework Transition Slide (Debbie)

So now I'm going to talk more about the Required Reporting Templates and Optional Calculation tables.

So as I display the information, if you want to enlarge the display, you can hover over the left hand side panel and you should see a magnifying glass. This will increase the size of your display.

## Excel Tool Resources



- Two versions of the required reporting templates and optional calculation tables
  - Version 1 and Version 2
    - Six templates and tables
    - Main difference is that data auto-populates across different templates and tables in V1
- Methodology for Estimating Unmet Need Instruction Manual
  - Provides instructions regarding how to complete the templates and tables
- Instructional video under development
  - Provides overview of the functionality of the templates and tables

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### Populate Reporting Templates (Debbie)

First, I want to highlight what resources are available. There are actually two different versions of the Excel Tool. While they both have the same templates and tables, what differs is how the different templates and tables relate to one another.

In version 1, data auto-populates across different templates and tables. This means you can populate the Optional Calculation Tables, and they will then automatically populate the Required Reporting Templates.

In version 2, this feature does not exist. Both versions have validations and auto-calculation fields (cells highlighted in yellow) to make things easier for you. For the purposes of today's review, I'm going to use V2 for most of the demonstration but will be sure to highlight the data auto-populate feature in V1.

The Unmet Need instruction manual is the best resource for step by step instructions. There will also be an instructional video that will provide an overview of the functionality of the templates and tables. These can all be found on the Unmet Need page on TargetHIV.

Now let's talk a little more detail about the templates and tables. For purposes of this review, I'll be using version 2.

## Required Reporting Templates and Optional Calculation Tables



- Two Required Reporting Templates
  - Reporting Template A: Unmet Need
  - Reporting Template B: Priority Pops
- Four Optional Calculation Tables
  - Table 1A – HIV Surveillance Data
  - Table 1B – RWHAP Data
  - Table 2A – Subpop HIV Surveillance
  - Table 2B – Subpop RWHAP

### Populate Reporting Templates (Debbie)

There are six tabs in the Excel document: Two required reporting templates and four optional calculation tables. The required reporting templates will need to be submitted as part of your response to the NOFO. You can submit the optional calculation tables as well, but that is not required. Let's do a quick review of the required reporting templates and the optional calculation tables.

Diane is posting the link to the Excel files in the chat so you can download these as well.



# Required Reporting Template

## Template A: Unmet Need



| Reporting Template A - Unmet Need              |   |        |                        |   |                 |
|--|---|--------|------------------------|---|-----------------|
| Jurisdiction Name:                             |   |        | Approach?              |   |                 |
| Definition/Description                         |   |        | Linked Databases Used? |   |                 |
| A  | B   | Number | Percent                | Data Source   | Year(s) of Data |
| C  | D   | E      | F                      |   |                 |
| <b>HIV SURVEILLANCE DATA</b>                   |   |        |                        |   |                 |
| <b>Late Diagnosed</b>                          |   |        |                        |   |                 |
| 1  | <b>Late diagnoses:</b> Number of people with late diagnosed HIV in the most recent calendar year in the jurisdiction based on residence at time of diagnosis. Late diagnosed HIV is based on the first CD4 test result (<200 cells/mL or a CD4 percentage of total lymphocytes of <14) or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection. |        |                        | HIV Surveillance data   |                 |
| 2  | <b>New diagnoses:</b> Number of people in the jurisdiction with HIV diagnosed in the most recent calendar year based on residence at time of diagnosis.   |        |                        |   |                 |
| <b>Unmet Need</b>                              |   |        |                        |   |                 |
| 3  | <b>Unmet need:</b> Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address without any CD4 or VL test in the most recent calendar year.   |        |                        | HIV Surveillance data; if linked databases are used please specify? |                 |
| 4  | <b>Population size:</b> Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address who had an HIV diagnosis or any other HIV-related lab data (e.g., CD4, VL, genotype, or HIV test even if already diagnosed) reported to the HIV surveillance program during the most recent five calendar year period.                          |        |                        | HIV Surveillance data   |                 |
| <b>In Care, Not Virally Suppressed</b>         |   |        |                        |   |                 |
| 5  | <b>Not virally suppressed:</b> Number of people living with diagnosed HIV infection in the jurisdiction who are in care and whose most recent viral load test result was ≥200 copies/mL in the most recent calendar year.   |        |                        | HIV Surveillance data; if linked databases are used please specify? |                 |
| <b>RYAN WHITE HIV/AIDS PROGRAM (RWHP) DATA</b> |   |        |                        |   |                 |
| <b>Unmet Need</b>                              |   |        |                        |   |                 |
| 6  | <b>Unmet need:</b> Number of RWHP clients in the jurisdiction without any CD4, VL, test or OAHs visit <sup>1</sup> in the most recent calendar year.  |        |                        | RWHP Database; if linked databases are used please specify?         |                 |
| 7  | <b>RWHP clients:</b> Number of RWHP clients in the jurisdiction who received any RWHP or RWHP-related funded service in the most recent calendar year.  |        |                        | RWHP data   |                 |
| <b>In Care, Not Virally Suppressed</b>         |   |        |                        |   |                 |
| 8  | <b>Not virally suppressed:</b> Number of RWHP clients in the jurisdiction who are in care and whose most recent viral load test result was ≥200 copies/mL in the most recent calendar year.   |        |                        | RWHP Database; if linked databases are used please specify?         |                 |

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### Required Reporting Templates: (Debbie)

There are two templates that recipients must use in order to report their Unmet Need Estimates. Template A-Unmet Need is where recipients will report Late Diagnoses, Unmet Need and In Care, Not Virally Suppressed **using HIV surveillance data and Unmet Need and Not Virally Suppressed using RWHP data (if applicable)**. **If linked databases are used, jurisdictions would note this under the data source for the care pattern definitions (unmet need)**. The cells highlighted in yellow will be auto-calculated as part of the Excel tool.

# Required Reporting Template

## Template B: Priority Populations



| Reporting Template B - Priority Populations     |  |                 |                                   |                   |                                   |                   |                                   |                           |                   |              |                                   |      |
|---|--|-----------------|-----------------------------------|-------------------|-----------------------------------|-------------------|-----------------------------------|---------------------------|-------------------|--------------|-----------------------------------|------|
| Jurisdiction Name:                              |  |                 |                                   |                   |                                   |                   |                                   |                           |                   |              | Approach?                         |      |
| Category  | Totals   |                 | Numerical Inputs                  |                   |                                   |                   | Auto-Calculated Percentages       |                           |                   |              |                                   |      |
|   | # of People Living with Diagnosed HIV Infection          | # New Diagnoses | # Late Diagnoses                  | # Unmet Need      | # In Care, Not Virally Suppressed | Within Categories |                                   |                           | Across Categories |              |                                   |      |
|   |  |                 |                                   |                   |                                   | % Late Diagnosed  | % Unmet Need                      | % In Care, Not Suppressed | % Late Diagnosed  | % Unmet Need | % In Care, Not Virally Suppressed |      |
| A   | B  | C               | D                                 | E                 | F                                 | G                 | H                                 | I                         | J                 | K            | L                                 | M    |
| <b>HIV SURVEILLANCE DATA</b>                    |  |                 |                                   |                   |                                   |                   |                                   |                           |                   |              |                                   |      |
| 1   | Total  |                 |                                   |                   |                                   |                   | 0.0%                              | 0.0%                      | 0.0%              | 0.0%         | 0.0%                              | 0.0% |
| 2   | <b>PRIORITY POPULATIONS (Determined by Jurisdiction)</b> |                 |                                   |                   |                                   |                   |                                   |                           |                   |              |                                   |      |
|   | Priority Population #1                                   |                 |                                   |                   |                                   |                   | 0.0%                              | 0.0%                      | 0.0%              | 0.0%         | 0.0%                              | 0.0% |
|   | Priority Population #2                                   |                 |                                   |                   |                                   |                   | 0.0%                              | 0.0%                      | 0.0%              | 0.0%         | 0.0%                              | 0.0% |
|   | Priority Population #3                                   |                 |                                   |                   |                                   |                   | 0.0%                              | 0.0%                      | 0.0%              | 0.0%         | 0.0%                              | 0.0% |
| <b>RYAN WHITE HIV/AIDS PROGRAM (RWHAP) DATA</b> |  |                 |                                   |                   |                                   |                   |                                   |                           |                   |              |                                   |      |
| Category  | Totals   |                 | Numerical Inputs                  |                   |                                   |                   | Auto-Calculated Percentages       |                           |                   |              |                                   |      |
|   | # of RWHAP Clients                                       | # Unmet Need    | # In Care, Not Virally Suppressed | Within Categories |                                   |                   | Across Categories                 |                           |                   |              |                                   |      |
|   |  |                 |                                   | % Unmet Need      | % In Care, Not Suppressed         | % Unmet Need      | % In Care, Not Virally Suppressed |                           |                   |              |                                   |      |
| A   | B  | C               | D                                 | E                 | F                                 | G                 | H                                 | I                         | J                 | K            | L                                 | M    |
| 5   | Total  |                 |                                   |                   |                                   |                   | 0.0%                              | 0.0%                      |                   |              | 0.0%                              | 0.0% |
| 6   | <b>PRIORITY POPULATIONS (Determined by Jurisdiction)</b> |                 |                                   |                   |                                   |                   |                                   |                           |                   |              |                                   |      |
|   | Priority Population #1                                   |                 |                                   |                   |                                   |                   | 0.0%                              | 0.0%                      |                   |              | 0.0%                              | 0.0% |
|   | Priority Population #2                                   |                 |                                   |                   |                                   |                   | 0.0%                              | 0.0%                      |                   |              | 0.0%                              | 0.0% |
|   | Priority Population #3                                   |                 |                                   |                   |                                   |                   | 0.0%                              | 0.0%                      |                   |              | 0.0%                              | 0.0% |

### Template B: (Debbie)

Template B is for reporting the priority populations. Similar to template A, recipients can report target populations for both HIV surveillance data and RWHAP data. As with template A, there are yellow autocalculated cells.

# Optional Calculation Tables

## Table 1A-HIV Surveillance Data



| Calculation Table 1A: Unmet Need Framework HIV Surveillance Data |  |               |                |   |
|--|--|---------------|----------------|---|
| Jurisdiction Name:   |  |               |                |   |
| A  | B  | C             | D              | E   |
| <b>Years of data</b>   |  |               |                |   |
| 1  | <b>New Diagnoses:</b> Most recent calendar year for which data are available   |               |                |   |
| 2  | <b>Care Patterns:</b> Most recent calendar year for which data are available   |               |                |   |
| 3  | <b>Population size:</b> Most recent 5 calendar year period for which data are available  |               |                |   |
|  | <b>Definition/Description</b>  | <b>Number</b> | <b>Percent</b> | <b>Data Source</b>  |
| <b>Late Diagnosed</b>  |  |               |                |   |
| 4  | <b>Late diagnoses:</b> Number of people with late diagnosed HIV in the most recent calendar year in the jurisdiction based on residence at time of diagnosis. Late diagnosed HIV is based on the first CD4 test result (<200 cells/mL or a CD4 percentage of total lymphocytes of <14) or documentation of an AIDS-defining condition ≤3 months after a diagnosis of HIV infection |               | 0.0%           | HIV Surveillance data   |
| 5  | <b>New diagnoses:</b> Number of people in the jurisdiction with HIV diagnosed in the most recent calendar year based on residence at time of diagnosis   |               |                |   |
| <b>Population Size</b>   |  |               |                |   |
| 6  | <b>Population size:</b> Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address who had an HIV diagnosis or any other HIV-related lab data (e.g., CD4, VL, genotype, or HIV test even if already diagnosed) reported to the HIV surveillance program during the most recent five calendar year period                          |               |                | HIV Surveillance data   |
| <b>Care Patterns</b>   |  |               |                |   |
| 7  | <b>Met need (in care):</b> Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address with a CD4 test or VL test in the most recent calendar year   |               | 0.0%           | HIV Surveillance data; if linked databases are used please specify <sup>1</sup> |
| 8  | <b>Unmet need:</b> Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address without any CD4 or VL test in the most recent calendar year   |               | 0.0%           |   |
| <b>In Care, Viral Suppression</b>                                |  |               |                |   |
| 9  | <b>Virally suppressed:</b> Number of people living with diagnosed HIV infection in the jurisdiction who are in care and whose most recent viral load test result was <200 copies/mL in the most recent calendar year   |               | 0.0%           | HIV Surveillance data; if linked databases are used please specify <sup>1</sup> |
| 10   | <b>Not virally suppressed:</b> Number of people living with diagnosed HIV infection in the jurisdiction who are in care and whose most recent viral load test result was ≥200 copies/mL in the most recent calendar year   |               | 0.0%           |   |

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While there are four optional tables, I'm going to focus on the ones for HIV surveillance data given today's presentation by CDC. The first table is Table 1A. You'll notice that this has a few more rows than the Required Reporting template A but otherwise is very similar. It also focuses specifically on the HIV surveillance data.

The output from the CDC SAS program will populate this table for you. The content includes late diagnosed, population size, care patterns and In Care Viral Suppression.

# Optional Calculation Tables

## Table 1B-RWHAP Data



| Calculation Table 1B: Unmet Need Framework Ryan White HIV/AIDS Program (RWHAP) Data |  |        |         |  |
|---|--|--------|---------|--|
| Jurisdiction Name:  |  |        |         |  |
| A   | B  | C      | D       | E  |
| Year of data  |  |        |         |  |
| 1   | Care Patterns: Most recent calendar year for which data are available  |        |         |  |
| Definition/Description  |  | Number | Percent | Data Source  |
| <b>RWHAP Clients</b>  |  |        |         |  |
| 2   | <b>RWHAP clients:</b> Number of RWHAP clients in the jurisdiction who received any RWHAP or RWHAP-related funded service in the most recent calendar year  |        |         | RWHAP Database   |
| <b>Care Patterns</b>  |  |        |         |  |
| 3   | <b>Met need (in care):</b> Number of RWHAP clients in the jurisdiction with a CD4 or VL test or OAHS visit <sup>2</sup> in the most recent calendar year   |        | 0.0%    | RWHAP Database; if linked databases are used please specify <sup>2</sup> |
| 4   | <b>Unmet need:</b> Number of RWHAP clients in the jurisdiction without any CD4, VL test or OAHS visit <sup>3</sup> in the most recent calendar year        |        | 0.0%    |  |
| <b>In Care, Viral Suppression</b>   |  |        |         |  |
| 5   | <b>Virally suppressed:</b> Number of RWHAP clients in the jurisdiction who are in care and whose most recent viral load test result was <200 copies/mL     |        | 0.0%    | RWHAP Database; if linked databases are used please specify <sup>2</sup> |
| 6   | <b>Not virally suppressed:</b> Number of RWHAP clients in the jurisdiction who are in care and whose most recent viral load test result was ≥200 copies/mL |        | 0.0%    |  |

Table 1B is specifically for RWHAP data. Content from Table 1B populates the RWHAP section of Required Reporting Template A-Unmet Need.

# Optional Calculation Tables

## Table 2A-Subpops HIV Surveillance



Calculation Table 2A: Subpopulation Analyses – HIV Surveillance Data

Jurisdiction Name:

| A | B   | Totals   |                         | Numerical Inputs      |                |                   |                                      | Auto-Calculated Percentages |                   |                                      |                       |                   |                                      |
|---|---|--|-------------------------|-----------------------|----------------|-------------------|--------------------------------------|-----------------------------|-------------------|--------------------------------------|-----------------------|-------------------|--------------------------------------|
|   |   | C<br># of People Living with Diagnosed HIV Infection | D<br># of New Diagnoses | E<br># Late Diagnoses | F<br># In Care | G<br># Unmet Need | H<br># In Care Not Viroly Suppressed | Within Categories           |                   |                                      | Across Categories     |                   |                                      |
|   |   |  |                         |                       |                |                   |                                      | I<br>% Late Diagnosed       | J<br>% Unmet Need | K<br>% In Care Not Viroly Suppressed | L<br>% Late Diagnosed | M<br>% Unmet Need | N<br>% In Care Not Viroly Suppressed |
| 1 | Total   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
| 2 | <b>CURRENT GENDER IDENTITY</b>                |  |                         |                       |                |                   |                                      |                             |                   |                                      |                       |                   |                                      |
|   | Male  |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | Female  |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | Transgender                                   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
| 3 | <b>RACE/ETHNICITY</b>                         |  |                         |                       |                |                   |                                      |                             |                   |                                      |                       |                   |                                      |
|   | American Indian/Alaska Native Non-Hispanic    |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | Asian Non-Hispanic                            |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | Black/African American Non-Hispanic           |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | Hispanic/Latino                               |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | Native Hawaiian/Pacific Islander Non-Hispanic |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | White Non-Hispanic                            |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | Multiple races Non-Hispanic                   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | Unknown                                       |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
| 4 | <b>AGE</b>                                    |  |                         |                       |                |                   |                                      |                             |                   |                                      |                       |                   |                                      |
|   | <13   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | 13-24   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | 25-34   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | 35-44   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | 45-54   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | 55-64   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |
|   | 65+   |  |                         |                       |                |                   |                                      | 0.0%                        | 0.0%              | 0.0%                                 | 0.0%                  | 0.0%              | 0.0%                                 |

Table 2A includes these same areas for all of the subpopulation analyses including priority populations and health planning areas. It is specifically for HIV surveillance data.

# Optional Calculation Tables

## Table 2B-Subpops RWHAP



Table 2B: Subpopulation Analyses – RWHAP Data


Jurisdiction Name:

| A | B   | Totals |                    |           |              | Auto-Calculated Percentages      |              |                                  |              |
|---|---|--------|--------------------|-----------|--------------|----------------------------------|--------------|----------------------------------|--------------|
|   |   | C      | Numerical Inputs   |           |              | Within Categories                |              | Across Categories                |              |
|   |   |        | # of RWHAP Clients | # In Care | # Unmet Need | # In Care Not Vrially Suppressed | % Unmet Need | % In Care Not Vrially Suppressed | % Unmet Need |
|   |   |        |                    |           |              |                                  |              |                                  |              |
| 1 | Total   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
| 2 | <b>CURRENT GENDER IDENTITY</b>                |        |                    |           |              |                                  |              |                                  |              |
|   | Male  |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | Female  |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | Transgender                                   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
| 3 | <b>RACE/ETHNICITY</b>                         |        |                    |           |              |                                  |              |                                  |              |
|   | American Indian/Alaska Native Non-Hispanic    |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | Asian Non-Hispanic                            |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | Black/African American Non-Hispanic           |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | Hispanic/Latino                               |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | Native Hawaiian/Pacific Islander Non-Hispanic |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | White Non-Hispanic                            |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | Multiple races Non-Hispanic                   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | Unknown                                       |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
| 4 | <b>AGE</b>                                    |        |                    |           |              |                                  |              |                                  |              |
|   | <13   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | 13-24   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | 25-34   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | 35-44   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | 45-54   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | 55-64   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |
|   | 65+   |        |                    |           |              | 0.0%                             | 0.0%         | 0.0%                             | 0.0%         |

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Table 2B includes these same areas for all of the subpopulation analyses including priority populations and health planning areas. It is specifically for RWHAP data.

Let's Hear from You!



**Discussion and Questions...**

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Let's Hear from You: Discussion and Questions (Facilitated by Anne)

Review Q&A

(At the end)

Thanks for your participation, please remember to complete the evaluation that will come up at the end of the webinar, we want to hear your feedback on this training!

Thanks and have a great day!



## **Guidance for Running CDC-Supplied SAS Programs for Unmet Need Estimates and Analyses**

**Baohua Wu, MS**

**HIV Incidence and Case Surveillance Branch**

**Division of HIV/AIDS Prevention**

April 15, 2021

Good afternoon, my name is Baohua Wu and I am a statistician with CDC. I am the developer of the CDC SAS programs to be run against the state/local eHARS database unmet need estimates and analyses.



## Outline

- **Data Preparation and Location of SAS programs**
- **Instructions for running SAS programs**
- **Tips for completing a subset analysis**
- **Resources and contacts**

Today I will discuss the following: I will inform you of how to prepare the datasets needed to run the programs and will let you know where the SAS programs can be found and downloaded. I will then provide instructions on downloading the file. I will briefly review how to run the programs and how to do subset analysis. I will end by informing you of available resources and providing you with contacts for support with running the programs.

## **eHARS Data Preparation and Location of Programs**

I will now discuss eHARS data preparation and the location of the SAS programs.

## Prepare data sets

- **Extract data sets from eHARS system**
  - Person
  - Document and Lab(in the same folder)
  - PITA data set (to be created with PITA\_4\_STATE.sas)

**Note: These four data sets need to be extracted/created on the same day!**

Before running the HRSA Unmet Need programs, 3 data sets need to be extracted from the state/local eHARS system. 1. Person. 2. Document 3. Lab. The Document and Lab datasets are usually stored in the same folder. Please remember to extract these 3 data sets on the same day. If you extract them on different days your analysis may not produce accurate results.

After you have extracted the 3 files, the point in time address (PITA) dataset needs to be created using the PITA\_4\_state.SAS program. This program is also provided by CDC and is located inside the CDC-supplied SAS programs folder on CDC's HIV surveillance SharePoint site.

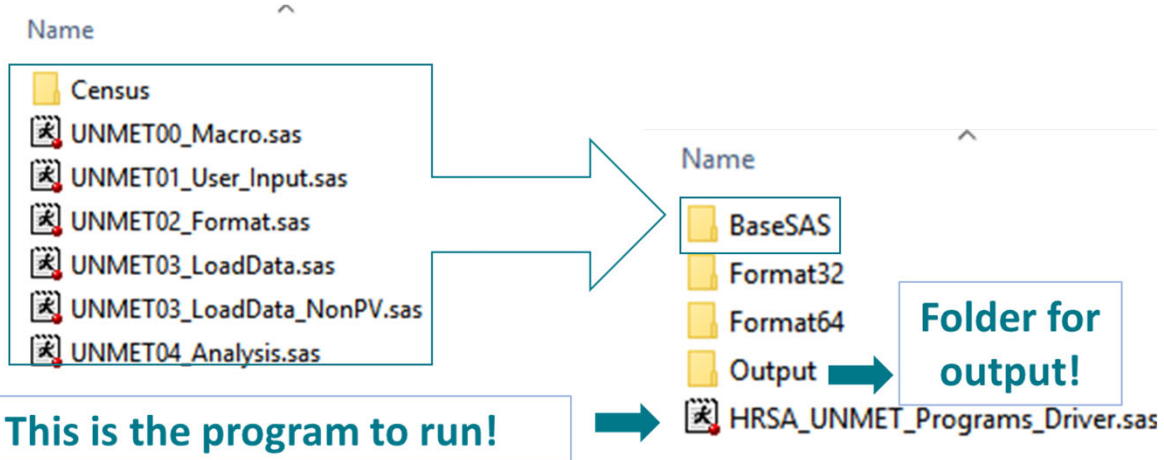
## **Location of Unmet Need SAS programs**

- **Located on CDC's HIV Incidence and Case Surveillance Branch's secure SharePoint site**
- **Stored inside the CDC-supplied SAS programs folder**
- **Name of program: HRSAUnmet.zip**

State/local surveillance program staff can access the unmet need SAS programs from CDC's HIV Incidence and Case Surveillance Branch's secure SharePoint site. The SAS programs are stored inside the CDC-supplied SAS programs folder. The name of the program is HRSAUnmet.zip. User should copy the zip file to their local drive.

All HIV surveillance coordinators should have access to the SharePoint site. If the surveillance coordinator does not have access to the HICSB SharePoint, they should contact their CDC assigned HIV surveillance project officer to request access.

## Unzip “HRSAUnmet.zip” package



After you have downloaded the “**HRSAUnmet.zip file**” to your local drive, you will need to unzip the package to a folder in your computer. Please note that, the folder name should not have any special characters, such as a comma, otherwise, the programs will not run.

After unzipping the package, you will see that the folder contains four subfolders and the **HRSA\_UNMET\_Programs\_Driver** SAS program.






In the **BaseSAS** subfolder, there are a few single SAS files. These files will be called through the driver SAS program. Unless there are special requirements for running, such as the need to complete a subset analysis, users do not need to do anything to these SAS files.

The **Format32/64** folder contains the formats the Unmet programs need. The programs will automatically select the compatible SAS format file based on your SAS system, either 32bits or 64bits. The **Output** folder is where the final output file will be saved, e.g. the excel report after you run the program.

## Instructions for Running Unmet Need SAS Programs

After you have the datasets ready, you can proceed with running the unmet need SAS programs.

## Step 1: Run the SAS Driver program

| Name   | Date modified     | Type                | Size |
|--|-------------------|---------------------|------|
|  BaseSAS                        | 3/4/2021 9:19 AM  | File folder         |      |
|  Format32                       | 8/31/2020 4:17 PM | File folder         |      |
|  Format64                       | 8/31/2020 4:17 PM | File folder         |      |
|  Output                         | 3/3/2021 10:52 AM | File folder         |      |
|  HRSA_UNMET_Programs_Driver.sas | 3/4/2021 1:42 PM  | SAS System Progr... | 3 KB |

**This is the  
program to run!**

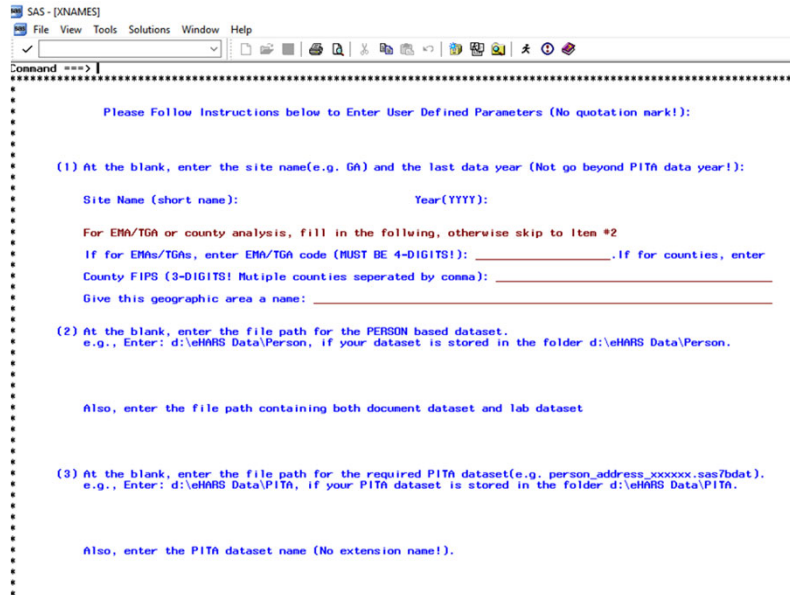
The only program you will need to open, and run is the **HRSA\_UNMET\_Programs\_Driver** program.

## Step 2: Follow Instructions of User Interface

#1-enter site name  
and last data year

#2-enter file paths  
for PERSON based  
dataset and  
document and lab  
dataset

#3-enter file path  
for the PITA dataset  
and dataset name



SAS - [XNAMES]  
File View Tools Solutions Window Help

Command >>> |

.....

Please Follow Instructions below to Enter User Defined Parameters (No quotation mark!):

(1) At the blank, enter the site name(e.g. GA) and the last data year (Not go beyond PITA data year!):

Site Name (short name): \_\_\_\_\_ Year(YYYY): \_\_\_\_\_

For EMA/TGA or county analysis, fill in the following, otherwise skip to Item #2  
If for EMAs/TGAs, enter EMA/TGA code (MUST BE 4-DIGITS!): \_\_\_\_\_ . If for counties, enter  
County FIPS (3-DIGITS! Multiple counties separated by comma): \_\_\_\_\_

Give this geographic area a name: \_\_\_\_\_

(2) At the blank, enter the file path for the PERSON based dataset.  
e.g., Enter: d:\eHARS Data\Person, if your dataset is stored in the folder d:\eHARS Data\Person.

Also, enter the file path containing both document dataset and lab dataset

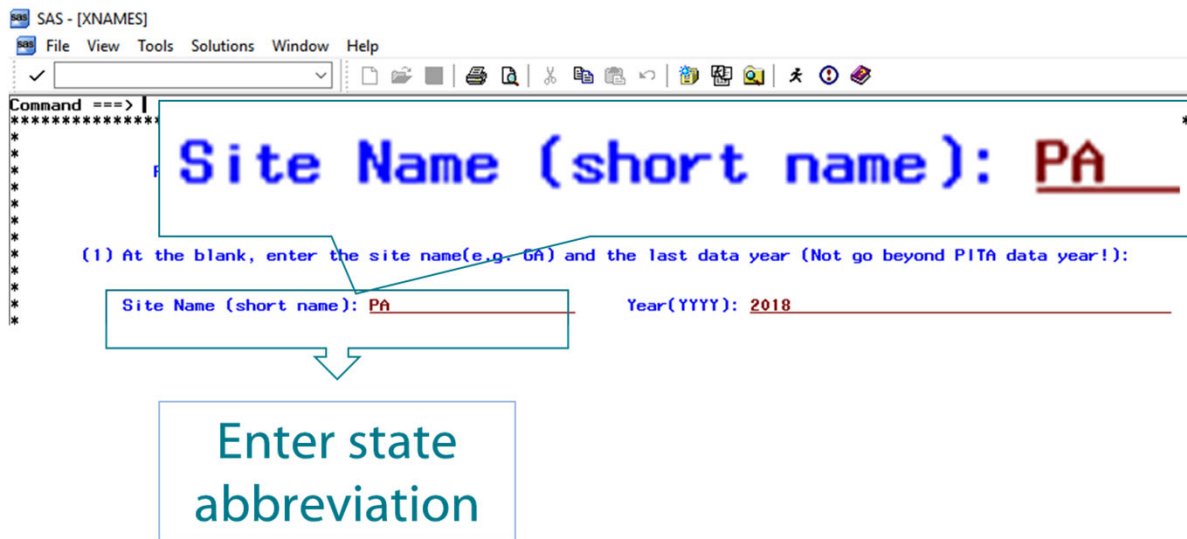
(3) At the blank, enter the file path for the required PITA dataset(e.g. person\_address\_XXXXX.sas7bdat).  
e.g., Enter: d:\eHARS Data\PITA, if your PITA dataset is stored in the folder d:\eHARS Data\PITA.

Also, enter the PITA dataset name (No extension name!).

Once you open and click run the driver program, a user interface will pop up. Users will need to **follow instructions** provided in the **user interface**.



## Step 2a: Define parameter, Site (required)



Users will need to **enter the required parameters** to run the programs.

The **first required parameter** to define is the **site**. Here you will need to enter the **state abbreviation**.

## Step 2b: Define parameter, Data Year (required)

SAS - [XNAMES]  
File View Tools Solutions Window Help

Command ==> |

\*\*\*\*\*  
\*  
\* Please Follow Instructions \*\*\*\*\*  
\*  
\* Year(YYYY): **2018**  
\*  
\* (1) At the blank, enter the site name(e.g. GA) and the last data year (Not go beyond PITA data year!):  
\*  
\* Site Name (short name): PA Year(YYYY): 2018  
\*  
\*\*\*\*\*

Programs will not allow for analysis of data for years prior to 2010.

Use caution when interpreting results produced using an eHARS dataset produced less than 12 months from the data year analyzed.

The **second required parameter** to define is the **data year** to be analyzed.

Please note that the **program does not allow for analysis of year prior to 2010**. As this was the criteria used to set up the programs, if user enter 2008, for example, a message will pop up to say the data range needs to start from 2010.

Note. Caution should be used when interpreting results of care outcomes analyses produced using an eHARS dataset produced less than 12 months from the year of interest. Accuracy of care outcomes depend on (1) complete reporting of laboratory results and (2) complete ascertainment of death information.

Note: This step is for subset analysis by EMA/TGA/County only!

## Step 2c: Define parameter, EMA/TGA/county (optional)

If for EMAs/TGAs, enter EMA/TGA code (MUST BE 4-DIGITS!): \_\_\_\_\_

For EMA/TGA or county analysis, fill in the following, otherwise skip to Item #2

If for EMAs/TGAs, enter EMA/TGA code (MUST BE 4-DIGITS!): \_\_\_\_\_ . If for counties, enter County FIPS (3-DIGITS! Multiple counties separated by comma): \_\_\_\_\_

Give this geographic area a name: \_\_\_\_\_

County FIPS (3-DIGITS! Multiple counties separated by comma): \_\_\_\_\_

Must provide area codes and names for  
EMA/TGA or county analyses.  
Cannot be both.

The **third parameter is optional** and only needs to be completed for **TGA/EMA/county analyses**. Users will need to **provide the area code and names**. If not completing TGA/EMA/county analyses, users should leave the fields blank and go to item 2 in the user interface.

## EMA/TGA and county fips code file

Metro Area Code

Metro Area Name

County Fips

| A               | B  | C              | D             | E  | F       |
|-----------------|--|----------------|---------------|--|---------|
| Metro Area Code | Metro Area Name                                  | State          | No. of County | County Fips  | EMA/TGA |
| 0520            | Atlanta, GA                                      | Georgia        | 20            | 013, 015, 045, 057, 063, 067, 077, 089, 097, 113, 117, 121, 135, 151, 217, 223, 227, 247, 255, 297 | EMA     |
| 0640            | Austin-San Marcos, TX                            | Texas          | 5             | 021, 055, 209, 453, 491  | EMA     |
| 0720            | Baltimore, MD                                    | Maryland       | 7             | 003, 005, 013, 025, 027, 035, 510  | EMA     |
| 0875            | Bergen-Passaic, NJ                               | New Jersey     | 2             | 003, 031   | EMA     |
| 1123            | Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH | Massachusetts  | 7             | 005, 009, 017, 021, 023, 025, 027  | EMA     |
| 1123            | Boston-Worcester-Lawrence-Lowell-Brockton, MA-NH | New Hampshire  | 3             | 011, 015, 017  | EMA     |
| 1294            | Baton Rouge, LA                                  | Louisiana      | 9             | 005, 033, 037, 047, 063, 077, 091, 121, 125  | TGA     |
| 1310            | Caguas, PR                                       | Puerto Rico    | 5             | 025, 035, 041, 063, 129  | EMA     |
| 1600            | Chicago, IL                                      | Illinois       | 9             | 031, 037, 043, 063, 089, 093, 097, 111, 197  | EMA     |
| 1674            | Charlotte-Gastonia-Rock Hill, NC-SC              | North Carolina | 5             | 007, 025, 071, 119, 179  | TGA     |
| 1674            | Charlotte-Gastonia-Rock Hill, NC-SC              | South Carolina | 1             | 091  | TGA     |
| 1680            | Cleveland-Lorain-Elyria, OH                      | Ohio           | 6             | 007, 035, 055, 085, 093, 103   | EMA     |
| 1814            | Columbus, OH                                     | Ohio           | 8             | 041, 045, 049, 089, 097, 117, 129, 159   | TGA     |
| 1920            | Dallas, TX                                       | Texas          | 8             | 085, 113, 121, 139, 213, 231, 257, 397   | EMA     |
| 2080            | Denver, CO                                       | Colorado       | 5             | 001, 005, 031, 035, 059  | EMA     |
| 2160            | Detroit, MI                                      | Michigan       | 6             | 087, 099, 115, 125, 147, 163   | EMA     |
| 2281            | Dutchess County, NY                              | New York       | 1             | 027  | EMA     |
| 2650            | Fort Lauderdale, FL                              | Florida        | 1             | 011  | EMA     |
| 2650            | Indianapolis-Carmel, IN                          | Indiana        | 10            | 011, 013, 057, 059, 063, 081, 097, 109, 133, 145   | EMA     |
| 2800            | Fort Worth-Arlington, TX                         | Texas          | 4             | 221, 251, 367, 439   | TGA     |
| 3282            | Memphis, TN-MS-AR                                | Arkansas       | 1             | 035  | TGA     |
| 3282            | Memphis, TN-MS-AR                                | Mississippi    | 4             | 033, 093, 137, 143   | TGA     |
| 3282            | Memphis, TN-MS-AR                                | Tennessee      | 3             | 047, 157, 167  | TGA     |

In the package we provide an excel file which contains the EMA/TGA or county fips code information. The file can be found in the **Census folder in the BaseSAS folder**.

The **EMA/TGA** field must be populated with a **4-digit code**.

The **county fips** must be populated with a **3-digit code**.

If data are to be run for more than one county, a comma should be used to separate the counties' fips. You must choose to enter either EMAs/TGAs or counties. You cannot enter both. The area names used do not have to match the ones provided in the excel file. You can choose the name, however, be careful to not use any special characters. Commas may be used in the names.

## Step 2d: Enter complete path of required data sets (required)

Document and Lab

(2) At the blank, enter the file path for the PERSON based dataset.  
e.g., Enter: d:\eHARS Data\Person, if your dataset is stored in the folder d:\eHARS Data\Person.

Also, enter the file path containing both document dataset and lab dataset

Person

(3) At the blank, enter the file path for the required PITA dataset(e.g. person\_address\_XXXXXX.sas7bdat).  
e.g., Enter: d:\eHARS Data\PITA, if your PITA dataset is stored in the folder d:\eHARS Data\PITA.

PITA (point in time address)

**Important!**

All four data sets must be extracted/created from eHARS on the same day.

There are **4 eHARS-based datasets** needed to run the programs. Users need to provide the complete file path for the required **person dataset, document/lab datasets** (usually in one folder) and **point in time address dataset** also referred to as the PITA dataset.

Please remember, the four data sets need to be extracted/created from eHARS system on the same day/time. If the dataset does not exist in the given paths, a message will pop up to ask you to enter the correct file path. You will not be able to move forward if an incorrect file path is provided.

## Step 2e: Hit <Enter> key to run

If need/want to stop running, type in letter <y> or <Y> to Exit.

Exit w/o Running: N (Y/N)

Press <ENTER> when ready to continue

If the user needs/wants to stop running the program, just input <y> or <Y> in the space on the very bottom, otherwise, click <Enter> to keep running the programs. Please do not use the "X" icon from SAS system interface.

## Example of Table 1A Output

|    | A  | B  | C             | D              | E                     |
|----|--|--|---------------|----------------|-----------------------|
| 1  | <b>Calculation Table 1A: Unmet Need Framework HIV Surveillance Data.</b> |  |               |                |                       |
| 2  | <b>Jurisdiction Name: XX</b>   |  |               |                |                       |
| 3  |  |  |               |                |                       |
| 4  | <b>A</b>   | <b>B</b>   | <b>C</b>      | <b>D</b>       | <b>E</b>              |
| 5  | <b>Years of Data</b>   |  |               |                |                       |
| 6  | 1  | <b>New Diagnoses:</b> Most recent calendar year for which data are available   |               |                |                       |
| 7  | 2  | <b>Care Patterns:</b> Most recent calendar year for which data are available   |               |                |                       |
| 8  | 3  | <b>Population size:</b> Most recent 5 calendar year period for which data are available  |               |                |                       |
| 9  |  | <b>Definition/Description</b>  | <b>Number</b> | <b>Percent</b> | <b>Data Source</b>    |
| 10 | <b>Late Diagnosed</b>  |  |               |                |                       |
| 11 | 4  | <b>Late diagnoses:</b> Number of people with late diagnosed HIV in the most recent calendar year in the jurisdiction based on residence at time of diagnosis. Late diagnosed HIV is based on the first CD4 test result (<200 cells/mL or a CD4 percentage of total lymphocytes of <14) or documentation of an AIDS-defining condition <=3 months after a diagnosis of HIV infection. |               |                | HIV Surveillance data |
| 12 | 5  | <b>New diagnoses:</b> Number of people in the jurisdiction with HIV diagnosed in the most recent calendar year based on residence at time of diagnosis.  |               |                | HIV Surveillance data |
| 13 | <b>Population Size</b>   |  |               |                |                       |
| 14 | 6  | <b>Population size:</b> Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address who had an HIV diagnosis or any other HIV-related lab data (e.g., CD4, VL, genotype, or HIV test even if already diagnosed) reported to the HIV surveillance program during the most recent five calendar year period.                           |               |                | HIV Surveillance data |
| 15 | <b>Care Patterns</b>   |  |               |                |                       |
| 16 | 7  | <b>Met need (In care):</b> Number of people living with diagnosed HIV infection in the jurisdiction with a CD4 test or VL test in the most recent calendar year.   |               |                | HIV Surveillance data |
| 17 | 8  | <b>Unmet need:</b> Number of people living with diagnosed HIV infection in the jurisdiction based on most recent known address without any CD4 or VL test in the most recent calendar year.  |               |                | HIV Surveillance data |
| 18 | <b>In Care, Viral Suppression</b>  |  |               |                |                       |
| 19 | 9  | <b>Virally suppressed:</b> Number of people living with diagnosed HIV infection in the jurisdiction who are in care and whose most recent viral load test was <200 copies/mL in the most recent calendar year.   |               |                | HIV Surveillance data |
| 20 | 10   | <b>Not virally suppressed:</b> Number of people living with diagnosed HIV infection in the jurisdiction who are in care and whose most recent viral load test was >=200 copies/mL in the most recent calendar year.  |               |                | HIV Surveillance data |

This slide shows how **Table 1A** will look in the **output** excel file. This is a summary table of the outcomes needed for estimating unmet need.

# Example of Table 2A Output

| Calculation Table 2A: Subpopulation Analysis – HIV Surveillance Data |  |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
|--|--|----------|---|------------------------|------------------|-----------|--------------|--|------------------|--------------|--|------------------|--------------|--|--|
| Jurisdiction Name: XX  |  |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| A  | B                                      | Category | Total   |                        |                  |           |              | Numerical Inputs                       |                  |              | Within Categories                      |                  |              | Across Categories                      |  |
|  |  |          | # of People Living with Diagnosed HIV Infection | # of New HIV Diagnoses | # Late Diagnosed | # In Care | # Unmet Need | # In Care Not Virologically Suppressed | % Late Diagnosed | % Unmet Need | % In Care Not Virologically Suppressed | % Late Diagnosed | % Unmet Need | % In Care Not Virologically Suppressed |  |
|  |  |          | C   | D                      | E                | F         | G            | H                                      | I                | J            | K                                      | L                | M            | N                                      |  |
| 1  | Total                                  |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 2  | Gender                                 |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 9  | Male                                   |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 10   | Female                                 |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 11   | Transgender                            |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 12   | Race                                   |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 13   | American Indian/Alaska Native          |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 14   | Asian                                  |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 15   | Black/African American                 |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 16   | Hispanic/Latino <sup>a</sup>           |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 17   | Native Hawaiian/Other Pacific Islander |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 18   | White                                  |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 19   | Multiple races                         |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 20   | Unknown                                |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 21   | Age                                    |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 22   | 13 to 24                               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 23   | 25 to 34                               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 24   | 35 to 44                               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 25   | 45 to 54                               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 26   | 55 to 64                               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 27   | 65+                                    |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 28   | Transmission Category                  |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 29   | Male:                                  |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 30   | Male-to-male sexual contact            |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 31   | Injection drug use (IDU)               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 32   | Male-to-male sexual contact/IDU        |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 33   | Heterosexual contact                   |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 34   | Other/No Identified Risk               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 35   | Female:                                |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 36   | Injection drug use (IDU)               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 37   | Heterosexual contact                   |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 38   | Other/No Identified Risk               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 39   | Transgender:                           |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 40   | Sexual contact                         |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |
| 41   | Injection drug use (IDU)               |          |   |                        |                  |           |              |  |                  |              |  |                  |              |  |  |

This slide shows how **Table2A** will look in the **output** excel file. Table2A provides data on the outcomes by demographic variables such as gender/age/race/transmission category.



## Resources and Contacts

That completes the instructions on how to run analyses. I will now discuss resources and contacts.

## Resources and Contacts

- **Unmet Need SAS programs and presentation saved to CDC HIV Incidence and Case Surveillance Branch SharePoint site**
- **If state/local surveillance staff encounter issues or have questions regarding running the SAS programs, they should contact their CDC-assigned HIV surveillance project officer**

The SAS programs and this presentation are saved to CDC's HIV Incidence and Case Surveillance Branch's SharePoint site. As I stated at the beginning of the presentation, surveillance staff should have access to CDC's SharePoint site. If they do not they should contact their CDC-assigned HIV surveillance project officer.

If state/local HIV surveillance staff encounter issues or have questions regarding running the SAS programs they should contact their CDC-assigned HIV surveillance project officer.

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**CDC's HIV Incidence and Case Surveillance Branch developed the unmet need SAS programs to assist state/local HIV surveillance program staff in supporting their Ryan White program colleagues in producing unmet need estimates.**

I would like to acknowledge my CDC colleagues listed here on the slide who assisted me in the development of the SAS programs and this training.

## Questions?

For more information, contact CDC  
1-800-CDC-INFO (232-4636)  
TTY: 1-888-232-6348 [www.cdc.gov](http://www.cdc.gov)

The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.



We will now take your questions.