PEPFAR COP22 Data Pack User Guide & Data Dictionary

U.S. Department of State
U.S. Office of the Global AIDS Coordinator and Health Diplomacy (S/GAC)

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Chapter 1

COP22 DataPack Overview

Welcome to the COP22 DataPack User Manual. The following pages aim to provide users of the DataPack with the information necessary to successfully complete each tab of the DataPack tool and determine accurate, data-driven targets. For the past several years, the DataPack has a been a key element of PEPFAR COP planning, and for COP22 serves a critical function in assisting PEPFAR Country Teams in setting targets in line with the UNAIDS 95-95-95 goals for Testing, Care & Treatment, PMTCT, VMMC, OVC, and other program areas. Please note that the COP22 DataPack is mandatory and must be used to set targets for COP22. For COP22, all indicators included in the DataPack are **MER 2.6** indicators. For further information on the MER 2.6 indicators, please go to https://datim.zendesk.com/hc/en-us/sections/200929315-MER.

1.1 About the DataPack

The COP22 DataPack supports analysis for all targets by Priority Subnational Unit (PSNU), population, and Implementing Mechanism (IM). This tool supports calculation of targets based on expected treatment coverage rates by type of PSNU and population prioritization:

- Attained
- Scale-up: Aggressive
- Scale-up: Saturation
- Sustained

Prioritizations for PSNUs are based on COP Guidance section 7.3.2.ba. These determine for a given PSNU programmatically what HIV treatment and prevention services should be planned and informs both the overall strategy and the targets. Teams must review and revise their PSNU prioritization levels for COP22. The COP22 DataPack assumes a 'test and start' treatment platform and will develop targets for achieving 95% coverage in Scale up: Aggressive and Scale-up: Saturation PSNUs; all other targets in the DataPack are based on the treatment targets, insofar as the treatment targets are the main focus of reaching epidemic control, and therefore relate to both testing and prevention targets.

The DataPack will allow PEPFAR teams to use country specific programmatic assumptions to develop the optimal targets by PSNU along the program cascades to ensure the necessary number of PLHIV are diagnosed, linked, and start treatment. The DataPack does not necessarily calculate targets for every indicator, but it has space for teams to enter targets for all indicators and thus can be used to record agreed-upon COP targets, even for non-calculated indicators.

Teams must not modify the structure of the COP22 DataPack in any way. The Office of the US Global Aids Coordinator (OGAC) has developed a process by which targets can be directly imported into DATIM via the DataPack Site Tool in order to generate targets. However, this is *only* possible for teams that do not in any way alter the structure or format of the DataPack. Additional details are provided in COP Guidance and will be available through COP webinars.

1.2 Highlighted Changes from COP21 to COP22

The COP22 DataPack is largely the same as the COP21 DataPack. However, please note the following updates that have been implemented as a result of multiple feedback sessions with various country teams that had been identified by the PRIME team, as well as new programmatic changes that are reflected in the Section 7 of COP guidance. These changes revolve around workflow, ease of target setting, and linkage to the COP guidance based on different aspects of the DataPack that worked well and others that did not during COP21 target stetting:

- New Cascade Approach that will flow from Program Viral Load Suppression to testing to allow for countries closer or at Epi Control to more easily set targets, based on Section 7 of COP22 Guidance.
- Integration of new SNS Modalities for HTS and HTS_Recent.
- Targets will no longer be set for PrEP_CURR, but instead will be set for a replacement indicator of PrEP_CT.
- 50+ finer age bands across the clinical cascade. These will be aggregated to 50+ upon DATIM import for all but TX_CURR.
- **PSNUxIM tab structure** that will again handle de-duplication and IM allocation.

1.3 Data Flow and Review Process to COP22 Submission

The results from APR20 have been taken from DATIM and used to populate the DataPack. In turn, the DataPack targets will produce FY22 targets that will be subsequently submitted through DATIM after COP22 has been finalized and the PSNU level data entered into the Strategic Direction Summary (SDS) tables, where appropriate (Target related data).

DataPack Review

	Single OU Track: Group 1	Single OU Track: Group 2	Singel OU Track: Group 3	OUs at Epi Control	Regional /Country Pair Track
1st Draft Tool Su bmission	Feb 28	Mar 7	Mar 14	Mar 7 or Mar 14	Feb 28
COP Meeting	Mar 7-11	Mar 14-18	Mar 22-25	Mar 14-18 or Mar 22-25	Mar 22-25
M id-point Tool Check					
Tools Due for Final Review	Apr 4	Apr 11	Apr 18	Apr 11 or Apr 18	Apr 18

	Single OU Track: Group 1	Single OU Track: Group 2	Singel OU Track: Group 3	OUs at Epi Control	Regional /Country Pair Track
Ad ditional Touc hpoints/ Reviews					Rolling Each Monday
Tools S ubmitted for Upload	Apr 11	Apr 18	Apr 25	Apr 18 or Apr 25	Apr 25
COP21 Su bmission Due	Apr 19	Apr 22	Apr 29	Apr 22 or Apr 29	Apr 29

Submission Process

For each of the below submissions, the following process will occur:

- Country Teamspre-validates their DataPack submission in the DataPack Self-Service App (available at https://apps.datim.org/datapack/).
- Country Team uses DataPack Self-Service App to sync data with PAW Dossiers.
- Country Team saves DataPack to SharePoint under the OU's HQ Collaboration > COP 2022 - FY 2023 > Guidance, Tools, and Resources folder.
- Country Team submits a ticket in ZenDesk that includes:
  - A link to the DataPack file saved in SharePoint
  - Confirmation that this file has been pre-validated in the DataPack Self-Service App
  - Confirmation that this file has been sent to PAW via the DataPack Self-Service App
  - In copy: Chair, PPM, assigned DUIT Liaison, and any Interagency members that should be aware of ongoing review and discussions.
- Once this ticket is received, the DataPack Support Team will confirm all the above has occurred and send additional instructions as needed
- The PPM reviews the ticket/email thread and confirms the correct individuals have all been copied.
- The assigned PPM and the assigned DUIT Liaison use both the DataPack Self-Service App and the PAW COP Dossiers to validate and review the DataPack, noting any feedback in the ticket/email thread.
- The assigned Chair should also review all feedback on the ticket thread and any additional comments as needed.

As is possible, all the above should occur within a 24 hour turnaround from the initial submission of a DataPack from a Country Team. While this process will remain the same for each submission for review, the content of each review will differ, as explained below. Once a Zendesk ticket and email thread has been started with an initial DataPack submission, all future DataPack submissions related to the same Country should use the same thread/ticket to allow for easy coordination.

Submission 1

- Validate high-level strategic planning direction aligns with the vision set by the PLL.

- Highlight any areas for technical assistance.
- Ensure construction of DataPack has not been tampered with.

For this stage of review, it is not expected that your PSNUxIM tab be completed or even populated. At this stage, the focus should be on ensuring the high-level cascade is strategically aligned, and only afterward proceeding to allocating targets to IMs. Note that this is also partly to avoid Excel performance issues that may occur with the addition of more data to the PSNUxIM tab.

Submission 2

- Confirm resolution of any issues flagged during your first submission.
- Confirm no discrepancies between targets modeled in your submitted DataPack and any COP Meeting presentations to date or other high-level discussions had with PPMs and Chairs.
- Review the PSNUxIM tab and address issues related to IM and DSD-TA allocation, and deduplication.

Submission 3

- Again confirm DataPack alignment with all high-level decisions and any final presentations given by the Country Team.
- Confirm resolution of any issues flagged during the second submission.
- Track down and resolve any last bugs and issues in seen in the DataPack
- Confirm the DataPack is as near final as possible

Final Submission

- Confirm all targets modeled in the DataPack are ready for submission to DATIM.
- Secure Interagency Government sign-off for import of your submitted DataPack to DATIM.
- Note authority to waive any lingering validation issues flagged by the DataPack Self-Service App.

Once approval by PPMs, Chairs, and Liaisons is documented on the Zendesk thread/ticket, the DataPack Support Team will move forward with uploading your submitted DataPack to DATIM, then note completion of this here on this ticket. Once this is done, it is recommended that you review your data in DATIM to ensure alignment between DATIM and your DataPack. Please note in addition to these regular formal submissions, we encourage regular sharing and dialogue with Chair, PPM, and DUIT Liaison around target setting process generally, and DataPack specifically. Feel free to share draft versions as often as is helpful.

1.4 DataPack SharePoint Location

The DataPack will be posted on PEPFAR SharePoint: www.pepfar.net.

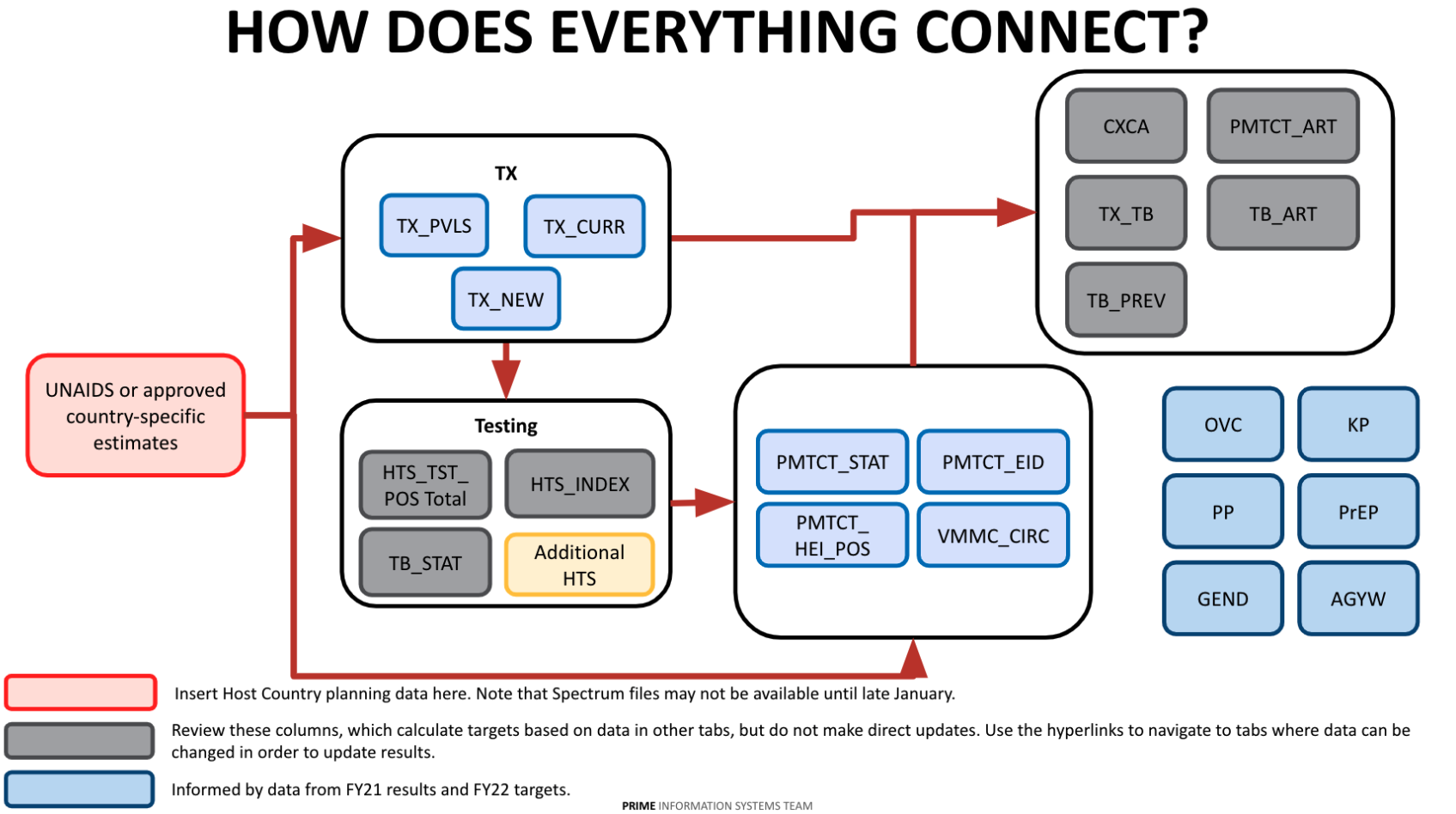
- The file path will be OU > Country Name > HQ Collaboration > COP 2022 – FY2023 > Guidance, Tools, and Resources.
- The file name will be "Datapack_CountryName_20220121.....". Please reference the day in which the file was added to the folder. If there are new .zip files added, please utilize this file as it may be a new version of the DataPack tool.

1.5 Tab Categories

Each DataPack will start with 21 tabs organized in the order presented below. Upon downloading the DataPack, the PSNUxIM tab will appear as a blank sheet, but will be generated by the self-service validation app after you submit your preliminary DataPack.

- Home
- Spectrum
- Prioritization
- Cascade
- PMTCT
- EID
- TB
- VMMC
- KP
- HTS
- CXCA
- HTS_RECENT
- TX_TB_PREV
- PP
- OVC
- GEND
- AGYW
- PrEP
- KP_MAT
- KP Validation
- PSNU x IM

1.6 How Does Everything Connect?



1.7 Elements of a Tab

HYPERLINKS

Light blue hyperlinks lead to that column's input or immediate output.

INPUT LEVERS

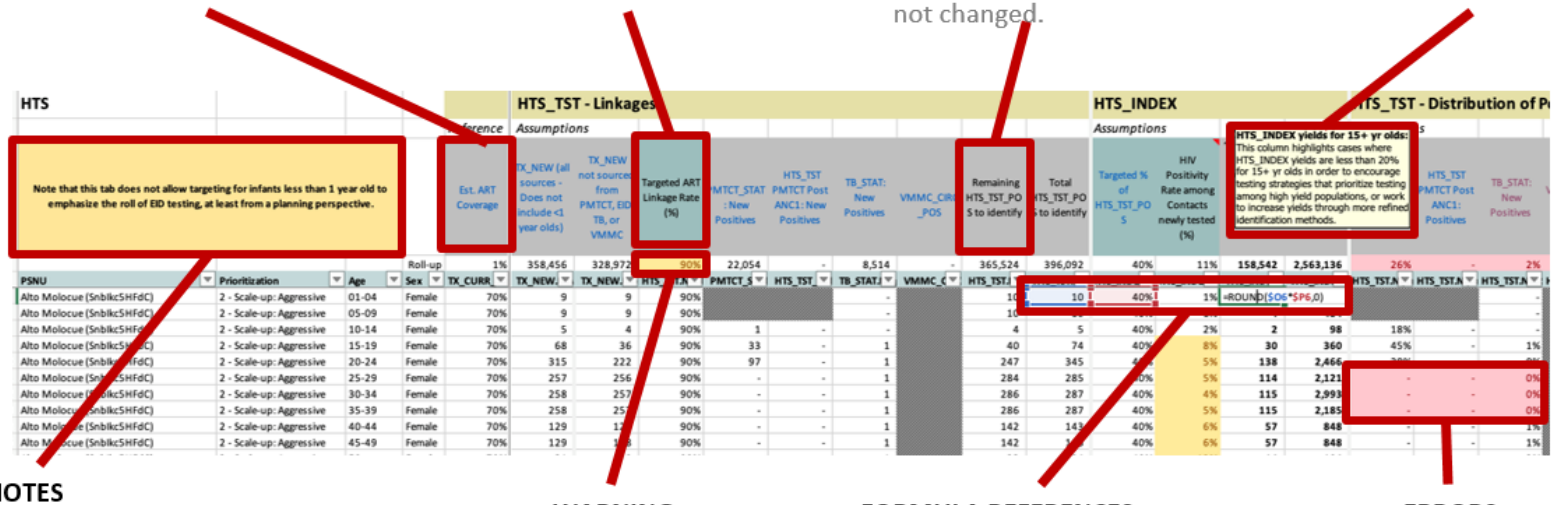
Sea green column headers indicate that a column can be edited. Start with these.

OUTPUTS

Grey column headers indicate that a column should be reviewed, but not changed.

POP-UP COMMENTS

Hovering over or clicking a cell with a red tag reveals helpful instructions or explanations.



NOTES

Yellow boxes at the top left of a tab include notes or instructions pertaining to the whole tab.

WARNING

Figures in yellow indicate a warning for review.

FORMULA REFERENCES

Double clicking a formula reveals its input references.

ERRORS

Figures in red indicate an error.

1.8 How to Navigate a DataPack Tab

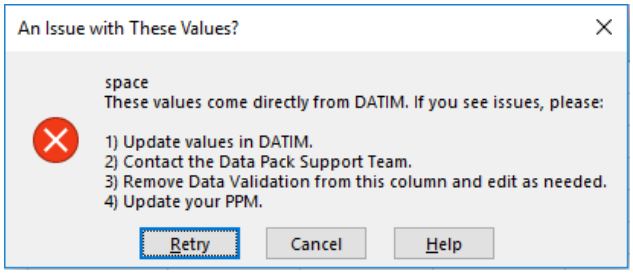
ENTERING DATA IN THE CORRECT SECTION

In the tabs for the DATIM Data Elements, sections may either have data prepopulated from DATIM or the user will enter data into that column. Each section of the guide will list what columns users can expect to have data prepopulated and / or where they can enter data themselves.

ENTERING DATA IN THE WRONG SECTION

If you enter data into a cell that you are not supposed to enter data into, you will receive the following message box with corrective action suggestions as well.

Example:



1.9 Adjustments to Historic Targets and Results

Throughout the DataPack, historic targets and results have been provided for reference and often to drive target modeling algorithms. If, in the process of reviewing these historic data, issues with the data are discovered that may need to be addressed in DATIM, follow the below procedure:

1. Raise specific issues with historic data to your PPM and DUIT Liaison. Determine together whether any issue identified requires updating values in DATIM.
2. It maybe that together with your PPM and DUIT Liaison you decide that changes to historic values are not necessary in DATIM, but still necessary in the DataPack. This is an extraordinary circumstance and must have approval from PRIME/DUIT leadership via your Liaison to allow. If approved, you may make changes directly in the related column of the DataPack.
3. If it is the case that DATIM values should be updated, follow the usual process for OPU Target changes, requesting all necessary approvals to initiate and expedite this process during COP.
4. Once changes are aprroved, either through an OPU for targets, or through data change request for results, you can enter the new values into the related column of the DataPack yourself. If you wish to request a new DataPack, you may do so, but will have to start the DataPack process afresh. For either of these routes, reach out to the DataPack Systems Team via Zendesk for support.

1.10 DataPack Assumptions

There are many pre-populated assumptions that appear throughout the DataPack. These assumptions are included as a result of COP and MER Guidance. Although DataPacks come pre-populated with these assumptions, there are various cases and guidance that allow user's to make edits to these assumptions. Below is a table of all pre-populated assumptions, the tab in which they are located, the Indicator, the Assumption, and guidance needed to make the changes and if any approvals are needed.

Tab	Section	Indicator	As sumption	Guidance
Ca scade	Host Country Context	Targeted Host Country ART Coverage (FY23) (%)	90%	Free to change depending on context as along as in line with COP Guidance
Ca scade	Host Country Context	Targeted Host Country CVLS (FY23) (%)	95%	Free to change depending on context as along as in line with COP Guidance
Ca scade	TX_PVLS (D)	PEPFAR Targeted VLS Rate (FY23) (%)	95%	Reduction requires Chair and PRIME approval
Ca scade	TX_NEW	% of TX_NEW Eligible for VL Test (%)	70%	Free to change depending on local policy (70% for 3-month, 50% for 6-month); local policy change should be COP priority
Ca scade	TX_NEW	Proportion of eligible w/ access to VL testing (%)	100%	Reduction requires Chair approval
Ca scade	TX_CURR	Proportion of TX_NET_NEW from New ART Initiation (FY22) (%)	100%	Free to change, if needed, along as in line with COP Guidance. Recommend not changing.
Ca scade	TX_CURR	Targeted Retention Rate - New on ART (FY22) (%)	98%	Reduction requires Chair and PRIME approval
Ca scade	TX_CURR	Targeted Retention Rate - Already on ART (FY22) (%)	98%	Reduction requires Chair and PRIME approval
Ca scade	testing	Targeted ART Linkage Rate (FY22) (%)	95%	Reduction requires Chair and PRIME approval
PMTCT	PMTCT_STAT (D)	Expected change in new ANC clients (%)	0%	Free to change depending on context
PMTCT	PMTCT_S TAT_SUBNAT (D)	Targeted PEPFAR proportion of Host Country PMTCT _STAT_SUBNAT (D) (FY23) (%)	SET TO EQUAL: P rojected PEPFAR pr oportion of Host Country P MTCT_STA T_SUBNAT (D) (FY22) (%)	Free to change depending on context
PMTCT	PMTCT_STAT (N)	Targeted testing coverage of ANC1 clients (FY23) (%)	100%	Reduction requires Chair and PRIME approval
PMTCT	PMTCT_STAT (N)	Est. % ANC1 clients already Known HIV Positive (%)	ca lculated	Free to change depending on context

Tab	Section	Indicator	As sumption	Guidance
PMTCT	PMTCT_STAT (N)	Est. Positivity Rate among Newly Tested ANC1 clients (%)	ca lculated	Free to change depending on context
PMTCT	HTS_TST: PMTCT Post ANC1	Yield (%)	Set to equal: Yield (FY21 Results) (%)	Free to change depending on context
EID	PMTCT_EID (N)	Targeted % HIV exposed infants tested by 2 mo (%)	95%	Reduction requires Chair and PRIME approval
EID	PMTCT_EID (N)	Targeted % HIV exposed infants tested by 12 mo (%)	100%	Reduction requires Chair and PRIME approval
EID	PMT CT_HEI_POS (N)	Est. Positivity Rate, $\leq$ 0 mo (FY23) (%)	Set to equal: 2 | Yield (FY21 Results) (%)	Free to change depending on context |
EID	PMT CT_HEI_POS (N)	Est. Positivity Rate, 02 - 12 mo (FY23) (%)	Set to equal: Yield (FY21 Results) (%)	Free to change depending on context
EID	PMT CT_HEI_POS (N)	% Eligible for VLS Testing	70%	Reduction requires Chair approval
EID	PMT CT_HEI_POS (N)	% Eligible tested for VLS	100%	Reduction requires Chair approval
EID	PMT CT_HEI_POS (N)	Est. VL Suppression Rate (%)	95%	Reduction requires Chair and PRIME approval
TB	TB_STAT (D)	Estimated Change in Incidence (%)	0%	Free to change depending on context
TB	TB_STAT (N)	Targeted TB_STAT Coverage (FY23) (%)	100%	Reduction requires Chair and PRIME approval
TB	TB_STAT (N)	Est. % TB clients already Known HIV Positive (FY23) (%)	Set to equal FY21 Results %	Free to change depending on context
TB	TB_STAT (N)	Est. Positivity Rate among Newly Tested (FY23) (%)	Set to equal FY21 Results %	Free to change depending on context
VMMC	VMMC_CIRC	PEPFAR Coverage of Host Country VMMC _CIRC_SUBNAT (FY23) (%)	Set to equal FY22 Targets %	Free to change depending on context
VMMC	VMMC_CIRC	_Military ONLY: Change in VMMC_CIRC FY21-FY22 (%)	SET BY DoD	Only DOD should change

Tab	Section	Indicator	As sumption	Guidance
VMMC	VMMC_CIRC	Est. Indet erminate/Not Tested rate (FY23) (%)	Set to equal FY21 Results %	Free to change depending on context
VMMC	VMMC_CIRC	Est. Positivity Rate among Newly Tested (FY23) (%)	Set to equal FY21 Results %	Free to change depending on context
KP	TX_NEW	Proportion of TX_NET_NEW from New ART Initiation (FY23) (%)	100%	Free to change, if needed, along as in line with COP Guidance. Recommend not changing.
KP	TX_NEW	Targeted Retention Rate - Already on ART (FY23) (%)	98%	Reduction requires Chair and PRIME approval
KP	TX_NEW	Targeted Retention Rate - New on ART (FY23) (%)	98%	Reduction requires Chair and PRIME approval
KP	TX_PVLS (D)	% of TX_NEW Eligible for VL Test (FY23) (%)	70%	Free to change depending on local policy (70% for 3-month, 50% for 6-month); local policy change should be COP priority
KP	TX_PVLS (D)	Proportion of eligible w/ access to VL testing (FY23) (%)	100%	Reduction requires Chair approval.
KP	TX_PVLS (N)	Targeted VL Suppression Rate (FY23) (%)	95%	Reduction requires Chair and PRIME approval
KP	HTS_TST	Targeted ART Linkage Rate (FY23) (%)	95%	Reduction requires Chair and PRIME approval
KP	HTS_ TST_RECENT	% of HTS_TST KeyPop Positives (FY23) (%)	100%	Free to change depending on context as along as in line with COP Guidance
HTS	HTS_SELF	% Change in HTS_SELF (%)	0%	Free to change depending on context as along as in line with COP Guidance
CXCA	CXCA_SCRN	Targeted CXCA Screening coverage rate (%)	Defaults to 50%;	Free to change depending on context as along reflecting COP guidance, which was updated to suggest 100% FY23 TX_NEW + 33% (1/3) of FY22 TX_CURR
HTS_R ECENT	all modalities	% of Positives 15+	100%	Free to change depending on context as along as in line with COP Guidance
TX_TB _PREV	TX_TB (D)	Targeted coverage: New on ART (%)	100%	Free to change depending on context as along as in line with COP Guidance

Tab	Section	Indicator	As sumption	Guidance
TX_TB _PREV	TX_TB (D)	Targeted coverage: Already on ART (%)	100%	Free to change depending on context as along as in line with COP Guidance
TX_TB _PREV	TB_PREV (D)	% TX_TB (D) Screen Neg., New on ART initiated on TPT (%)	100%	Free to change depending on context as along as in line with COP Guidance
TX_TB _PREV	TB_PREV (D)	% TX_TB (D) Screen Neg., Already on ART initiated on TPT (%)	90%	Free to change depending on context as along as in line with COP Guidance
TX_TB _PREV	TB_PREV (N)	Targeted TPT completion (%)	90%	Free to change depending on context as along as in line with COP Guidance
PP	PP_PREV	Expected change in PP_PREV services (%)	0%	Free to change depending on context as along as in line with COP Guidance
OVC	OVC_SERV	Projected Net Change in OVC_SERV (%)	0%	Free to change depending on context as along as in line with COP Guidance
OVC	OVC_SERV	DREAMS % of Total OVC_SERV (%)	0%	Free to change depending on context as along as in line with COP Guidance
OVC	OVC_SERV	Preventive % of Total OVC_SERV (%)	0%	Free to change depending on context as along as in line with COP Guidance
OVC	OVC_SERV	Targeted Graduation Rate among C omprehensive (%)	20%	Free to change depending on context as along as in line with COP Guidance
OVC	O VC_HIVSTAT	% OVC (<18) with reported HIV Status (%)	100%	Reduction requires Chair and PRIME approval
GEND	GEND_GBV	Expected change in GEND_GBV - Physic al/Emotional Violence services (%)	0%	Free to change depending on context as along as in line with COP Guidance
GEND	GEND_GBV	Expected change in GEND_GBV - Sexual Violence services (%)	0%	Free to change depending on context as along as in line with COP Guidance
AGYW	AGYW_PREV	Projected Net Change in Total AGYW_PREV from FY21 Results (%)	0%	Free to change depending on context as along as in line with COP and DREAMS Guidance
AGYW	AGYW_PREV	Targeted Percent Completion (%)	60%	Free to change depending on context as along as in line with COP and DREAMS Guidance

Tab	Section	Indicator	As sumption	Guidance
K P_MAT	KP_MAT	Targeted PEPFAR Coverage of K P_MAT_SUBNAT (FY23) (%)	Set to equal FY22 Targets %	Free to change depending on context as along as in line with COP Guidance
K P_MAT	KP_MAT	Targeted Change in KP_MAT (FY23) (%)	0%	Free to change depending on context as along as in line with COP Guidance

Chapter 2

Release Notes

2.1 January 21 DataPack Re-release

On January 21st, we re-generated and shared new DataPacks via HQ Collaboration > COP 2022 - FY 2023 > Guidance, Tools, and Resources > DataPack. Please use the *.zip version from **January 21st**.

This new released version addresses small bugs that were caught after the initial version was released. It also added in missing "ROUND" functions into formulas on the Cascade tab as well as correcting comments to properly reflect COP Guidance.

2.2 datapackr 5.1.4

2.2.1 Bug Fixes

- Ignore duplicated Not PEPFAR columns in PSNUxIM
- Fixes for handling 50+ age bands in PSNUxIM packing and unpacking

2.2.2 New Features

- Adds COP Approval Memo target table generation to the package and enables COP22 Approvale Memo target table generation support (DP-503, DP-528, DP-534, DP-536)
  - Creates the following new functions to aid in the fetching, cleaning, and formatting of data used in the various target tables of COP approval memos:
    * `evaluateIndicators`
    * `fetchPrioritizationTable`
    * `generateComparisonTable`
    * `getMemoIndicators`
    * `memoStructure`
    * `prepareExistingDataAnalytics`
    * `prepareMemoData`
    * `prepareMemoDataByAgency`
    * `prepareMemoDataByPSNU`
    * `prepareMemoDataByPartner`
    * `prepareMemoDataByPrio`
    * `prepareMemoMetadata`

    - `updateExistingPrioritization`
  - Creates the following new functions to aid in the creation and formatting of COP Approval Memo target tables:
    - `getMemoTemplate` selects whether to supply a watermarked "Draft Memo" Word document or a blank document for final memo tables.
    - `renderAgencyTable`, `renderPartnerTable`, and `renderPrioTable` each generate formatted tables for their respective sections of the memo.
    - `generateApprovalMemo` compiles all target tables together in a single document.
    - `default_memo_font`, `default_memo_style_header`, and `default_memo_style_para` contain information on standard memo formatting.
    - `zeros_to_dashes` is a utility function used in formatting memos appropriately.
  - Adds `cop_validation_rules` as new dataset object within package
    - Adds `data-raw` file to create and update `cop_validation_rules` object
  - Adds `draft_memo_template.docx` under `inst/extdata` folder for use in draft memo generation
  - Adds tests for new functions:
    - Adds `test-get-memo-indicators` to test `getMemoIndicators`
    - Adds `test-indicators` to test `evaluateIndicators`
    - Adds `test-memo-structure` to test `memoStructure`
- Adds additional non-memo related functionality from the `datapackr-app` into the package (DP-504)
  - Creates `checkMechanisms` and `checkPSNUData` to replace `validateMechanisms` and `validatePSNUData` from the `datapackr-app`, respectively. These functions are used in validating and analyzing Data Pack targets.
  - Adds `sane_name`, `source_user`, and `operating_unit` as new variables under `d$info` in keychain
    - Creates `getSaneName` and `getOUFromCountryUIDs` as new functions
    - Modifies `createKeychainInfo` to create new variables under `d$info`
    - Modifies `packDataPack` to create new variables under `d$info`
    - Adds `d2_session` argument to `createKeychainInfo`
    - Updates relevant tests to incorporate new elements of keychain
- Enables the ability to get COP22 data using `getCOPDataFromDATIM` (DP-536)

2.2.3 Minor improvements and fixes

- Adds `parallel`, `gdtools`, `flextable`, and `officer` as suggested packages

2.3 datapackr 5.1.3

2.3.1 Bug Fixes

- Downgrades `openxslx` to version 4.2.3 to prevent error with PSNUxIM packing.
- Changes the HTS modality group set to `HTS Modality (USE ONLY for FY22 Results/FY23 Targets)`.
- Change `compareData_OpuDatapackVsDatim` to NOT compare AGYW data which are not part of OPU data packs.

2.3.2 Breaking changes

- Changes arguments for `unPackSchema_datapack` and `validateSchema` to use standard argument names. Replaces `filepath` with `template_path` and replaces their usage in all relevant locations.

2.3.3 Minor improvements and fixes

- Reexports magrittr `%<>%` function.
- Adds missing function `interactive_warning`.
- Removes function `getPass` since this code is commented out and functionality has been replaced by `datimutils`.
- Cleans up mismatched brackets in `data.R` file and allows for creation of documentation for all datasets.
- Updates `.Rbuildignore` to include all appropriate files and folder.
- Clears error with R dependency by downgrading required version to R 4.1.0.
- Updates package dependencies:
  - Adds dependency and remote for `datimutils`.
  - Adds dependency for `methods`.
  - Suggests `waldo` package.
  - Removes `scales` and `stringi` as dependencies as they are not used.
  - Moves `assertthat` from `Imports` to `Suggests` since it is only used in `data-raw` files.
- Moves the following variables from `data-raw` files to environment variables. Users can add these to an `.Rprofile` to streamline their workflow:
  - `SECRETS_FOLDER`
  - `OUTPUT_FOLDER`
  - `MODEL_DATA_PATH`
  - `SNUXIM_MODEL_DATA_PATH`

2.4 datapackr 5.1.2

2.4.1 Bug Fixes

- Corrects the % of EID by 12 months from 95% (same as by 2 months) to 100%.
- Updates comments and conditional formatting in the Cascade Tab over HTS_INDEX yield columns to align with COP Guidance (<10% as warning, rather than 20%).

2.4.2 New Features

- For COP22 Data Packs, enables appending data to the bottom of the PSNUxIM tab when data is detected in the main tabs of the Data Pack, but not reflected in the PSNUxIM tab.

2.5 datapackr 5.1.1

2.5.1 Bug fixes

- This maintenance release fixes a bug with `unPackCountryUIDs` that was introduced in v5.0.1 due to linting. This bug preventing the processing of COP and OPU tools in `datapackr-app` as well as broke the `createAnalytics` function for regional tools.

2.6 datapackr 5.1.0

2.6.1 Breaking changes

- The function `packForDATIM_UndistributedMER` now takes in arguments for MER data and COP year instead of an entire `d` object and returns a table of undistributed MER data rather than return a `d` object with data nested under `d$data$UndistributedMER`.

2.6.2 New features

- Updates COP22 Data Pack template and processing code.
  - Removes "Summary" tab from COP22 tools and processing code.
  - Includes "Not PEPFAR" column to PSNUxIM tab and adds support for processing this data. Drops dataf from this column before creating the analytics table and MER exports.
- Adds item to `d` object for unallocated IMs nested under `d$info$unallocatedIMs`.

2.6.3 Minor improvements and fixes

- Additional handling for default Category Option Combos.
- Adds dataset UIDs for COP22 to the `getDatasetUids` function.
- Updates `getMapDataPack_DATIM_DEs_COCs` to include handling for COP22 map.
- Adds test for `getDatasetUids`
- Adds explicit comparison checks when updating schemas and Data Pack-DATIM mapping files using the `waldo` package.

2.7 datapackr 5.0.3

2.7.1 New features

- Initial launch of COP22 Data Pack processing!

2.7.2 Breaking changes

- Now requires R version 4.1.1 or higher.

2.7.3 Minor improvements and fixes

- Updated and improved documentation of datasets in `datapackr`.
- Improves handling of default `categoryOptionCombo`.
- Improves documentation of `packDataPackSheet`, `packSheets`, and `prepareSheetData`.

2.7.4 Deprecated features

- `loginToDATIM` is retired in favor of the same function in `datimutils`. All instances of this function being invoked have been replaced appropriately.

  - The functions `DHISLogin`, `GetCredentialsFromConsole`, `LoadConfigFile`, and `ValidateConfig` were not exported and are now deprecated as well. They were previously only used by `loginToDATIM`.

- `isLoggedIn` is retired as it was only used in `getMechList` and `loginToDATIM`.

2.8 datapackr 5.0.2

2.8.1 Bug fixes

- Resolves a bug with `packOPUDataPack` where `createDataPack` was not implemented correctly in version 5.0.1.
- Patches a bug with `getOPUDataFromDATIM` where `getCOPDataFromDATIM` returns a dataframe where the default Category Option Combo UID is listed as `default` rather than the appropriate DATIM UID. This will be removed in favor of a more permanent solution in future updates.

2.8.2 New features

- Significantly improves handling of parameter checks and standardizes their validation and defaults. Documentation for these checks is also added.
- Adds functionality for producing COP22 Beta Packs and test data.

2.8.3 Breaking changes

- Removes `getDataPackSchema` in favor of consolidated `pick_schema`.

2.8.4 Deprecated features

- `getDataPackSchema` has been deprecated in favor of `pick_schema` and has been replaced in the two locations where it was previously used.

2.8.5 Minor improvements and fixes

- Improves and updates tests related to parameter checks and schemas.
- Introduces many new small utilities functions such as `%missing%` and `%||%`.
- Improves automation of Data Pack Template/schema validation.

2.9 datapackr 5.0.1

2.9.1 New features

- `loadDataPack` is a new function that returns a Data Pack object conserving styles and formatting of the original Data Pack .xlsx file, as well as other metadata necessary for processing and analysing data in the Data Pack.
- `.testInvalidIndicatorCodes` was previously an internal function that is now documented and exported by the package. This function tests for invalid indicator codes in a `d` Datapackr object.
- `datapack_cogs` is a new dataset containing Datapack Category option groups (id and name) along with their individual category options (id and name) as a nested data frame.

2.9.2 Breaking changes

- `createWorkbook` has been renamed `createDataPack` to deconflict with the openxlsx function `createWorkbook`. This function now returns a `d` datapackr object rather than an openxlsx workbook object.
- The `d2_session` argument has been removed from the following functions:
  - `check_params`
  - `createDataPack` (previously `createWorkbook`)
  - `unPackSchema_datapack`

2.9.3 Minor improvements and fixes

- `unPackSchema_datapack` was modified in the following ways:
  - Now uses the `datapack_cogs` data set rather than making a query to DATIM.
  - Inherits parameters from `datapackr_params`.
- `writeHomeTab` was modified in the following ways:
  - The `wb` and `datapack_name` arguments default to `NULL`.
  - Checks and assigns parameters using the `check_params` function.
  - Lists country names on the Home tab in addition to Country UIDs.
- Minor corrections were made to Excel functions written by `packSNUxIM` that had been erroneously changed during previous linting.
- Internal changes were made to variable names and functions used inside the `check_params` function.
- A new file has been added to `data-raw` to generate the `datapack_cogs` data set.
- Documentation is now provided for the `cop20OPU_data_pack_schema` data set.

Chapter 3

What's New?

3.1 Section 7 Changes

Reorienting of the Cascade Tab around PVLS, rather than ART Coverage, although both are taken into account. This year's new shift to begin setting the Cascade from Program Viral Load Suppression. This starting point will allow for country team users to build up a full cascade that will provide insight into VLS, VL Testing and how this will translate into determining the new on treatment and those returning to treatment. It will provide a full picture of the treatment ecosystem and the way in which countries understand if they will achieve 86% (95% x 95% x 95%) coverage across all three Cascades. This will allow countries that are at or close to Epidemic Control to better approach the understanding of how they will continue to sustain their 95-95-95 goals. This approach will put a greater emphasis on the Coverage Cascade as the driver of the target setting process, a direct shift from the past 5 years that have focused on the first two Cascades, and paint a picture of both VL to gap in Treatment and Testing.

3.2 MER2.6 Changes

Changes in line with MER 2.6:

- Use of PrEP_CT in lieu of PrEP_CURR.
- Integration of the new SNS modality.
- 50+ finer age bands across the clinical cascade. These will be aggregated to 50+ upon DATIM import for all but TX_CURR.

The introduction of 65+ age bands for TX_CURR targets this year will be visible across the Cascade, PMTCT, TB, and VMMC tabs. For structural purposes of these tabs to seamlessly work with the new inclusion of the 50+ finer age bands, targets will be set across many indicators at the finer age bands across the clinical cascade. The most important thing for users to note is that these will be aggregated to 50+ upon DATIM import for all but TX_CURR. The breakdown that has been used to disaggregate the 50+ age band into the finer age bands up to 65+ is the following:

- 50-54: 42%
- 55-59: 35%
- 60-64 14%

- 65+: 9%

These percentages were determined through various research studies. If teams feel as though they need to adjust the breakdowns based on local data and research they are able to do so, but should first consult their Chair, PPM and DUIT Liaison.

3.3 PSNUxIM Tool Formulas

When you received your newly generated PSNUxIM tool for the first time by generating it from the DataPack Self-Service App, you will need to scroll to the "Target Values" Section that begins in column CW and copy down the formulas populated in row 15 all the way down to the bottom of your DataPack. This will be required in order for your Roll-up column to properly populate as well as the Deduplication sections.

Chapter 4

Frequently Asked Questions

Q: We are having trouble setting TX_CURR appropriately, given new structure of Cascade tab of the DataPack, which starts with viral load, what help is there?

A: The PEPFAR Virtal Academy (PVA, learn.pepfar.net) DataPack course is a key resource, particularly Module 3, Cascade tab, fifth chapter "VLT Coverage (Columns AV-BL)" and sixth chapter "TX_NEW, TX_CURR, TX_CURR_SUBNAT (Columns BM-BV)," as well as third chapter "VL_SUPPRESSION_SUBNAT (Columns AJ-AN)." Although the defaults of the DataPack begin around a program that plans to get to 95-95-95 for all age and sex groups by PSNU, we recognize that many countries have different contexts, and thus need flexibility in setting ambitious yet achievable targets on the path to this goal. So, a number of green columns can be changed, yet your Chair and PPM should be made aware of how you are changing these assumptions, and how it leads to ambitious but achievable targets. It is also important to remember that DataPack goes through the cascade in reverse, from VL to TX to HTS. Now with viral load being the starting point, the DataPack gets to COP22 TX_CURR by adding and thinking through the COP21 TX_CURR contribution and the COP22 TX_NEW contribution separately – including breaking out new and prior infection-based TX_NEW – because there are different implications for how we think about planning for viral load testing for those groups. It is also important to keep in mind that the single Planned PopVLS number is multiplied by the PLHIV estimate to yield the targeted national number of virally suppressed persons (Viral_Suppression_SUBNAT), and thus needs to take into account all intermediate steps, i.e. the % diagnosed, % linked to ART, % eligible for viral load testing, % tested for viral load, and % virally suppressed. Thus, this likely will need to be reduced if you are not yet able to achieve 95-95-95 in COP22 for a given age-sex-PSNU combination, no matter which of the 95s are your largest gap, as well as changing the other separate percentages. For the PEPFAR targets "Planned PEPFAR Contribution to HIV Response (FY23) (%)" also plays an important role. If you need more specific OU assistance, be sure to reach out by either submitting a DATIM Zendesk ticket cc'ing your DUIT Liaison and PPM, or emailing your DUIT Liaison and PPM as much as you need for additional guidance and resources.

Q: Column AZ of the Cascade tab "H.C. Est. # Previously Diagnosed not on ART (FY22)" is being highlighted red, how can I get rid of this?

A: This is a bug with the conditional formatting of the column. Because surrounding columns are all measuring percentages, the conditional formatting is set to flag anything over 1 (i.e. anything over 100%). As a result almost all cells will be highlighted RED in this section. This should be ignored, and the only values that should be reviewed are those that are less than zero.

Q: I have generated a PSNUxIM Tab, but there are duplicate rows for the 50+ age band that have been added to the bottom on the tab, how can I fix this?

A: For countries that generated a PSNUxIM tab and have the presence of the duplicate 50+ age bands. The following needs to be done:

- Teams need to delete ALL green appended rows in the PSNUxIM tab.
- Once deleted, save the file, and run it back through the app. If there were other targets they will be re-added, but there will no longer be any duplicates

Q: On the HTS tab, the reference columns for "Host Country Est. ART Coverage (FY22) (%)" (column F) and "Host Country Est. PopVLS Rate (VLS/PLHIV) (FY22) (%)" (column G) are highlighting red for the 50+ Age bands. Why are these percentages so high?

A: There is an error in the formula. Though this is only a reference formula and will not impact any calculations for targets on the HTS Tab, the following new formulas can be applied to these columns to fix this error. The two formulas below you will be able to copy into your DataPack to resolve this. Please note that when you copy this formula, that you paste it into ROW 15 of the HTS tab and then drag the formula down across all rows in that column.

For Column F "Host Country Est. ART Coverage (FY22) (%)", paste the following into cell F15 and drag it down:

```
=IFERROR(1/(1/IF($C15="50+",AVERAGE(AVERAGEIFS(Cascade!$BU:$BU,Cascade!$B:$B,$B15,Cascade!$C:$C,{"50-54
```

For Column G "Host Country Est. PopVLS Rate (VLS/PLHIV) (FY22) (%)", paste the following into cell G15 and drag it down:

```
=IFERROR(1/(1/IF($C15="50+",AVERAGE(AVERAGEIFS(Cascade!$AL:$AL,Cascade!$B:$B,$B15,Cascade!$C:$C,{"50-54
```

This should resolve this issue.

Q: Cascade Tab "Host Country Context" section column V "H.C. Est. ART Patients Tested for VLS" and column X "H.C. Est. Virally Suppressed ART Patients (FY22)" are blank, how should I fill these out or can I leave them blank?

A: These two columns have been added and left blank for country teams to add in data, should they have reliable Host Country Data available to them. Should a team have access to this data, they should consult their PPM and DUIT Liaison prior to populating the columns. If a country does not have good Host Country Data VL data, the best way forward is likely to leave blank, and the DataPack will work with your PEPFAR TX_PVLS data on it's own.

Q: I have an outstanding COP21 OPU for IM shifts, what should I do?

A: For OU's with outstanding target-shift OPUs that are only shifting targets from one IM to another. This OPU will not affect the DataPack that has been issued thus far since it does not have a generated PSNUxIM tab (note this tab should not be generated until all main tabs have been filled-in). However, if the team would like the OPU to be taken into account in the COP22 DataPack's PSNUxIM tab, the OU SI teams should NOT generate a PSNUxIM tab for the COP22 DataPack until their target shift OPU memos are fully approved, and the target shifts are imported into DATIM. Otherwise, they should be prepared to also make the allocation updates in their COP22 PSNUxIM tab that will align with the OPU update.

Q: Why are there more than just TX_CURR (FY23) Indicators being set at the new finer 65+ age bands despite MER2.6 Guidance?

A: Due to the structure of the Cascade tab, and other COP22 - FY23 Targets that rely on TX_CURR (FY23), the tool had to be built, such that these tabs are all disaggregated to the the 65+ age band. However, upon completion of the DataPack, ONLY TX_CURR (FY23) will be import to DATIM with the finer age bands. All other indicators will be aggregated to 50+.

Q: When working through PSNUxIM KP mechanism allocations and I allocate the KP-specific targets to KP partners, given that the KP disaggregates are a subset of the total population being targeted, do I also need to allocate total pop targets to the KP partner?

A: Yes, you should be setting a corresponding Total Pop target against each mechanism you set KeyPop targets against. This is because KeyPop is a subset of Total Pop. Note however, that only clinical, facility partners may have targets and report many indicators. For these indicators, the KP targets must be assigned to a partner and site qualified to report the results.

Q: Can you use FY23 Spectrum estimates to work through the Cascade tab?

A: No, unless you receive approval from OGAC Leadership you should use FY22 Spectrum Data. Your target setting process for the COP22 DataPack should be to set FY23 targets based on where you are ending FY22.

Q: Is the coverage rate that is used to calculate "Targeted Host Country TX_CURR_SUBNAT (FY22)" and "Targeted Host Country TX_NET_NEW_SUBNAT (FY22)" too high or being miscalculated?

A: No, this is not a formula error. The calculations occurring are focusing on PLHIV for each district that are being treated for HIV/AIDS for each age band, as opposed to those being treated for HIV/AIDS in the district regardless of whether they live in that district. if the PEPFAR results are higher than the PLHIV Spectrum estimate in a particular district, then back-calculating the coverage rate shows a greater than 100% value for that PSNU-Age-Sex band. This can come from one of two things generally: People are coming from outside the district to seek treatment, leading to a higher PEPFAR TX_CURR value than PLHIV in the district; or The PLHIV estimate from Spectrum is too low. Either way if you have good programmatic reason for doing so, particularly health seeking behavior of PLHIV, you can aim for a coverage rate even higher than 100% (e.g., current coverage in capital city is estimated at 105%, but due to health seeking behavior you want to aim for 120% to achieve 95% for across all metropolitan area).

Q: Why in the newly generated PSNUxIM tab are data-pack totals and roll up columns blank?

A: Once you have regenerated your PSNUxIM tab from the DataPack Self-Service app, please open your newly regenerated tool, save your tool and close it. When you reopen your tool, it should populate your targets into that column. You will also need to drag down the formula in the far right "Target Values" section of the PSNUxIM tab to ensure all rows are populated with the proper formula.

Q: If my program performs testing but not treatment, how do I represent this in the DataPack?

A: You will first need approval from OGAC Leadership to do this. If you receive this approval you will need to manually alter in the Cascade Tab column "HTS_TST_POS + PMTCT_HEI_POS (FY22)" (BD). Please make the alterations to this column and not on the HTS tab.

Q: When I try to validate my DataPack in the self-service app, I get a message saying "ERROR: An error has occurred. Check your logs or contact the app author for clarification." How do I resolve this?

A: This error can be caused by a number of different issues. The most common causes and their resolutions include:

- Trying to validate a newly regenerated DataPack before opening it and saving it. After generating or regenerating your PSNUxIM tab, it is necessary to first open your tool and save it before uploading it to the app.
- The browser is causing issues with the app. This can be resolved by opening an Incognito window or by clearing your cache. PLEASE NOTE: Clearing your cache will sign you out of all accounts in that browser.
- Trying to validate a file that isn't an XLSX. If your team has saved your DataPack in a different file format for sharing, such as XLSB, ensure that you resave the file as an XLSX before validating it in the app.
- The target distribution formulas on the PSNUxIM tab have not been applied to all rows. By default, the formulas in the "Target Value" section (Column CW and right) are only applied to Row 15. Once you generate or regenerate your PSNUxIM tab, ensure that you copy these formulas all the way down to the bottom row of your targets. After this is done, try validating your tool again.

If none of the above issues apply to your DataPack tool and you are still receiving this error, please submit a ZenDesk ticket identifying your country and attaching or linking to a copy of the DataPack tool that caused the error in the app.

Chapter 5

Testing Targets Cheat Sheet

5.1 Purpose

The purpose of this cheat sheet is to document a recurring DataPack issue to guide other OU's towards a solution. This document does not supersede PEPFAR guidance. For more questions, please contact the ICPI Zendesk.

5.2 Issue

Our HTS_TST_POS targets from modalities are summing to over 100% of the HTS_TST_POS total. We have too many positives but cannot figure out how to resolve the errors in the datapack?

5.3 Is this issue in my DataPack?

This issue is most likely to affect countries with high treatment coverage but has been seen in lower coverage OUs as well

- If your DataPack has negative values in the Other Modalities **(Cascade Tab; Column BR)** or a large HTS POS difference to adjust **(HTS Tab; Column BO)**

AND

- You have already walked through the instructions in the Datapack User Guide HTS Section link HERE

5.4 Why is this issue in my DataPack?

- COP guidance in COP21 recommended that age/sex/SNU combinations with high treatment coverage (above 80%) have a high rate of positives (75%) coming from index testing and the COP21 target was used to pre-populated the COP22 datapack, but countries may already have more than 25% of positives coming from other passive modalities (PMTCT, TB).

- Thus while you are trying to continue an effective testing strategy based on past COP guidance and/or trying to set appropriately ambitious targets from active testing modalities (e.g., Index, SNS) based on COP22 guidance, the DataPack defaults also have a high percent of positives coming from more passive modalities that may be based on a standard of care for that entry point (PMTCT, TB), but are not necessarily strategic case finding strategies.

- This guidance can help you evaluate if there are strategic ways to re-examine the assumptions around these standard of care, passive modalities that help you optimize your testing strategy.

5.5 Possible solutions

- Work with your PMTCT and TB program colleagues to review your program and surveillance data and increase the percentage of known positives coming from PMTCT (and other modalities, such as TB and VMMC). Also review positivity of VMMC, and make sure it hasn't been thrown off by historical high percentage, potentially from low volume (e.g., 1 of 5 were positive, inflating to 20%)

  - Changes in PMTCT are most likely to decrease high positives (while maintaining ambitious targets for your PMTCT program)
  - See examples below for PMTCT and TB indicators

- If still unable to resolve high positives, adjust the % of positives that come from Index Testing according to COP22 Guidance.

5.6 How to try these solutions in the DataPack

Remember that you can only change the sea green columns in the DP. The following solutions are in order of impact (high to low).

5.6.1 PMTCT Tab - decrease positives from ANC and Post-ANC1

Goal: To reduce column AE "Newly Tested, Positive" which feeds into the total HTS_TST_POS values that are too high

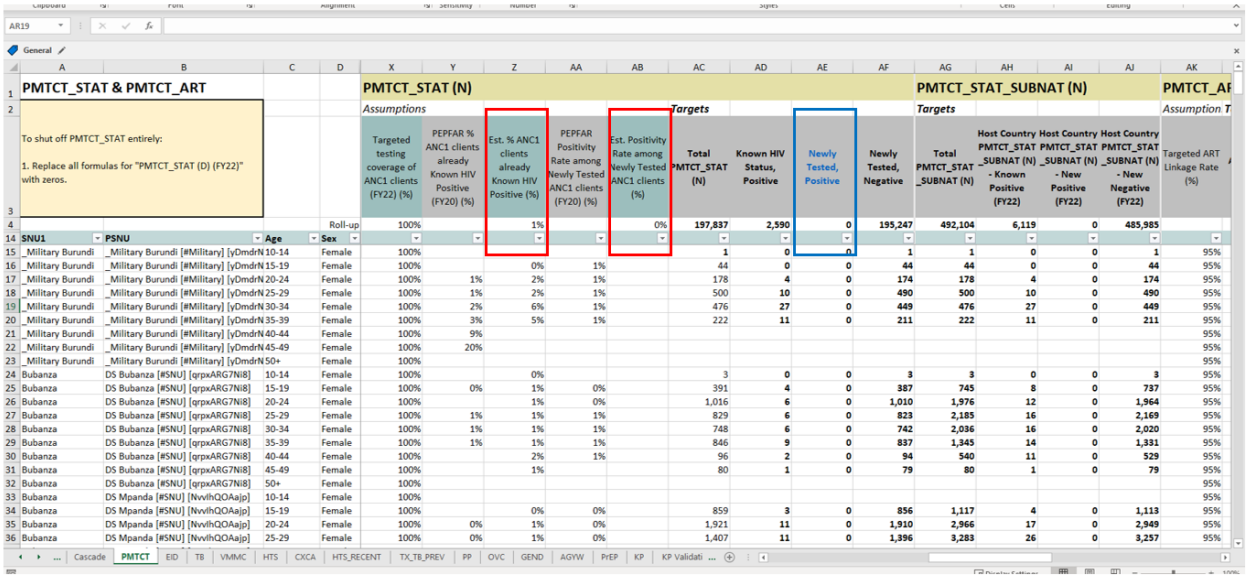
- Shift positives from newly tested to known positives

- **Column Z** "Est. % ANC1 clients already Known HIV Positive (%)"

  - Increasing column Z directly increases column AD "Known HIV Status, Positive" by the same amount it decreases column AF "Newly Tested, Negative" ultimate reducing "Newly Tested Positives"
  - This reduction in New Positives may be small

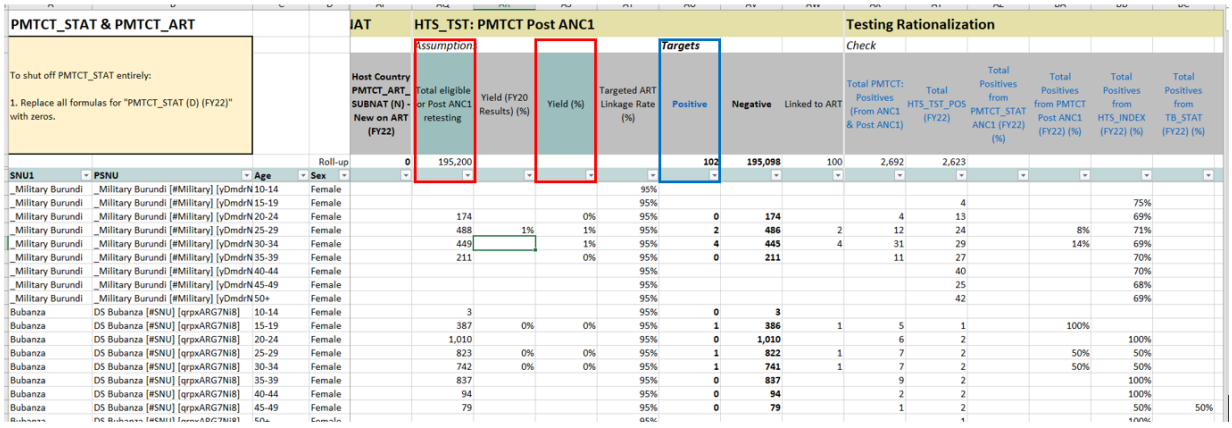
- **Column AB** "Est. Positivity Rate among Newly Tested ANC1 clients (%)"

  - Decreasing column AB directly decreases column AE "Newly Tested, Positive" by the same amount it decreases column AF "Newly Tested, Negative"
  - This reduction in Newly Tested Positives will be bigger, proceed with caution



Goal: To reduce Column AU "Positives" from Post ANC1

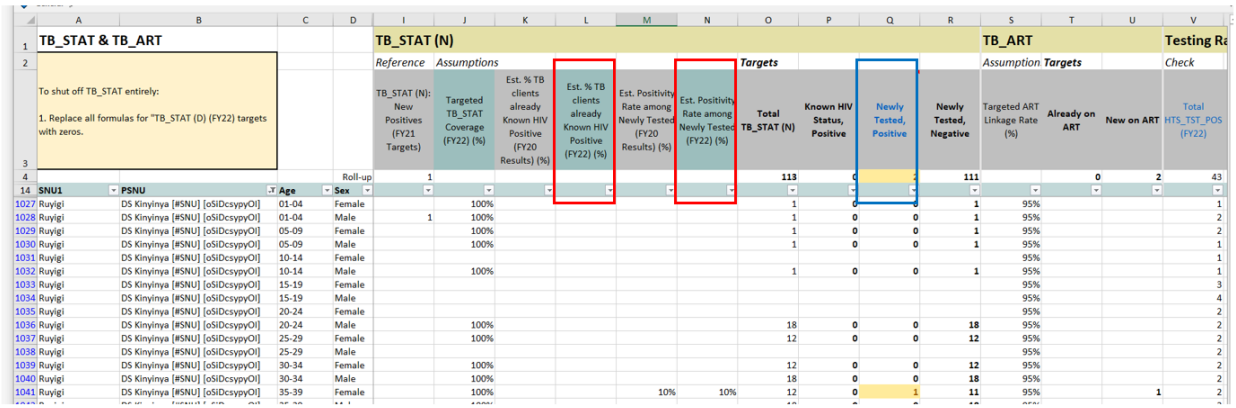
- This change will most likely only have a small impact on your total positives
- Increasing Known Positives (in step above) reduces Column AQ "Total eligible for Post ANC1 retesting" thereby reducing column AU "Positive"
- **Column AS "Yield (%)"**
  - Reducing Yield will reduce Positive (AU)
  - While it is not plausible to see no positives from Post ANC1, consider a programmatic maximum that you would like to target
- While it is possible to change Column AQ, we recommend not altering this column directly so as to not create logical gaps in PMTCT testing process



5.6.2 TB tab - decrease positives from TB

Goal: To reduce column Q "Newly Tested, Positive" which feeds into the total HTS_TST_POS values that are too high

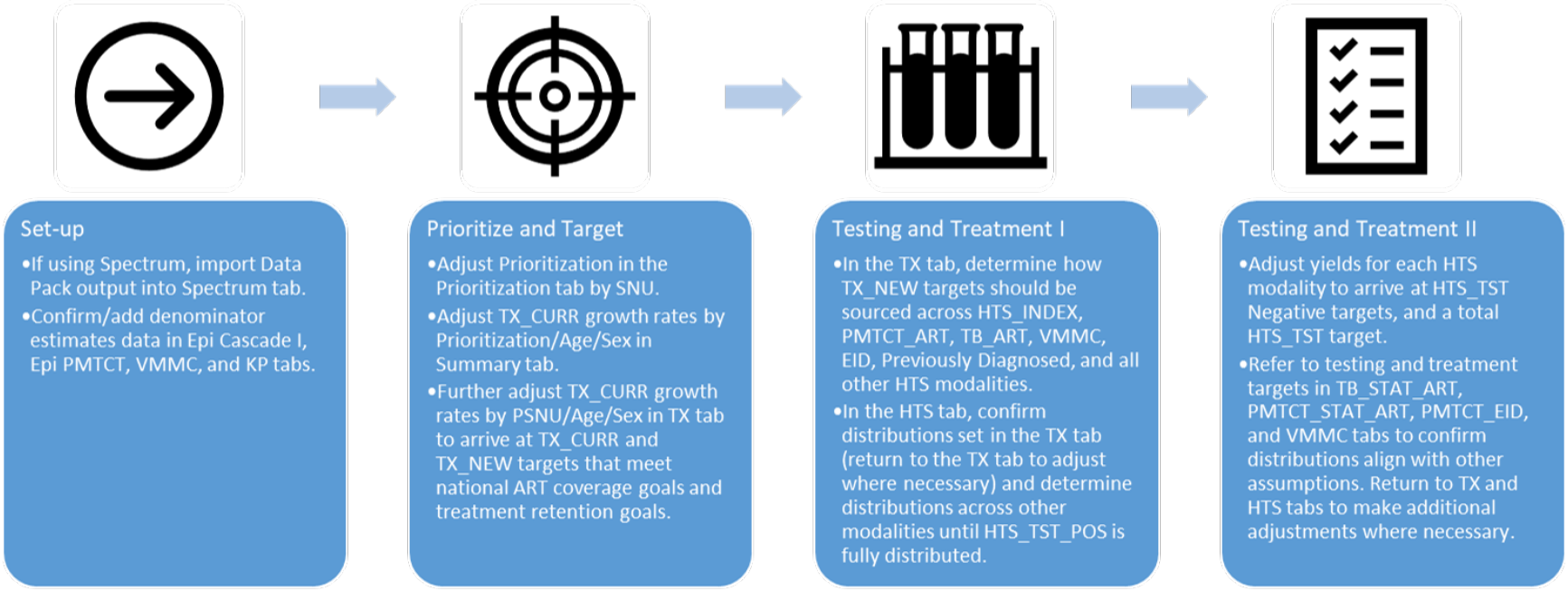
- Shift positives from newly tested to known positives
- **Column L** "Est. % TB clients already Known HIV Positive (%)"
  - Increasing column L directly increases column P "Known HIV Status, Positive" by the same amount it decreases column R "Newly Tested, Negative" ultimate reducing "Newly Tested Positives"
  - This reduction in New Positives may be small
- **Column N** "Est. Positivity Rate among Newly Tested (%)"
  - Decreasing column N directly decreases column Q "Newly Tested, Positive" by the same amount it decreases column R "Newly Tested, Negative"
  - This reduction in Newly Tested Positives will be bigger, proceed with caution

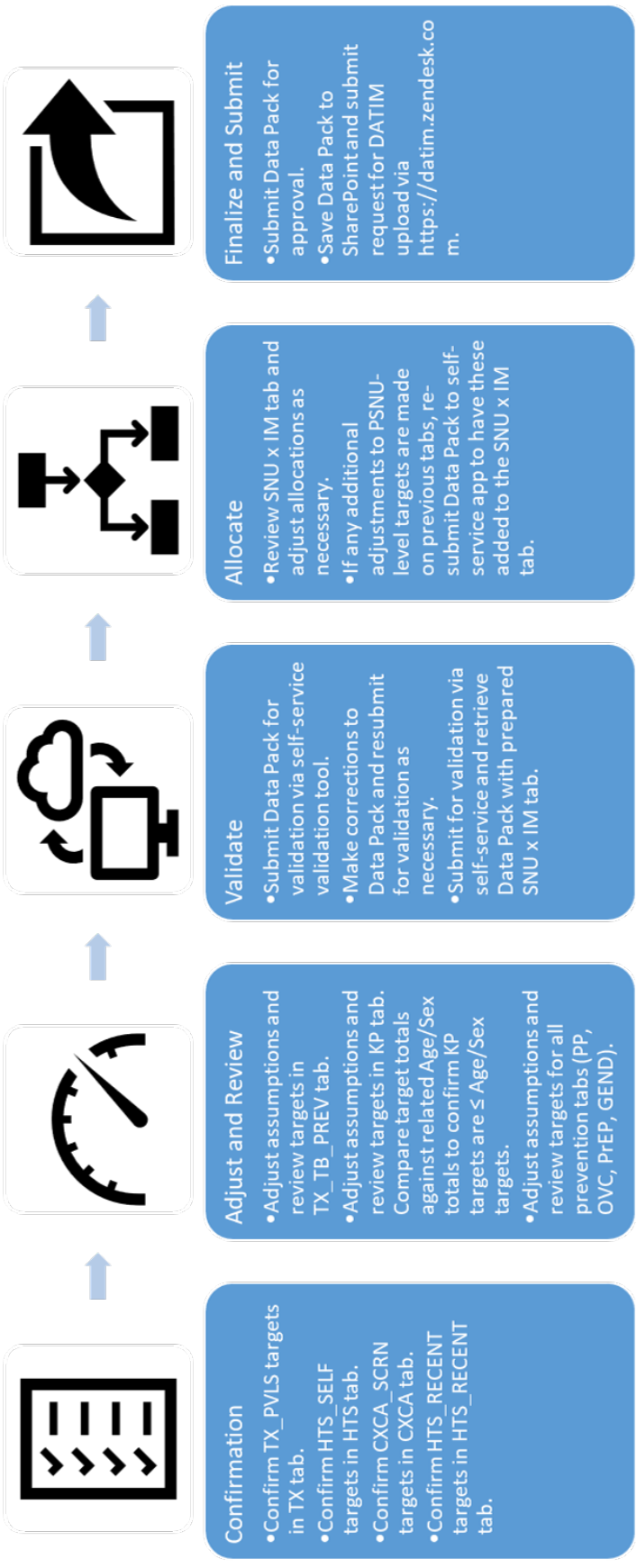


	A	B	C	D	I	J	K	L	M	N	O	P	Q	R	S	T	U	V
1	TB_STAT & TB_ART				TB_STAT (N)										TB_ART			Testing Ra
2					Reference	Assumptions					Targets				Assumption	Targets		Check
3	To shut off TB_STAT entirely: 1. Replace all formulas for "TB_STAT (D) (FY22) targets with zeros.				TB_STAT (N): New Positives (FY21 Targets)	Targeted TB_STAT Coverage (FY22) (%)	Est. % TB clients already Known HIV Positive (FY20 Results) (%)	Est. % TB clients already Known HIV Positive (FY22) (%)	Est. Positivity Rate among Newly Tested (FY20 Results) (%)	Est. Positivity Rate among Newly Tested (FY22) (%)	Total TB_STAT (N)	Known HIV Status, Positive	Newly Tested, Positive	Newly Tested, Negative	Targeted ART Linkage Rate (%)	Already on ART	New on ART	Total HTS_TST_POS (FY22)
4				Roll-up	1						113	0	2	111		0	2	43
14	SNU1	PSNU	Age	Sex														
1027	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	01-04	Female		100%					1	0	0	1	95%			1
1028	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	01-04	Male	1	100%					1	0	0	1	95%			2
1029	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	05-09	Female		100%					1	0	0	1	95%			2
1030	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	05-09	Male		100%					1	0	0	1	95%			1
1031	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	10-14	Female											95%			1
1032	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	10-14	Male		100%					1	0	0	1	95%			1
1033	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	15-19	Female											95%			3
1034	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	15-19	Male											95%			4
1035	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	20-24	Female											95%			2
1036	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	20-24	Male		100%					18	0	0	18	95%			2
1037	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	25-29	Female		100%					12	0	0	12	95%			2
1038	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	25-29	Male											95%			2
1039	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	30-34	Female		100%					12	0	0	12	95%			2
1040	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	30-34	Male		100%					18	0	0	18	95%			2
1041	Ruyigi	DS Kinyinya [#SNU] [oSiDcsypyOI]	35-39	Female		100%			10%	10%	12	0	1	11	95%		1	2

Chapter 6

How to Fill Out the DataPack




Confirmation
•Confirm TX_PVLS targets in TX tab.
•Confirm HTS_SELF targets in HTS tab.
•Confirm CXCA_SCRN targets in CXCA tab.
•Confirm HTS_RECENT targets in HTS_RECENT tab.
Adjust and Review
•Adjust assumptions and review targets in TX_TB_PREV tab.
•Adjust assumptions and review targets in KP tab. Compare target totals against related Age/Sex totals to confirm KP targets are ≤ Age/Sex targets.
•Adjust assumptions and review targets for all prevention tabs (PP, OVC, PrEP, GEND).
Validate
•Submit Data Pack for validation via self-service validation tool.
•Make corrections to Data Pack and resubmit for validation as necessary.
•Submit for validation via self-service and retrieve Data Pack with prepared SNU x IM tab.
Allocate
•Review SNU x IM tab and adjust allocations as necessary.
•If any additional adjustments to PSNU-level targets are made on previous tabs, re-submit Data Pack to self-service app to have these added to the SNU x IM tab.
Finalize and Submit
•Submit Data Pack for approval.
•Save Data Pack to SharePoint and submit request for DATIM upload via https://datim.zendesk.com.

Chapter 7

How to Use the User Manual

The DataPack consists of tabs that address indicators related to each PEPFAR program area.

The COP22 DataPack User Manual reviews all indicators within each tab and provides you with the relevant information to complete all required sections of the DataPack correctly. It also instructs you where to find more information on each program area in the COP21 Guidance.

7.1 Key Column Highlights

Column type? Indicates whether the data in this column is a result from a previous fiscal year ("Result"), an assumption that the country team is making ("Assumption"), a target for FY2023 ("Targets"), or a reference for the country team as they fill out the DataPack ("Reference").

What type of data? Indicates whether the data in the column is an integer, e.g., a whole number, or a percentage.

Prepopulated data? Indicates whether the data in this column is prepopulated from data in DATIM or from data elsewhere in the DataPack.

Enter or modify data? Indicates whether the user should enter new information into this column or is allowed to modify the prepopulated information in the column. If there is a question mark here, country teams must consult with their PPMs and Chairs before modifying the data in this column. If there is an exclamation mark here, country teams may overwrite the formula in this column, however it will prevent the DataPack from refreshing this data if changes are made elsewhere.

Calculated column? This indicates that a formula is used to indicate where a formula is used to calculate the values in this column from data elsewhere in the DataPack.

Linked column? This indicates that this data is either prepopulated by or is used to prepopulate data in a column on another tab within the DataPack. For columns that are prepopulated from another tab, clicking on the hyperlinked column name in the DataPack will take you to the referenced column.

UID in Appendix. The UID provided here is a DataPack reference ID and can be used to find more information about the data entered into this column in the appendices.

Chapter 8

SPECTRUM

The Spectrum tab will allow users to load UNAIDS data with 12 columns of data elements for your OU. A Data Pack specific csv file will be produced for your OU at the conclusion of the UNAIDS Spectrum Workshops for Country Teams based on the Naomi model. The contents of this file will be manually loaded (ie copied and pasted) into the Spectrum tab which is setup as below:

	D	E	F	G	H	I
Column Name	psnu	psnu_uid	area_id	indicator_code	dataelement_uid	age
Column Type?	assumption	assumption	assumption	assumption	assumption	assumption
What type of data?	string	string	string	string	string	string
Prepopulated data?	N	N	N	N	N	N
Enter or modify data?	N	N	N	N	Y	Y
Calculated column?	N	N	N	N	N	N
Linked column?	Y	Y	N	Y	N	Y

	J	K	L	M	N	O
Column Name	age_uid	sex	sex_uid	calendar_quarter	value	age_sex_rse

	J	K	L	M	N	O
Column Type?	assumption	assumption	assumption	assumption	assumption	assumption
What type of data?	string	string	string	string	integer	percentage
Prepopulated data?	N	N	N	N	N	N
Enter or modify data?	N	N	N	N	N	N
Calculated column?	N	N	N	N	N	N
Linked column?	N	Y	N	Y	Y	N

	P
Column Name	district_rse
Column Type?	assumption
What type of data?	percentage
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	N
Linked column?	N

With OGAC approval, countries can also populate input their own data into this tab with a different MOH/country approved set of estimates as an alternate to Spectrum/Naomi results. Estimate changes can also be made in the two associated tabs, Cascade and PMTCT. Note in CY2022 the Spectrum/Naomi models will not include estimates of programmatic viral load coverage and suppression. This is okay, the DataPack does not rely on these being present. If these columns are blank, DataPack will default to using PEPFAR data.

Chapter 9

PRIORITIZATION

	C	D	E
Column Name	SNU Prioritization (FY22)	SNU Prioritization (FY23)	FY23 SNU Prioritization Translation
UID	IMPATT.PRIORITY_SNU. T_1	IMPATT.PRIORITY_SNU. T	PRIORITY_SNU. translation
Column Type?	past	target	reference
What type of data?	integer	integer	string
Prepopulated data?	Y	N	N
Enter or modify data?	?	N	N
Calculated column?	N	Y	Y
Linked column?	Y	Y	Y

9.0.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **SNU Prioritization (FY23)** *IMPATT.PRIORITY_SNU.T*

9.0.2 Instructions

1. Review the column "SNU Prioritization (FY22)" which will indicate prioritization levels set in COP22 for each PSNU.
2. Review "SNU Prioritization (FY23)" and adjust as appropriate for COP21 programming. This is currently set to populate with the same level of prioritization that was referenced in step 1. Overwrite this column to set new levels of prioritization based on the list below. This column should only be populated using integers 1-8 and "M", "NA", or "Not a PSNU", as follows:
    - 1 = "Scale-up: Saturation"
    - 2 = "Scale-up: Aggressive"
    - 4 = "Sustained"
    - 5 = "Centrally Supported"
    - 6 = "Sustained: Commodities"
    - 7 = "Attained"
    - 8 = "Not PEPFAR Supported"
    - "M" = "Military"
    - "NA","Not a PSNU" = "INVALID"
3. Review the column "FY23 SNU Prioritization Translation" to ensure the prioritization level for each PSNU is correct. To make any changes, only edit the column "SNU Prioritization (FY23)" from Step 2.

Chapter 10

CASCADE

The Cascade Tab allows DataPack users to view and set the overall contour of their treatment and testing program across both geography and population. Of all tabs in the COP22 DataPack, this tab experienced the most changes compared to the COP21 DataPack, reflecting changes in PEPFAR COP guidance to reemphasize the importance of Viral Load Testing Coverage (VLC) and Viral Load Suppression (VLS) in the HIV response.

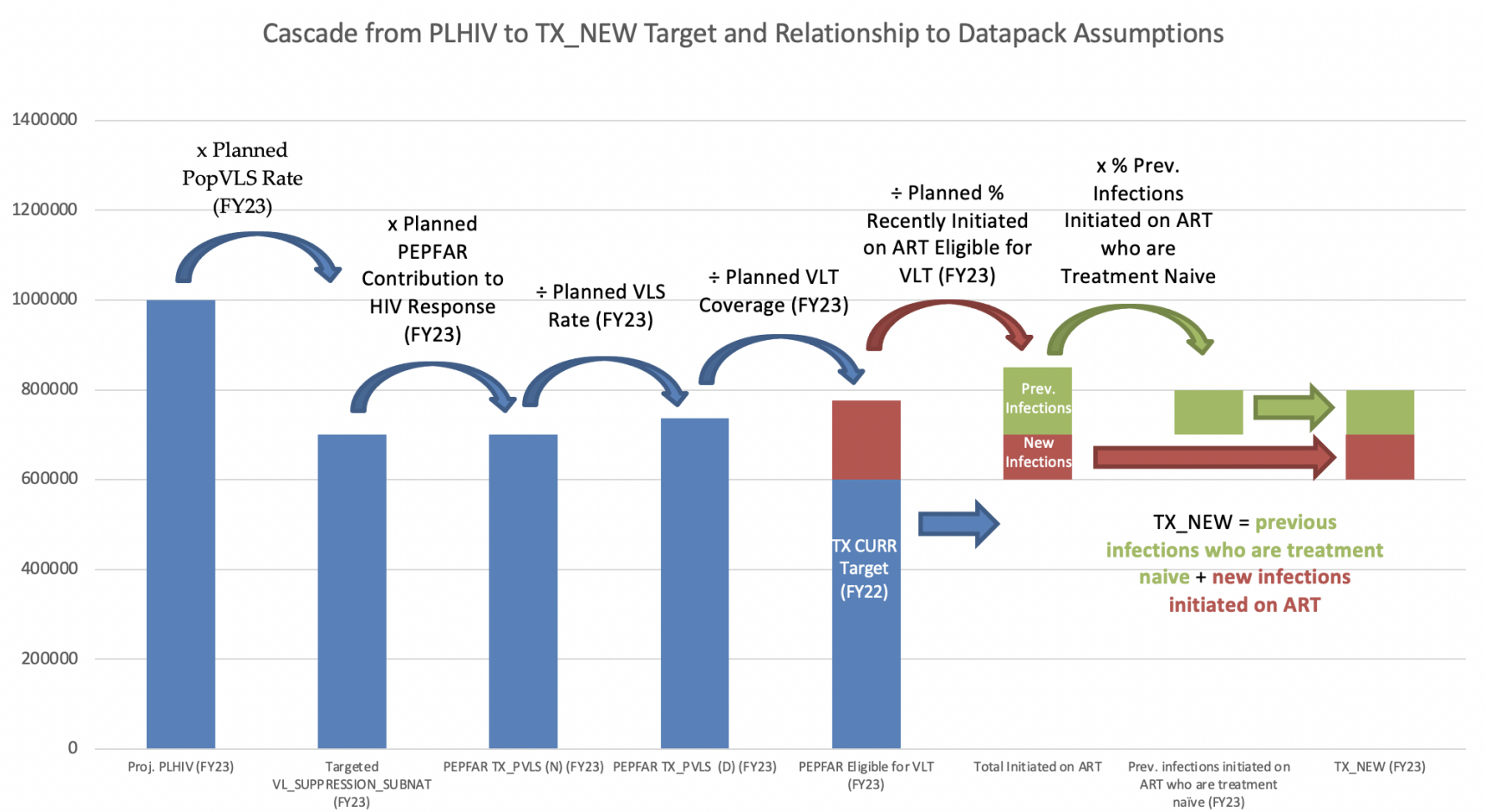
As seen in Section 7 of PEPFAR COP/ROP 2022 Guidance, Country Teams are asked to center their COP22 discussions around the concept of Population Viral Load Suppression (PopVLS), or the percent of all People Living with HIV who have a suppressed viral load. This metric provides a succinct, composite view of the HIV response, including: new infections, testing & diagnosis, linkage to and retention on treatment, eligibility for viral load testing, roll out of viral load testing, and viral load suppression.

Because this is a fundamental shift in the Cascade tab from previous years, it is important to have an overall understanding of the flow of the Cascade calculations from FY23 estimated PLHIV to the TX_PVLS and TX_NEW targets. This logical flow is described in the figure below. The key assumption is the "Planned PopVLS rate (FY23)", which takes you from the FY23 estimated PLHIV to the measured number of virally suppressed patients in the OU (VL_SUPPRESSION_SUBNAT (FY23)). This use of the term % PopVLS should be distinguished from its use in other settings where it is meant to convey the theoretical fraction of PLHIV who are virally suppressed (whether in-care or out of care, tested for viral load or not). As used in the DataPack, PopVLS is a programmatic PopVLS that conveys only what can be measured either by the host country or by PEPFAR. The VL_SUPPRESSION_SUBNAT (FY23) is then multiplied by the Planned PEPFAR Contribution to the HIV Response (FY23) to give the PEPFAR TX_PVLS (N) (FY23) target. The PEPFAR TX_PVLS_D is then divided by the Planned VLS Rate (FY23) to yield the TX_PVLS (D) (FY23) target.

The DataPack then calculates the TX_NEW target from the TX_PVLS (D) target. Because TX_PVLS (D) is only the number of persons on treatment tested for VL, the DataPack calculates the total number eligible for VL testing by dividing by the Planned VLT Coverage (FY23). The number eligible for viral load testing can be thought of as the sum of those who were already on treatment, i.e. TX_CURR (FY22), and those who are initiated on treatment during FY23 and eligible for VLT. To get the number of persons initiated on treatment (whether eligible for VLT or not), we divide by the Planned % Recently Initiated on ART Eligible for VLT (FY23). The number initiated on treatment during FY23 is similar to

TX_NEW, but still may contain individuals who may have previously been on ART, fallen out of care, and re-initiated treatment who may not need to be retested for HIV and who should not be included in TX_NEW. Therefore, we calculate the # of previous infections who are treatment naïve by multiplying the total number of previous infections by the % Prev. Infections Initiated on ART who are Treatment Naïve. TX_NEW is then calculated as the sum of previous infections who are treatment naïve and the new infections initiated on ART.

As in past DataPacks, this tab interweaves with many other tabs of the DataPack, including the PMTCT, TB, EID, VMMC, KP, HTS, CXCA, HTS_RECENT, and TX_TB_PREV tabs. As is explained below and in sections related to these tabs, DataPack logic is most useful when target-setting begins in the Cascade tab and progresses from left to right, both within that tab, and across and within all other tabs, returning iteratively to the Cascade tab throughout.



10.1 Host Country Context

	F	G	H	I
Column Name	H.C. Est. Population (FY22)	RSE: Population (District-level) (%)	H.C. Est. PLHIV (FY22)	RSE: PLHIV (District-level)

	F	G	H	I
UID	POP_EST.T_1	POP_EST. DistrictUncertainty. T_1	PLHIV.T_1	PLHIV. DistrictUncertainty.
Column Type?	target	reference	target	reference
What type of data?	integer	percentage	integer	percentage
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	Y	Y
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

	J	K	L
Column Name	H.C. Est. HIV Prevalence (FY22) (%)	RSE: HIV Prevalence (District-level) (%)	H.C. Projected Incidence Rate (FY23) (%)
UID	HIV_PREV.T_1	HIV_PREV. DistrictUncertainty. T_1	Incidence_SUBNAT.Rt. T_1
Column Type?	target	reference	reference
What type of data?	percentage	percentage	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	N	O	P
Column Name	H.C. Projected New Infections (FY23)	RSE: New Infections (District-level) (%)	H.C. Est. PLHIV Diagnosed (
UID	EW_INFECTIONS_SUBNAT. T_1	EW_INFECTIONS_SUBNAT. DistrictUncertainty. T_1	DIAGNOSED_SUBNAT.T
Column Type?	reference	reference	target
What type of data?	integer	percentage	integer

	N	O	P
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	R	S	T
Column Name	H.C. Observed TX_CURR_SUBNAT (FY21)	RSE: TX_CURR_SUBNAT.R (District-level) (%)	H.C. Est. TX_CURR_SUBNA
UID	TX_CURR_SUBNAT.R	TX_CURR_SUBNAT. DistrictUncertainty. R	TX_CURR_SUBNAT.'
Column Type?	result	reference	target
What type of data?	integer	percentage	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	V	W	
Column Name	H.C. Est. ART Patients Tested for VLS (FY22)	RSE: ART Patients Tested for VLS (District-level) (%)	H.C. Est. Virall
UID	VL_TESTING_SUBNAT. T_1	VL_TESTING_SUBNAT. DistrictUncertainty. T_1	VI
Column Type?	reference	reference	
What type of data?	integer	percentage	
Prepopulated data?	N	N	
Enter or modify data?	N	N	

	V	W	
Calculated column?	Y	Y	
Linked column?	Y	Y	

For those leveraging UNAIDS Spectrum estimate exports for the Data Pack, once these have been loaded into the Spectrum tab of the Data Pack, this first portion of the Cascade tab will automatically update to reflect these estimates. For those leveraging alternatives to Spectrum, see below.

In specific, the Host Country Context section of the Cascade tab provides space for reflecting the following data:

- **Host Country Estimated Population (FY22)** *POP_EST.T_*1: Estimated population, projected as of September 2022.
- **Host Country Estimated PLHIV (FY22)** *PLHIV.T_*1: Estimated number of people living with HIV, projected as of September 2022.
- **Host Country Estimated HIV Prevalence (FY22) (%)** *HIV_PREV.T_*1: Estimated HIV Prevalence, projected as of September 2022.
- **Host Country Projected Incidence Rate (FY22) (%)** *Incidence_SUBNAT.Rt.T_*1: Estimated incidence rate, projected as of September 2022.
- **Host Country Projected New Infections (FY23)** *NEW_INFECTIONS_SUBNAT.T_*1: Estimated new infections projected to occur in FY23, based on projected FY22 Incidence Rates.
- **Host Country PLHIV Diagnosed (FY22)** *DIAGNOSED_SUBNAT.T_*1: Estimated number of people living with HIV who know their HIV status, projected as of September 2022.
- **Host Country Observed TX_CURR_SUBNAT (FY21)** *TX_CURR_SUBNAT.R*: Observed/actual total number of PLHIV receiving ART as of September 2021.
- **Host Country Estimated TX_CURR_SUBNAT (FY22)** *TX_CURR_SUBNAT.T_*1: Estimated number of PLHIV receiving ART, projected as of September 2022.
- **Host Country Est. ART Patients Tested for VLS (FY22)** *VL_TESTING_SUBNAT.T_*1: Estimated number of ART Patients who have been tested for Viral Load Suppression, projected as of September 2022. **See note below*
- **Host Country Estimated Virally Suppressed ART Patients (FY22)** *VL_SUPPRESSED.T_*1: Estimated PLHIV who are on ART and have a suppressed viral load, projected as of September 2022. **See note below*

**Note:* This indicator is not available via Spectrum for COP22. If high quality data is available from another source, you may enter it this here, overwriting formulas, though retain data source documentation. However, if data is not readily available, it is best to leave this column blank — the DataPack was designed to populate subsequent columns even without this data.

10.1.1 DATIM Import

The following data points will be imported into DATIM from this section, replacing any preexisting estimates for these indicators that may have already been entered in DATIM:

- **Host Country Estimated Population (FY22)** $POP_EST.T_1$
- **Host Country Estimated PLHIV (FY22)** $PLHIV.T_1$
- **Host Country Estimated HIV Prevalence (FY22) (%)** $HIV_PREV.T_1$
- **Host Country PLHIV Diagnosed (FY22)** $DIAGNOSED_SUBNAT.T_1$
- **Host Country Observed TX_CURR_SUBNAT (FY21)** $TX_CURR_SUBNAT.R$
- **Host Country Estimated TX_CURR_SUBNAT (FY22)** $TX_CURR_SUBNAT.T_1$
- **Host Country Est. ART Patients Tested for VLS (FY22)** $VL_TESTING_SUBNAT.T_1$
- **Host Country Estimated Virally Suppressed ART Patients (FY22)** $VL_SUPPRESSED.T_1$

10.1.2 Instructions

1. If using UNAIDS Spectrum as the source for these data:

    a. Review the above columns to confirm that data has been correctly linked with the Spectrum tab. You may consider using filter drop-down menus to quickly inspect for any non-numeric, negative, or invalid data.

    b. Review Relative Standard Error values to identify any estimates with a Relative Standard Error of more than or equal to 20. See the section below for additional instructions.

2. If leveraging alternatives to UNAIDS Spectrum as the source for these data, see the below section.

3. Confirm that no data has been entered against _Military Organization Units. See below for more explanation.

Please note that the Host Country Estimated Patients Tested for VLS (FY22) and the Host Country Estimated Virally Suppressed ART Patients (FY22) are not available from Spectrum/Naomi. Therefore, they will not populate from the Spectrum tab. The DataPack does not need it populated to work, and if it is left blank the DataPack will rely on PEPFAR MER data.

10.1.3 Leveraging Alternatives to Spectrum

Most countries are encouraged to use UNAIDS Spectrum as their source for the above data. However, Country Teams may request approval from their PPM and a DUIT Liaison to use an alternative data source if deemed more reliable.

In this case, paste estimates from other approved sources into this section of the Cascade tab by overwriting the formulas currently in these green columns. Due to hidden Relative Standard Error columns between the various estimate columns, it is recommended you paste this data in one column

at a time, rather than in bulk. It may also reduce technical issues to first copy geographic data in the SNU1, PSNU, Age, and Sex columns into a separate spreadsheet, then use Excel lookup functions to add estimates data against the correct geographies and populations, and then return to pasting data into the original Cascade tab column by column.

Please note that it is not required to populate the Host Country Estimated Patients Tested for VLS (FY22) and the Host Country Estimated Virally Suppressed ART Patients (FY22) columns. In fact, in the absence of appropriate programmatic or clinical data, it is inadvisable to expend great effort on making these estimates. The DataPack has been redesigned with the understanding that most countries will not have these data. If these columns are left blank, the DataPack will automatically use PEPFAR program data to estimate the Working PopVLS Rate and the cascade calculations will still be able to proceed.

10.1.4 Relative Standard Errors

UNAIDS Spectrum estimates are accompanied by Relative Standard Errors (RSE) for each data point, both at the District level as well as the Age/Sex-specific level. These indicate the relative reliability of each of these data, which should be considered when using these to make program planning decisions.

Along with the data points above, RSEs will also automatically be populated in the Cascade tab from data loaded into the Spectrum tab. While initially these RSE columns will be hidden, you can unhide these columns to inspect these values. RSEs are also used to color-coded related columns based on the relative uncertainty of each specific data point as follows:

- **Red:** RSE ≥ 40.
- **Yellow:** RSE < 40, but ≥ 20.
- **Green:** RSE < 20.

Red or yellow highlighting may not always mean a data point should be disregarded, nor is it the case that all green values should be taken at face value. Either way, consider these RSEs as helpful guideposts in interpreting the contextual meaning and quality of UNAIDS Spectrum estimates.

If, in reviewing Relative Standard Error values, the uncertainty interval of an estimate appears to be concerning, consider the following next steps:

1. Raise and discuss the issue with your PPM and DUIT Liaison.
2. Communicate concerns to assigned UNAIDS liaisons and discuss appropriate methods for improving or better understanding data quality for the data points in question.

10.1.5 Host Country Estimates for Military Organization Units

Due to issues of political sensitivity and national security, estimates for the above indicators should not be entered against Military Organization Units. Any case where this does occur will be flagged in the Data Pack Self-Service App, and removed during DATIM import.

10.2 PEPFAR FY21 Cascade (Observed) & PEPFAR FY22 Cascade (Planned)

	Z	AA	AB	AC	AD
Column Name	New Positives	TX_NEW	TX_CURR	TX_PVLS (D)	TX_PVLS (N)
UID	HTS_TST.Pos. Total_With_HEI.R	TX_NEW.R	TX_CURR.R	TX_PVLS.D.Routine.R	TX_PVLS.N.Routine.R
Column Type?	calculation	past	past	past	past
What type of data?	integer	integer	integer	integer	integer
Prepopulated data?	N	Y	Y	Y	Y
Enter or modify data?	N	?	?	?	?
Calculated column?	N	N	N	N	N
Linked column?	Y	Y	Y	Y	Y

	AE	AF	AG	AH	AI
Column Name	New Positives	TX_NEW	TX_CURR	TX_PVLS (D)	TX_PVLS (
UID	HTS_TST.Pos. Total_With_HEI.T_1	TX_NEW.T_1	TX_CURR.T_1	TX_PVLS.D.Routine. T_1	TX_PVLS.N.Routi
Column Type?	calculation	past	past	past	past
What type of data?	integer	integer	integer	integer	integer
Prepopulated data?	N	Y	Y	Y	Y
Enter or modify data?	N	?	?	?	?
Calculated column?	N	N	N	N	N
Linked column?	Y	Y	Y	Y	Y

This section provides an overview of PEPFAR FY21 results and FY22 targets, both to give insight into the current status of PEPFAR's contribution to the host country HIV response, as well to serve as reference to many other sections in the Cascade tab. Review this section to understand PEPFAR's trends for the following data, as well as the linkages and relationships between them:

- New Positives — including from both HTS_TST_POS (serologic testing) & PMTCT_HEI_POS (virologic testing)
- TX_NEW
- TX_CURR
- TX_PVLS (D)
- TX_PVLS (N)

10.3 VL_SUPPRESSION_SUBNAT

	AJ	AK	
Column Name	Est. PEPFAR Contribution to HIV Response (FY22) (%)	Planned PEPFAR Contribution to HIV Response (FY23) (%)	Work
UID	TX_PVLS.N.NatlContr. T_1	TX_PVLS.N.NatlContr. T	
Column Type?	reference	assumption	
What type of data?	percentage	percentage	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

This section of the Cascade tab builds upon the preceding Host Country Context and PEPFAR Cascade sections to arrive at an analysis of gap to PopVLS by geography and population. This analysis for popVLS, helps the DataPack user simulate the percentage of PLHIV who are virally suppressed, either from Host Country or PEPFAR data, which derives downstream PEPFAR cascade indicators beginning with TX_PVLS.

10.3.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **VL_SUPPRESSION_SUBNAT (FY23)** *VL_SUPPRESSED.T*

10.3.2 Instructions

1. Review historic PEPFAR and Host Country data to understand existing trends by geography and population.
2. Review the estimated PEPFAR Contribution to HIV Response for FY22, and adjust the planned PEPFAR Contribution to HIV Response for FY23. See below.
3. Review baseline Working PopVLS Rate for FY22. This is estimated from Host Country PLHIV estimates and either Host Country VLS data, if available, or extrapolated from PEPFAR VLS data otherwise.
4. Review and adjust the Planned PopVLS Rate for FY23. See below for additional information
5. Review resulting **VL_SUPPRESSION_SUBNAT**. See below for additional information.

10.3.3 PEPFAR Contribution to HIV Response

While PEPFAR's contribution to the HIV response within the Host Country may vary across areas of that response, this column attempts to summarize this contribution for use in modeling subsequent targets.

The DataPack first attempts to describe PEPFAR's contribution during FY22, based on both Host Country estimates as well as PEPFAR Results and Targets. Keep in mind as you review these data that the methodologies used in producing Host Country estimates may produce artificial discrepancies between PEPFAR and Host Country values. For example, if Host Country estimates are produced from household surveys, these residential-centric data may differ significantly from PEPFAR's data, which are largely collected at point of service. (Because of this, it is recommended that Host Country estimates follow a point-of-service model where possible.)

In the following column, adjust values to reflect PEPFAR's planned contribution to the HIV response. Keep in mind that if PEPFAR's FY21 results or FY22 targets are greater than Host Country Estimates for a given geography of population, it may be wise to maintain this same relationship to avoid depressing treatment and testing values set later in the Cascade tab beyond what would be the result of projected retention rates.

10.3.4 Working & Planned PopVLS Rates

One of the most pivotal assumptions in the DataPack is the Planned PopVLS Rate (FY23). In planning your PopVLS rate, you should consider your OU's current status in this age-sex-PSNU stratum as represented in the Working PopVLS Rate (FY22) column and your OU's ambitious but feasible aspiration for expansion of VLC. It is important to understand that the DataPack does not require you to estimate the Host Country FY22 PopVLS. Host Country columns may be left blank and the DataPack will estimate Working PopVLS from the imported MER data. To calculate the estimated — or, Working — PopVLS Rate for FY22 (i.e., projected as of September 2022), the Data Pack may use a variety data points, depending on data availability for a given geography and population.

In all cases, the denominator of this calculation is the estimated PLHIV, making it critical that this data be added to the Data Pack in the Host Country Context section.

For its numerator, the DataPack first attempts to use Host Country estimates of the total number of Virally Suppressed ART Patients ($VL_SUPPRESSED.T_1$):

$$\frac{Host\ Country\ Est.\ Virally\ Suppressed\ ART\ Patients\ (FY22)}{Host\ Country\ Est.\ PLHIV\ (FY22)}$$

However, when Host Country estimates of the number of virally suppressed ART patients are unavailable, the DataPack refers instead to PEPFAR data for TX_PVLS (N) either from FY22 targets or, if these are also unavailable, FY21 results, and then extrapolates these to the Host Country context by referencing the Planned PEPFAR Contribution to HIV Response set previously.

$$\frac{PEPFAR\ TX_PVLS}{Host\ Country\ Est.\ PLHIV\ (FY22)}$$

Reviewing and understanding the Working PopVLS Rate arrived at in this column is critical for much of the rest of the DataPack. In particular, this column is immediately used to inform the Planned PopVLS Rate (FY23) in the next column. While the default in this column is 95% x 95% x 95%, reflecting the UNAIDS "95 for All" goals, anytime the Working PopVLS Rate from FY22 is higher than this default for a given geography/population, the higher number will be used instead. The gap between the FY23 Planned and FY22 Working PopVLS Rates is instrumental in determining the following key data points throughout the remainder of the Cascade Tab:

- Host Country VL_SUPPRESSION_SUBNAT
- PEPFAR TX_PVLS (N)
- PEPFAR TX_PVLS (D)
- PEPFAR TX_NEW
- PEPFAR TX_CURR
- PEPFAR TX_CURR_SUBNAT
- PEPFAR HTS_TST totals

No matter the starting default for Planned PopVLS rate, you may adjust this target to fit the realities of your country context and your treatment program. It may also be helpful to return to this column to iteratively adjust it as you proceed through the next few sections of the DataPack. To help conceptualize how you might adjust the planned PopVLS Rate, please review the figure in the introduction of this section which describes the role of the Planned PopVLS Rate assumption in the overall logic of calculating the TX_PVLS and TX_NEW targets. As described in the introduction, Planned PopVLS is not intended to convey the idea of population viral load suppression as used in some other settings to mean the theoretical fraction of the PLHIV population that is virally suppressed (whether in care or out of care, tested or untested). Rather, it is best thought of as a programmatic PopVLS value that summarizes the relationship between PLHIV and the clinically known and measured number of virally suppressed PLHIV on treatment.

Because the single Planned PopVLS number is multiplied by the PLHIV estimate to yield the targeted national number of virally suppressed persons (Viral_Suppression_SUBNAT), it should take into account all intermediate steps, i.e. the % diagnosed, % linked to ART, % eligible for viral load testing, % tested for viral load, and % virally suppressed. The calculations in this figure may also be written out as the following formula:

$$Planned_PopVLS = \%\ Diagnosed\ in\ Full\ Population \times \%\ Linked\ Among\ All\ Diagnosed \times Proportion\ of\ full\ FY23\ TX_CURR\ Eligible\ for\ VLT \times Planned\ V$$

Of the factors included in the Planned PopVLS formula, Planned PEPFAR Contribution to HIV Responses (FY23), Planned VLT Coverage (FY23) and Planned VLS Rate (FY23) are present as such in the DataPack. However, percent diagnosed in the full population may be different from the DataPack assumption column "Planned % New Infections Diagnosed (FY23)", which is applied to new (FY23) infections only.

Percent linked among all diagnosed may similarly be different from the DataPack assumption column "Targeted Linkage Rate (FY23)", which in the DataPack is only applied to persons diagnosed in FY23.

Finally, the proportion of the full FY22 TX_CURR eligible for VLT relates to the entire FY23 treatment cohort, whereas the DataPack assumption of Planned % Recently Initiated on ART Eligible for VLT (FY23) with default of 70% only applies to those initiated on ART in FY23; the proportion eligible in the full treatment cohort will be substantially higher and can be calculated by assuming that 100% of the FY22 treatment cohort are eligible for viral load and taking a weighted average of the percentages as follows:

$$\frac{Total\ Initiated\ on\ ART\ (FY23) \times Planned\ \%\ Recently\ Initiated\ on\ ART\ Eligible\ for\ VLT\ (FY23) + (100\ \% * TX_CURR\ Target\ (FY23))}{Total\ Initiated\ on\ ART\ (FY23) + TX_CURR\ Target\ (FY23)}$$

Because the DataPack calculates viral load testing, treatment, and testing targets by first setting the measured number of virally suppressed persons (VL_SUPPRESSION_SUBNAT

$$FY23$$

) using the Planned PopVLS Rate and then stepping back up the cascade, if the Planned PopVLS Rate and these other assumptions are not internally consistent, then the DataPack may give unexpected results, such as setting targets above the PLHIV estimate. Having an understanding of the relationship between the Planned PopVLS and its component assumptions may help teams troubleshoot the DataPack if it seems to be setting inappropriate targets.

It is noteworthy that in cases where the host country estimates of viral suppression are derived from population-based surveys of viral load that get around incomplete programmatic viral load testing, but programmatic viral load coverage in the country is low, the use of these host country estimates to calculated planned PopVLS without adjustment for VLC may give unexpected results. Unless reliable programmatic Host Country VL data is available, it may be best to leave the columns for H.C. Est. ART Patients Tested for VLS (FY22) and H.C. Est. Virally Suppressed ART Patients (FY22) blank, and then the DataPack will automatically rely on PEPFAR PVLS data including TX_PVLS_N, which represents viral suppression only among those tested for viral load, i.e. it incorporates the level of viral load coverage in the OU.

NOTE: The Data Pack will not prevent situations resulting in PopVLS Rate exceeding 100% in a given PSNU, but will flag these cases in Red to highlight when it occurs. Given that these may be a common occurrence in cases of urban PSNUs, they are allowable in the Data Pack, though should be coordinated with PPMs and DUIT Liaisons.

10.3.5 VL_SUPPRESSION_SUBNAT

VL_SUPPRESSION_SUBNAT (FY23) is set as follows (rounded to the nearest integer):

$$Planned\ PopVLS\ Rate\ (FY23)\ \times\ (PLHIV\ (FY22)\ +\ ProjectedNewInfections(FY23))$$

As is evident here, targeted VL_SUPPRESSION_SUBNAT is set as a function of FY22 estimated PLHIV plus the New Infections projected for FY23. How these projected New Infections specifically impact PEPFAR targets for TX_NEW, HTS_TST_POS, and TX_CURR will be explained in subsequent sections.

10.3.6 _Military Organization Units

Due to sensitivities around PopVLS estimates for Military organization units and populations, this data will not be reflected here in the Data Pack. Country Teams should coordinate closely with Department of Defense liaisons who will perform a similar analysis based on available data sources and then directly paste resulting TX_PVLS (N) targets against the Military organization unit, overwriting the formulas in the TX_PVLS (N) column described in the next section.

10.4 TX_PVLS (N)

TX_PVLS (N): Number of ART patients with suppressed VL results (<1,000 copies/mL) documented in the medical or laboratory results/LIS within the past 12 months.

	AU	AV	AW
Column Name	TX_PVLS (D) Routine (FY23)	H.C. Est. % PLHIV Diagnosed (FY22) (%)	H.C. Est. # PLHIV Previously Undiagnosed (FY2
UID	TX_PVLS.D.Routine.T	DIAGNOSED_SUBNAT.Rt. T_1	PLHIV.Undiagnosed. T_1
Column Type?	target	reference	reference
What type of data?	integer	percentage	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	AU	AV	AW

10.4.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TX_PVLS (N): Routine (FY23)** $TX_PVLS.N.Routine.T$

10.4.2 Instructions

1. Filter out both <01 year olds and _Military organization units. See below for additional steps for these groups.
2. Review FY23 TX_PVLS (N) Routine targets. To make initial adjustments, return to the Planned PopVLS Rate (FY23), Planned PEPFAR Contribution to HIV Response (FY23), New Infections (FY23), and PLHIV (FY22). However, at this stage, it is recommended to leave defaults for these in place and review modeled targets for TX_PVLS (N), TX_PVLS (D), TX_NEW, and TX_CURR, paying special attention to TX_NET_NEW (FY23), which will be explained further in the TX_CURR section below.
3. Unfilter _Military organization units and coordinate with DOD SI so they can paste TX_PVLS (N) targets here. In doing so, they may need to adjust targets in other PSNUs as well. See below for additional information.

10.4.3 TX_PVLS (N): Routine (FY23)

For both TX_PVLS (N) and TX_PVLS (D), targets are set in the Data Pack only for Routine viral load testing.

TX_PVLS (N) targets for Routine Viral Load Testing are set as follows, rounded to the nearest integer:

$$TX_PVLS.N.Routine_t = VL_SUPPRESSION_SUBNAT_t \times \text{Planned PEPFAR Contribution to HIV Response (FY23)}$$

10.4.4 _Military Organization Units

Due to the sensitive nature of DOD support for foreign government Military organization units, DOD SI teams model and set PSNU-level targets for TX_PVLS (N) separately so they can leverage granular data collected in their protected systems. DOD SI liaisons have authority to overwrite formulas so as to paste targets for Military organization units in the TX_PVLS (N) column of the Data Pack. As needed, they also have permission to coordinate with other interagency representatives to adjust assumptions and targets in other organization units in order to accommodate _Military organization unit targets, which are effectively a cross-section subset of targets across all other PSNUs.

10.4.5 Infants Virally Suppressed

Targets for <01 year olds who are virally suppressed are set and modeled separately from all other age groups as an extension of the PMTCT model used on the PMTCT tab of the Data Pack. These are initially set without sex disaggregation on the EID tab of the Data Pack, then equally allocated by male and female to be reflected on the Cascade Tab. As such, it is recommended that <01 year olds be filtered out while working through the remaining sections of this Cascade tab, and reviewed here in the Cascade Tab only once targets on the PMTCT and EID tabs have been fully reviewed.

10.5 TX_PVLS (D)

TX_PVLS (D): Number of ART patients with a Viral Load (VL) result documented in the medical or laboratory records/laboratory information system (LIS) within the past 12 months.

	AM	AN	AO
Column Name	Planned PopVLS Rate (FY23) (%)	VL_SUPPRESSION_SUBNAT (FY23)	PMTCT_HEI_POS Virally Suppressed (FY23)
UID	PopVLS.Rt.T	VL_SUPPRESSED.T	PMTCT_HEI_POS. TX_PVLS.N.T
Column Type?	assumption	target	reference
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

10.5.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TX_PVLS (D): Routine (FY23)** *TX_PVLS.D.Routine.T*

10.5.2 Instructions

1. In preparation for setting assumptions for the FY23 Planned VLS Rate, review Host Country estimates and PEPFAR results and targets for trends in VLS rates for each PSNU and population. This can be done in the Data Pack in this section, as well as in PAW, DATIM, and Panorama. Yellow highlights in these columns indicate where VLS rates have historically been below the UNAIDS goal of 95%, and red highlights indicate where reported data produces VLS rates above 100%.
2. Review and adjust the FY23 Planned VLS Rate. This defaults to 95%, unless historic Host Country or PEPFAR data shows a higher trend. However, you may adjust these as needed. In many cases, it is recommended to leave modeled assumptions in place and review targets through to the TX_CURR section of this tab, paying special attention to TX_NET_NEW, and then return to this and other assumptions to adjust iteratively.
3. Review TX_PVLS (D) targets for routine viral load testing. See below for additional information.

10.5.3 TX_PVLS (D): Routine (FY23)

As mentioned above, only Routine Viral Load testing will be targeted in the Data Pack. Within the Data Pack, TX_PVLS (D) targets for Routine Viral Load Testing are set as follows, rounded to the nearest integer:

$$TX_PVLS.D.Routine_t = \frac{TX_PVLS.N.Routine_t}{Planned\ VLS\ Rate\ (FY23)}$$

10.6 VLT Coverage

	AV	AW	AX
Column Name	H.C. Est. % PLHIV Diagnosed (FY22) (%)	H.C. Est. # PLHIV Previously Undiagnosed (FY22)	Planned % New Infections D
UID	DIAGNOSED_SUBNAT.Rt. T_1	PLHIV.Undiagnosed. T_1	EW_INFECTIONS_SU
Column Type?	reference	reference	assumpti
What type of data?	percentage	integer	percentag
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y

	AV	AW	AX
Linked column?	Y	Y	Y

	AZ	BA	
Column Name	H.C. Est. # Previously Diagnosed not on ART (FY22)	PEPFAR ART Linkage Rate (FY21 Results) (%)	PEPFAR ART Linka
UID	DIAGNOSED_SUBNAT. NoART.T_1	HTS_TST.Linkage.R	HTS_T
Column Type?	reference	reference	
What type of data?	integer	percentage	p
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

	BD	BE	
Column Name	Planned % Recently Initiated on ART Eligible for VLT (FY23) (%)	H.C. Est. VLT Coverage (FY22) (%)	PEPFAR VLT Cover
UID	TX_PVLS.D.Eligible. Rt.T	VL_TESTING_SUBNAT.Rt. T_1	TX_PVL
Column Type?	assumption	reference	ref
What type of data?	percentage	percentage	per
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

	BH	BI	BJ	
Column Name	New Infections Initiated on ART (FY23)	Prev. Infections Initiated on ART (FY23)	Total Initiated on ART (FY23)	PEPFA
UID	TX_CURR.New. NewInfections.T	TX_CURR.New. NonNewInfections.T	TX_CURR.New.T	
Column Type?	reference	reference	reference	
What type of data?	integer	integer	integer	
Prepopulated data?	N	N	N	
Enter or modify data?	N	N	N	
Calculated column?	Y	Y	Y	
Linked column?	Y	Y	Y	

	BL
Column Name	Final Planned VLT Coverage (FY23) (%)
UID	TX_PVLS.D.RtFinal.T
Column Type?	reference
What type of data?	percentage
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

10.6.1 DATIM Import

No Targets will be imported to DATIM from this section.

10.6.2 Instructions

1. Filter to exclude <01 year olds.
2. In preparation for setting targets for **diagnosis rates** for both New Infections and those previously Undiagnosed, review historic Host Country estimates of the percent of PLHIV with known HIV Status, and the number of PLHIV who were previously Undiagnosed. Yellow highlights indicate where diagnosis rates appear to be lower than the UNAIDS goal of 95%.
3. Review and adjust the P**lanned Percent of New Infections to be Diagnosed in FY23**. Return to the projected New Infections (FY23) column in the Host Country Context section of this tab to add or adjust New Infections and Incidence Rates as needed. Planned diagnosis rates here default to 95%, unless historic Host Country trends have been higher. In either case, you may adjust this assumption as appropriate.
4. Review historic data about diagnosis rates, and adjust the **FY23 Targeted Linkage Rate**, which applies both to New Infections and those Previously Infected who are not yet on ART including Undiagnosed and those Previously Diagnosed but not on ART). Note that Linkage Rates set here are *also* applied to the models used on the PMTCT, TB, and VMMC tabs in order to maintain linkages between TX_NEW, PMTCT_ART, TB_ART, and VMMC testing's linkage to treatment.
5. Adjust the **Percent of Recently Initiated on ART who are planned to be Eligible for VLT during FY23**. Keep in mind that per MER guidance, individuals must have been on ART for at least 3 months to be eligible for VLT. As such, the default in this column is 70%, though can be adjusted as needed. Also note that this eligibility rate applies to all those planned to be initiated on ART during FY23, whether treatment naive (New Infections, Previously Undiagnosed, or Previously Diagnosed), or those Returning to Treatment.
6. Review historic data about VLT coverage, and adjust the **FY23 Planned VLT Coverage Rate**. This rate defaults to 95%, though can be adjusted with approval from Chair.
7. Coordinate with DOD SI Liaisons to paste targets for **FY23 New Infections Initiated on ART**, overwriting formulas as needed, and adjusting upstream assumptions for other organization units as needed to reflect the cross-section of DOD targets.
8. Review FY23 targets modeled for **New Infections Initiated on ART**, **Previous Infections to be Initiated on ART**, and the **Total Initiated on ART**. See below for additional detail.
9. Review targets for the FY23 planned **Total Eligible for VLT**. See below for additional detail.
10. Review the **FY23 Final Planned VLT Coverage**, which may differ from planned VLT Coverage Rates set in the steps above. Discrepancies can be traced to assumptions set earlier for the PopVLS Rate, the PEPFAR Contribution to the Host Country HIV Response, Diagnosis Rates, Linkage Rates, and Eligibility Rates.

10.6.3 New Infections Initiated on ART (FY23)

Based on Incidence Rates and projected New Infections modeled in the Host Country Context section of this tab, this section of the Data Pack models how PEPFAR will support identifying these individuals and linking them to ART. As such, FY23 New Infections Initiated on ART is set as follows, reflecting both diagnosis and linkage to ART:

$$New\ Infections\ Initiated\ on\ ART = Projected\ New\ Infections\ (FY23) \times Planned\ PEPFAR\ Contribution\ to\ HIV\ Response\ (FY23)\ (\%) \times Planned\ \%\ New\ I$$

Keep in mind that targets for infants to be initiated on ART, as mentioned above, are set on the EID tab and only reflected here. Also similar to the

above, targets for new infections to be initiated on ART in _Military organization units are set and modeled separately by DOD SI liaisons, and will be pasted here in this column.

10.6.4 Previous Infections Initiated on ART (FY23)

After setting the Planned PopVLS Rate and other assumptions earlier (see above section on Working and Planned PopVLS Rate), the Data Pack calculates both TX_PVLS (N) and TX_PVLS (D) targets.

Subsequently, the Data Pack looks to calculate the total newly eligible for VLT in FY23 (Note= This is not a column in the COP22 Data Pack but is part of the equation within the column that estimates the Previous Infections Initiated on ART (FY23). Since the exact number of individuals that will be eligible for viral load testing in FY22 is unknown, the data pack gives us the assumption that all those planned to be on ART at the end of FY22 are eligible for VLT in FY23, therefore the VLT_NET_NEW = (Planned VLT Coverage (FY23) (%)- Planned TX_PVLS_D (FY22).

The full equation for estimating Previous Infections Initiated on ART is:

$$(\ VLT_NET_NEW/Planned\ \%\ Recently\ Initiated\ on\ ART\ Eligible\ for\ VLT\ (FY23))\ -New\ infections\ Initiated\ on\ ART\ (FY23)$$

This is a remainder calculation, in that the data pack assumes all those planned to be on ART at the end of COP22 were eligible for VLT in FY22, then estimates those that are planned to be eligible in FY23, and subtracts them first via those New Infections to be Initiated on ART and Eligible for VLT. Then, if VLT_NET_NEW remains, the Data Pack assumes the remainder must be filled by initiating on ART those that had been previously infected by otherwise not on ART. Also note, that in cases where PopVLS Rates lead to a negative VLT_NET_NEW, this remainder is prevented from ever being below zero.

10.6.5 Total Eligible for VLT (FY23)

The total Eligible for VLT is based first on the total number of individuals in the incoming treatment pool (TX_CURR from the previous year's targets), and secondly on the total number of individuals to be Initiated on TX_CURR who are projected to be on ART within the first three quarters of the Fiscal Year.

$$PEPFAR\ Total\ EVLT\ (FY23)\ =\ (Total\ Initiated\ on\ ART\ (FY23)\times Planned\ \%\ Recently\ Initiated\ on\ ART\ Eliglible\ for\ VLT\ (FY23)\ (\%))+FY22\ TX_CUI$$

This formula assumes all those who are targeted in COP21 to be on treatment at the end of FY22 are eligible for VLT in FY23 and a % of those that are initiated on ART in FY23 are eligible for ART. See step 5 in the instructions above for how review and modify this assumption.

10.7 TX_NEW

TX_NEW: Number of adults and children newly enrolled on anti-retroviral therapy (ART). *Part1of2*

	BM	BN
Column Name	% Prev. Infections Initiated on ART who are Treatment Naive (FY23) (%)	TX_NEW (FY23)
UID	TX_CURR.New. NonNewInfections. Naive.Rt.T	TX_NEW.T
Column Type?	assumption	target
What type of data?	percentage	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

10.7.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TX_NEW (FY22)** *TX_NEW.T*

10.7.2 Instructions

1. Return to the VLT Coverage section to review assumptions and targets related to **New Infections Initiated on ART (FY23)**, **Previous Infections Initiated on ART (FY23)**, and **Total Initiated on ART (FY23)**. Keep in mind that TX_NEW encompasses both those New Infections Initiated on ART, as well as those previously infected initiated on ART who are treatment naive (as opposed to those who returning to treatment).

2. Review and adjust assumptions for the **Percent of Previous Infections Initiated on ART who are Treatment Naive (FY23)**. The default for this column is 100% (i.e., none of those previous infections to be initiated on treatment in FY23 are returning to treatment), though you can adjust this column as appropriate for your context.

3. Review **FY23 TX_NEW** targets and return to previous steps to adjust assumptions and modeling decisions as necessary. See below for additional information.

4. Again, it is recommended that you filter out infant populations, as these are set separately on the EID tab, and focus on other populations at first. Only once you have confirmed targets for <01 year olds on the EID tab, return to review those targets on the Cascade tab alongside other populations.

10.7.3 TX_NEW

Because MER guidance stipulates that TX_NEW is to be used for reporting initiation on ART of those who are treatment naive, TX_NEW may not always be the same as the target for the Total Initiated on ART (FY23) set in the VLT Coverage section previously due to portions of the total number initiated that may be comprised of individuals who are returning to treatment.

10.8 TX_CURR

TX_CURR: Number of adults and children currently receiving anti-retroviral therapy (ART).

	BO	BP	BQ
Column Name	Targeted Retention Rate - Initiated on ART (FY23) (%)	Targeted Retention Rate - Already on ART (FY23) (%)	TX_CURR
UID	TX_RET.New.T	TX_RET.Already.T	TX_CUR
Column Type?	assumption	assumption	target
What type of data?	percentage	percentage	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

10.8.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TX_CURR (FY23)** *TX_CURR.T*

10.8.2 Instructions

1. Review and adjust assumptions for **Targeted Retention Rates**, both for those Initiated on ART during FY23, and those Already on ART at the start of FY23. The default for each of these is 98%, though you may adjust these as needed.
2. Return to the PEPFAR FY22 Targets Cascade section to review the **incoming Treatment Cohort**, which often times comprises the bulk of TX_CURR targets set in this section.
3. Return to the VLT Coverage section to review targets for the **Total Initiated on ART (FY23)**.
4. Review targets for **TX_CURR (FY23)**, which is based on the incoming Treatment Cohort, the Total Initiated on ART (FY23), and related retention rates for each.
5. Review historic TX_NET_NEW planned during the previous COP, as well as targeted TX_NET_NEW resulting from targets modeled in this Data Pack for the upcoming Fiscal Year. In some cases, negative TX_NET_NEW may result, and may not necessarily indicate quality failure, but will be highlighted red to encourage intentional discussion about these cases. It may be necessary to return to previous sections at this point to adjust assumptions. This review and adjustment process may be iterative, and may also depend on targets set in the PMTCT, TB, and VMMC tabs as well.

10.9 TX_CURR_SUBNAT

	BT	BU	
Column Name	TX_CURR_SUBNAT (FY23)	H.C. Est. Population ART Coverage (ART/PLHIV) (FY22) (%)	H.C. Planned Population ART C
UID	TX_CURR_SUBNAT.T	PopART.Rt.T_1	PopA
Column Type?	target	reference	ref
What type of data?	integer	percentage	per
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

10.9.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TX_CURR_SUBNAT (FY23)** *TX_CURR_SUBNAT.T*

10.9.2 Instructions

1. Return and review assumptions for the **PEPFAR Contribution to Host Country HIV Response (FY23)** set previously in the VL_SUPPRESSION_SUBNAT section of this tab.
2. Return and review PEPFAR targets for **TX_CURR (FY23)**.
3. Targets for **TX_CURR_SUBNAT (FY23)** are set in this section by extrapolating PEPFAR TX_CURR targets to a broader context based on PEPFAR's planned contribution to the Host Country HIV Response (FY23).
4. Review the **historic estimated Population ART Coverage** (the total on ART, divided by the total PLHIV).
5. Review the **Planned Population ART Coverage** for the upcoming Fiscal Year, based on all the targets set to this point. As needed, return to previous sections to adjust assumptions in order to influence this column, especially assumptions related to TX_CURR and TX_CURR_SUBNAT.

10.10 PEPFAR Testing

	BW	BX	
Column Name	% Prev. Infected TX_NEW from Prev. Diagnosed (FY23) (%)	TX_NEW from Previously Diagnosed (FY23)	TX_NEW from
UID	TX_NEW. NonNewInfections. PrevDiag.Rt.T	TX_NEW.PrevDiag.T	TX_NE
Column Type?	assumption	reference	r
What type of data?	percentage	integer	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

	CA	CB	CC
Column Name	HTS_TST_POS from HTS_INDEX (FY23 Targets) (%)	HTS_TST_POS + PMTCT_HEI_POS (FY23)	HTS_INDEX Po (FY23)
UID	HTS_TST.Index.Pos. ShareTargeted.T	HTS_TST.Pos. Total_With_HEI.T	HTS_INDEX.P
Column Type?	assumption	reference	reference
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	CE	CF	CG	
Column Name	HTS_TST Post ANC1 New Positives (FY23)	TB_STAT New Positives (FY23)	VMMC Tested Positives (FY23)	PM
UID	HTS_TST.PostANC1.Pos. T	TB_STAT.N.New.Pos.T	VMMC_CIRC.Pos.T	PM
Column Type?	reference	reference	reference	
What type of data?	integer	integer	integer	
Prepopulated data?	N	N	N	
Enter or modify data?	N	N	N	
Calculated column?	Y	Y	Y	
Linked column?	Y	Y	Y	

	CI
Column Name	HTS_TST_POS from All Other Modalities (FY23)

	CI
UID	HTS_TST.Pos. Total_Other.T
Column Type?	reference
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

10.10.1 DATIM Import

There are no Targets from this section that will be imported into DATIM.

10.10.2 Instructions

1. As explained above, TX_NEW includes both those who are newly infected, as well as those who had been previously living with HIV, but who had never been linked to ART. Among this second cohort, one portion may have been previously undiagnosed, while another previously diagnosed but not on ART. In this section, review and adjust assumptions to indicate what percent of those previously living with HIV had been **Previously Diagnosed**, as opposed to **New Diagnoses**.
2. Review historic trends from FY22 targets for the **Percent of HTS_TST_POS from HTS_INDEX**, and determine how to adjust this percentage for FY23 targets.
3. Review total testing targets (**HTS_TST_POS + PMTCT_HEI_POS**) for FY23. Where necessary, return to previous assumptions and adjust appropriately.
4. Review FY23 targets for **HTS_INDEX Positive** and adjust the Targeted % of HTS_TST_POS from HTX_INDEX for FY23 as necessary.
5. Review FY23 targets for **PMTCT_STAT New Positives** and **HTS_TST Post ANC1 New Positives** and navigate to the PMTCT tab to adjust underlying assumptions as necessary.
6. Review FY23 targets for **TB_STAT New Positives** and navigate to the TB tab to adjust underlying assumptions as necessary.
7. Review FY23 targets for **VMMC_CIRC Tested Positives** and navigate to the VMMC tab to adjust underlying assumptions as necessary.

8. Review FY23 targets for **PMTCT_HEI_POS** and navigate to the EID tab to adjust underlying assumptions as necessary. For infants under 1 year old, 100% of testing targets should come through PMTCT_HEI_POS. See below for additional information.

9. Review FY23 targets for **HTS_TST_POS from All Other Modalities** and navigate to the HTS tab to adjust underlying assumptions as necessary.

10. Review percentage contributions toward FY23 targeted Total Positives from HTS_INDEX, PMTCT ANC1, PMTCT Post ANC1, TB_STAT, VMMC, PMTCT_HEI_POS, and All Other Modalities. Red highlights across these columns indicate cases where targets have been over- or under-distributed across modalities. See below for additional information about reconciling discrepancies among these modalities.

10.10.3 Targeted % of HTS_TST_POS from HTS_INDEX

Unlike in past years, the COP22 Data Pack initially sets the percentage of HTS_TST_POS from HTS_INDEX based on the percentage used in the previous year's targets, but allows adjustments from this beginning rate as needed.

10.10.4 Testing Rationalization

As testing targets are set in the PMTCT, TB, VMMC, and EID tabs, these will be reflected here on the Cascade tab to reconcile against those high-level testing targets set following the logic flow in preceding sections. This section of the Cascade tab can serve as a Table of Contents across these tabs as you adjust assumptions and reconcile targets. Similar Testing Rationalization sections also exist in each of these tabs for easier reference.

Red highlighting will indicate any case where over- or under-distribution of testing targets across testing modalities has occurred. As these issues arise, determine whether to adjust either TX_NEW or total Testing targets, or related targets in the PMTCT, TB, VMMC, or EID tabs.

After testing targets have been allocated to PMTCT ANC1, PMTCT Post ANC1, TB_STAT, VMMC_CIRC, and PMTCT_HEI_POS, any remainder will be available for further allocation against other testing modalities in the HTS tab of the Data Pack.

10.10.5 Testing Targets for Infant Populations

Similar to other targets for <01 year olds seen on the Cascade Tab, targets for infants identified as HIV-positive are initially set in the EID tab, without sex disaggregation. In reflecting these in the Cascade tab, these values are equally allocated across male and female infants.

Per COP Guidance, 100% of these testing targets for infant populations should be accommodated for via PMTCT_HEI_POS, and no other modality. Should any portion of these targets be allocated to any other modality, an alert will be flagged in the Data Pack Self-Service App. Conditional formatting within the Data Pack will also indicate when this has occurred.

10.11 Testing Reference Distribution

	CJ	CK	CL
Column Name	Total Positives from HTS_INDEX (FY23) (%)	Total Positives from PMTCT ANC1 (FY23) (%)	Total Positives from PMTCT I
UID	HTS_TST.Index.Pos. Share.T	HTS_TST.PMTCT_STAT. Pos.Share.T	HTS_TST.PostANC1
Column Type?	reference	reference	reference
What type of data?	percentage	percentage	percentag
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	CN	CO	CP
Column Name	Total Positives from VMMC (FY23) (%)	Total Positives from PMTCT_HEI_POS (FY23) (%)	Total Positives from All Other M
UID	HTS_TST.VMMC.Pos. Share.T	HTS_TST.HEI_POS. Share.T	HTS_TST.Total_Other
Column Type?	reference	reference	reference
What type of data?	percentage	percentage	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

10.11.1 DATIM Import

No Targets from this section will be imported into DATIM.

10.11.2 Instructions

1. Review this section for any cases where targets may be over- or under-allocated across modalities, which will be highlighted red for easy distinction.
2. Return to the previous section to review target values as needed, or navigate to the PMTCT, TB, EID, or VMMC tabs to adjust targets set on these tabs.

10.12 HTS_Index

HTS_INDEX: Number of individuals who were identified and tested using Index testing services and received their results

	CQ	CR	
Column Name	% HTS_INDEX_POS identified in Community Sites (FY23) (%)	COMMUNITY - Yield (Contacts newly tested) (FY23) (%)	FA
UID	HTS_INDEX.Pos. ComShare	HTS_INDEX_COM.New. Yield	
Column Type?	calculation	calculation	
What type of data?	percentage	percentage	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	N	N	
Linked column?	Y	Y	

	CU	CV	
Column Name	COMMUNITY - Contacts Tested, New Negative (FY23)	FACILITY - Contacts Tested, Positive (FY23)	FACILITY - Contact
UID	HTS_INDEX_COM.New. Neg.T	HTS_INDEX_FAC.New. Pos.T	HTS_INDI
Column Type?	target	target	
What type of data?	integer	integer	
Prepopulated data?	N	N	

	CU	CV	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

10.12.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **COMMUNITY - Contacts Tested, New Positive** $HTS_INDEX_COM.New.Pos.T$
- **COMMUNITY - Contacts Tested, New Negative** $HTS_INDEX_COM.New.Neg.T$
- **FACILITY - Contacts Tested, New Positive** $HTS_INDEX_FAC.New.Pos.T$
- **FACILITY - Contacts Tested, New Negative** $HTS_INDEX_FAC.New.Neg.T$

10.12.2 Instructions

1. Review the estimated percent of total HTS_INDEX positives to be identified in **Community Sites**. This will initially be pre-populated based on historic trends as recorded in DATIM, but may be adjusted as needed. Red highlights indicate percentages over 100%, or under 0%.
2. Review estimated **yields** among HTS_INDEX contacts newly tested, both for Community and Facility sites. These are initially pre-populated based on historic trends from DATIM, but can be adjusted as needed. Red highlights indicate percentages over 100%, or under 0%; yellow highlights indicate cases where yield rates are less than 20% for 15+ year olds.
3. Review modeled targets for the following columns. See below for additional information:
    a. COMMUNITY – Contacts Tested, New Positive
    b. COMMUNITY – Contacts Tested, New Negative
    c. FACILITY– Contacts Tested, New Positive
    d. FACILITY– Contacts Tested, New Negative
4. Review the Actual percent of HTS_TST_POS to come from Index testing, calculated by dividing the sum of Community and Facility HTS_INDEX_POS by the total HTS_TST_POS.

10.12.3 HTS_INDEX Disaggregates

In general, HTS_INDEX disaggregates across both Community and Facility sites, and across both Negative and Positive HIV test results, are set by combining HTS_INDEX_POS with the percentages set in steps 1 and 2 above.

Targets for HTS_INDEX New Positives in Community Sites are set as follows, rounding to the nearest integer:

$$HTS_INDEX_COM.New.Pos_t = HTS_INDEX.Pos_t \times \%\ HTS_INDEX_POS\ identified\ in\ Community\ Sites_t$$

Building from this, targets for HTS_INDEX New Negatives in Community Sites are set as follows, rounding to the nearest integer:

$$HTS_INDEX_COM.New.Neg_t = \frac{HTS_INDEX_COM.New.Pos_t}{\text{Community New Tested Yield}_t} - HTS_INDEX_COM.New.Pos_t$$

Alternatively, targets for HTS_INDEX New Positives in Facility Sites are set as follows, rounding to the nearest integer:

$$HTS_INDEX_FAC.New.Pos_t = HTS_INDEX_POS_t - HTS_INDEX_COM.New.Pos_t$$

And finally, targets for HTS_INDEX New Negatives in Community Sites are set as follows:

$$HTS_INDEX_FAC.New.Neg_t = \frac{HTS_INDEX_FAC.New.Pos_t}{\text{Facility New Tested Yield}_t} - HTS_INDEX_FAC.New.Pos_t$$

10.13 DIAGNOSED_SUBNAT

	CY
Column Name	DIAGNOSED_SUBNAT (FY23)
UID	DIAGNOSED_SUBNAT.T
Column Type?	target
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N

	CY
Calculated column?	Y
Linked column?	Y

10.13.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Host Country DIAGNOSED_SUBNAT (FY23)** $DIAGNOSED_SUBNAT.T$

10.13.2 Instructions

1. Return to the VL_SUPPRESSION_SUBNAT section to review the **planned PEPFAR Contribution to HIV Response**.
2. Review FY23 targets for **Host Country DIAGNOSED_SUBNAT**. This is based on the PEPFAR target for Total Testing, but extrapolated to the Host Country context following the planned PEPFAR Contribution to the HIV Response, then added to the estimated FY22 DIAGNOSED_SUBNAT indicated in the Host Country Context section of the Data Pack.

Chapter 11

PMTCT

11.1 Host Country Context

	F	G	H
Column Name	Host Country Est. Female Population (FY22)	Host Country Est. PLHIV (FY22)	Host Country Est. HIV Prevalence (FY22) (%
UID	POP_EST.T_1	PLHIV.T_1	HIV_PREV.T_1
Column Type?	reference	reference	reference
What type of data?	integer	integer	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	Y
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	I	J	K
Column Name	Host Country Est. TX_CURR_SUBNAT (FY22)	Host Country Est. ART Coverage (FY22) (%)	Host Country Est. PopVLS Ra
UID	TX_CURR_SUBNAT.T_1	TX_CURR_SUBNAT.Rt. T_1	PopVLS_SUB
Column Type?	reference	reference	refere
What type of data?	integer	percentage	percen
Prepopulated data?	N	N	N
Enter or modify data?	Y	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	L	M
Column Name	Host Country PMTCT_STAT_SUBNAT (D) - # New ANC clients (FY22)	Host Country PMTCT_STAT_SUBNAT (N) - Known Po
UID	PMTCT_STAT_SUBNAT.D. T_1	PMTCT_STAT_SUBNAT.N. Known.Pos.T_
Column Type?	target	target
What type of data?	integer	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

	O	P
Column Name	Host Country PMTCT_STAT_SUBNAT (N) - New Negative (FY22)	Host Country PMTCT_ART_SUBNAT (D) - # HIV-positive
UID	PMTCT_STAT_SUBNAT.N. New.Neg.T_1	PMTCT_ART_SUBNAT.D. T_1
Column Type?	target	target

	O	P
What type of data?	integer	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

	R
Column Name	Host Country PMTCT_ART_SUBNAT (N) - New on ART (FY22)
UID	PMTCT_ART_SUBNAT.N. New.T_1
Column Type?	target
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

11.1.1 DATIM Import

The following data will be imported into DATIM from this section of the DataPack:

- **Host Country PMTCT_STAT_SUBNAT (D) - # New ANC clients (FY22)** *PMTCT_STAT_SUBNAT.D.T_1*
- **Host Country PMTCT_STAT_SUBNAT (N) - Known Positive (FY22)** *PMTCT_STAT_SUBNAT.N.Known.Pos.T_1*
- **Host Country PMTCT_STAT_SUBNAT (N) - New Positive (FY22)** *PMTCT_STAT_SUBNAT.N.New.Pos.T_1*
- **Host Country PMTCT_STAT_SUBNAT (N) - New Negative (FY22)** *PMTCT_STAT_SUBNAT.N.New.Neg.T_1*

- **Host Country PMTCT_ART_SUBNAT (D) - # HIV-positive pregnant women (FY22)** *PMTCT_ART_SUBNAT.D.T_1*
- **Host Country PMTCT_ART_SUBNAT (N) - Already on ART (FY22)** *PMTCT_ART_SUBNAT.N.Already.T_1*
- **Host Country PMTCT_ART_SUBNAT (N) - New on ART (FY22)** *PMTCT_ART_SUBNAT.N.New.T_1*

11.1.2 Instructions

1. Review data for the following columns, all of which come from corollaries on the Cascade tab. Follow hyperlinks to navigate to the source of this data:

    a. Host Country Estimated Female Population (FY22)
    b. Host Country Estimated PLHIV (FY22)
    c. Host Country Estimated HIV Prevalence (FY22)
    d. Host Country Estimated TX_CURR_SUBNAT (FY22)
    e. Host Country Estimated ART Coverage (FY22)

2. If using Spectrum as the source for Host Country Context data, the following columns will initially be populated based on data from the Spectrum export dataset added to the Spectrum tab of the DataPack. Review these and return to Spectrum to adjust assumptions there as needed. With approval by your PPM and assigned DUIT Liaison, you may also identify and use another source for this data.

    a. Host Country PMTCT_STAT_SUBNAT (D) - # New ANC clients (FY22)
    b. Host Country PMTCT_STAT_SUBNAT (N) - Known Positive (FY22)
    c. Host Country PMTCT_STAT_SUBNAT (N) - New Positive (FY22)
    d. Host Country PMTCT_STAT_SUBNAT (N) - New Negative (FY22)
    e. Host Country PMTCT_ART_SUBNAT (D) - # HIV-positive pregnant women (FY22)
    f. Host Country PMTCT_ART_SUBNAT (N) - Already on ART (FY22)
    g. Host Country PMTCT_ART_SUBNAT (N) - New on ART (FY22)

11.2 PMTCT: PMTCT_STAT (D)

PMTCT_STAT (D): Number of new ANC clients in reporting period.

	S	T	U
Column Name	PMTCT_STAT (D) (FY22 Targets)	Expected change in new ANC clients (%)	PMTCT_STAT (D) (FY23)
UID	PMTCT_STAT.D.T_1	PMTCT_STAT.D.Growth. T	PMTCT_STAT.D.T
Column Type?	past	assumption	target
What type of data?	integer	percentage	integer
Prepopulated data?	Y	N	N
Enter or modify data?	?	N	N
Calculated column?	N	Y	Y
Linked column?	Y	Y	Y

11.2.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **PMTCT_STAT (D) (FY23)** *PMTCT_STAT.D.T*

11.2.2 Instructions

1. For historical context, review FY22 targets for PMTCT_STAT (D), reflected in the DataPack per data reported in DATIM.

2. Review and adjust the Expected change in new ANC clients, which should help indicate whether there is an anticipated change in the number of women presenting to ANC compared to FY22. This is defaulted at 0%, though this reflects no suggestion of strategy from S/GAC. Adjust these growth rates to reflect intentional, data-driven, strategic programming. Values can be negative or positive percentages in this column, which will decrease or increase the FY23 target for PMTCT_STAT (D) respectively. (If the expected number of women presenting in ANC for FY22 is the same as FY21, the value in column F would be "0%". If it increased by 50%, the value would be "50%". If the number should decrease by 20%, enter "-20%".)

3. Review FY23 targets for PMTCT_STAT (D), which is calculated by multiplying the Expected change in new ANC clients (set in step 2) by the lesser of either the "Host Country PMTCT_STAT_SUBNAT (D) - # New ANC clients (FY22)" set in the Host Country Context section, or the PMTCT_STAT (D) FY22 targets from DATIM. In the case services are planned in FY23 where these were not provided in FY22, you may manually enter FY23 targets in this column.

11.3 PMTCT: PMTCT_STAT_SUBNAT (D)

	V	W
Column Name	Est. PEPFAR proportion of Host Country PMTCT_STAT_SUBNAT (D) (FY22) (%)	Targeted PEPFAR proportion of Host Country
UID	PMTCT_STAT.D. NatlContr.T_1	PMTCT_STAT.I
Column Type?	reference	assump
What type of data?	percentage	percen
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

11.3.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **PMTCT_STAT_SUBNAT (D) (FY23)** *PMTCT_STAT_SUBNAT.D.T*

11.3.2 Instructions

1. Review the Est. PEPFAR proportion of Host Country PMTCT_STAT_SUBNAT (D) (FY22) (%) that is calculated using the Host Country Context Section.

2. Review Targeted PEPFAR proportion of Host Country PMTCT_STAT_SUBNAT (D) (FY23) (%) which will be set by default to equal the FY22 percentage from the previous column.

3. Review the projected target total for PMTCT_STAT_SUBNAT (D) (FY23). If there is a need to adjust the target, revisit the percentage from column W for the Proportion, or go back and make adjustments to PMTCT_STAT (D) from the previous section of this tab.

11.4 PMTCT: PMTCT_STAT (N)

PMTCT_STAT (N): Number of pregnant women with known HIV status at first antenatal care visit (ANC1) (includes those who already knew their HIV status prior to ANC1).

	Y	Z	
Column Name	Targeted testing coverage of ANC1 clients (FY23) (%)	Est. % ANC1 clients Known HIV Positive (FY21 results) (%)	Projecte
UID	PMTCT_STAT.N.Rt.T	PMTCT_STAT.N. KnownPosRt.R	
Column Type?	assumption	calculation	
What type of data?	percentage	percentage	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	N	
Linked column?	Y	Y	

	AC	AD	AE
Column Name	Est. Yield among Newly Tested ANC1 clients (FY23) (%)	Total PMTCT_STAT (N) (FY23)	Known HIV Status, Positive (FY
UID	PMTCT_STAT.N.New. Yield.T	PMTCT_STAT.N.T	PMTCT_STAT.N. KnownPos.T
Column Type?	assumption	reference	target
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	AG
Column Name	Newly Tested, Negative (FY23)
UID	PMTCT_STAT.N.New.Neg. T
Column Type?	target
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

11.4.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Total PMTCT_STAT (N)** *PMTCT_STAT.N*
- **PMTCT_STAT (N) Known HIV Status, Positive** *PMTCT_STAT.N.KnownPos.T*
- **PMTCT_STAT (N) Newly Tested, Positive** *PMTCT_STAT.N.New.Pos.T*
- **PMTCT_STAT (N) Newly Tested, Negative** *PMTCT_STAT.N.New.Neg.T*

11.4.2 Instructions

1. Review "Targeted testing coverage of ANC clients (FY23)", which is pre-populated with a default value of 100%, indicating the goal that 100% of women presenting at ANC1 know their HIV status, whether by previous or new testing. Adjust this column and modify the proportion to match COP21 PMTCT strategy and goals.
2. Review FY21 Results for (a) Estimated % ANC1 clients with already Known HIV Positive status, and (b) Estimated Positivity Rate among Newly Tested ANC1 clients.
3. Review FY23 projections for (a) Estimated % ANC1 clients with already Known HIV Positive status, and (b) Estimated Positivity Rate among Newly Tested ANC1 clients. These data default to remain static from related FY22 rates added to the Host Country Context section of this tab.

Where these are unavailable, these instead use FY21 results trends. In either case, these can be adjusted as necessary with approval by your PPM and DUIT Liaison. Red highlights indicate percentages over 100%; yellow highlights indicate percentages different from FY21 results. See below for additional information.

4. Review "Total PMTCT_STAT (N)", which will display the numerator value for PMTCT_STAT based on the multiplication of "PMTCT_STAT (D)" and the "Targeted testing coverage of ANC1 clients (FY23)". To make changes to the PMTCT numerator, adjust either the PMTCT denominator or the desired testing coverage.
5. Review PMTCT_STAT Known HIV Status, Positive, which will be calculated based on multiplying Total PMTCT_STAT (N) by the Estimated percent of ANC1 clients already Known HIV Positive.
6. Review PMTCT_STAT Newly Tested, Positive, which will be calculated based on first removing the PMTCT_STAT Known HIV Status, Positive cohort from Total PMTCT_STAT (N), then by multiplying this value by the Estimated Positivity Rate among Newly Tested ANC1 clients.
7. Review PMTCT_STAT Newly Tested, Negative, which will be calculated as the remainder of Total PMTCT_STAT (N) less both PMTCT_STAT Known HIV Status, Positive and PMTCT_STAT Newly Tested, Positive.

11.4.3 FY23 Projected Known Positivity and New Positivity Rates

In projecting rates of Known and New positivity for PMTCT_STAT ANC1 clients, the COP21 DataPack relies first upon Host Country Context estimates, provided by Spectrum or another approved source, and where this data is unavailable, upon PEPFAR FY21 results obtained from DATIM on the date of the DataPack's generation, as documented on the Home tab. These rates are calculated from Host Country Context data as follows:

$$Estimated\ \%\ ANC1\ clients\ already\ Known\ HIV\ Positive_t = \frac{PMTCT_STAT_SUBNAT.N.Known.Pos._{t-1}}{PMTCT_STAT_SUBNAT.D_{t-1}}$$

$$Estimated\ Positivity\ Rate\ among\ Newly\ Tested\ ANC1\ clients_t = \frac{PMTCT_STAT_SUBNAT.N.New.Pos._{t-1}}{PMTCT_STAT_SUBNAT.D_{t-1} - PMTCT_STAT_SUBNAT.N.Known.Pos_{t-1}}$$

11.5 PMTCT: PMTCT_STAT_SUBNAT (N)

	AH	AI	
Column Name	Total PMTCT_STAT_SUBNAT (N)	Host Country PMTCT_STAT_SUBNAT (N) - Known Positive (FY23)	Host Country PMT

	AH	AI	
UID	PMTCT_STAT_SUBNAT.N. T	PMTCT_STAT_SUBNAT.N. Known.Pos.T	PMTC
Column Type?	reference	target	
What type of data?	integer	integer	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

11.5.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Host Country PMTCT_STAT_SUBNAT (N) - Known Positive (FY23)** *PMTCT_STAT_SUBNAT.N.Known.Pos.T*
- **Host Country PMTCT_STAT_SUBNAT (N) - New Positive (FY23)** *PMTCT_STAT_SUBNAT.N.Known.Pos.T*
- **Host Country PMTCT_STAT_SUBNAT (N) - New Negative (FY23)** *PMTCT_STAT_SUBNAT.N.New.Neg.T*

11.5.2 Instructions

1. Review the Total PMTCT_STAT_SUBNAT (N) that is calculated using the target set in the previous section for PMTCT_STAT_SUBNAT (D) (FY23) and Targeted testing coverage of ANC1 clients (FY23) (%) from the PMTCT_STAT (N) section. This will be used to calculate the FY23 targets for the remainder of this section
2. Review Host Country PMTCT_STAT_SUBNAT (N) - Known Positive (FY23) which will be calculated as the product of the Total PMTCT_STAT_SUBNAT (N) and Projected % ANC1 clients Known HIV Positive (FY23) (%). Adjust this percentage from the previous section to make changes to this target.
3. Review Host Country PMTCT_STAT_SUBNAT (N) - New Positive (FY23) in the same manner as it uses the SUBNAT Numerator and Est. Positivity Rate among Newly Tested ANC1 clients (FY23) (%). Adjust this percentage from the previous section to make changes to this target.
4. Review Host Country PMTCT_STAT_SUBNAT (N) - New Negative (FY23) which will be calcuated as the remainder of Host Country PMTCT_STAT_SUBNAT (N) - Known Positive (FY23), less Host Country PMTCT_STAT_SUBNAT (N) - Known Positive (FY23) and Host Country PMTCT_STAT_SUBNAT (N) - New Positive (FY23).

11.6 PMTCT: PMTCT_ART (N)

PMTCT_ART (N): Number of HIV-positive pregnant women who received ART to reduce the risk of mother-to-child transmission during pregnancy.

	AL	AM	AN
Column Name	Targeted ART Linkage Rate (FY23) (%)	Already on ART (FY23)	New on ART (FY23)
UID	PMTCT_STAT.Linkage.T	PMTCT_ART.Already.T	PMTCT_ART.New.T
Column Type?	reference	target	target
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

11.6.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Already on ART** *PMTCT_ART.Already.T*
- **New on ART** *PMTCT_ART.New*

11.6.2 Instructions

1. Review Targeted ART Linkage Rate for linkage between PMTCT_STAT (N) Newly Tested, Positive and PMTCT_ART New on ART. This rate is locked in step with ART Linkage Rates set on the Cascade Tab, which default to 95%; return to that tab to adjust this rate, though note that this will alter linkage rates across all modalities.
2. Review modeled targets for PMTCT_ART (N) Already on ART. For the purposes of COP21 target setting in the DataPack, FY23 targets for PMTCT_ART Already on ART are set assuming that 100% of those ANC1 clients with already known HIV positive status are already on ART.

3. Review modeled targets for PMTCT_ART New on ART, which is calculated by multiplying PMTCT_STAT (N) Newly Tested, Positive by the Targeted ART Linkage Rate.

11.7 PMTCT: PMTCT_ART_SUBNAT

	AO	AP
Column Name	Est. Host Country # HIV-positive pregnant women (FY23)	Est. Host Country # HIV+ Pregnant Women Already on ART (FY23)
UID	PMTCT_ART_SUBNAT.D.T	PMTCT_ART_SUBNAT.N. Already.T
Column Type?	target	target
What type of data?	integer	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

11.7.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Est. Host Country # HIV-positive pregnant women (FY23)** *PMTCT_ART_SUBNAT.D.T*
- **Est. Host Country # HIV+ Pregnant Women Already on ART (FY23)** *PMTCT_ART_SUBNAT.N.Already.T*
- **Est. Host Country # HIV+ Pregnant Women New on ART (FY23)** *PMTCT_ART_SUBNAT.N.New.T*

11.7.2 Instructions

1. Review Est. Host Country # HIV-positive pregnant women (FY23). This is the summation of FY23 Targets set in the PMTCT_STAT_SUBNAT (N) Section for Host Country PMTCT_STAT_SUBNAT (N) - Known Positive (FY23) and Host Country PMTCT_STAT_SUBNAT (N) - New Positive (FY23).
2.

11.8 PMTCT: HTS_TST: PMTCT Post ANC1

HTS_TST: PMTCT Post ANC1: Includes pregnant or breastfeeding women who receive a test POST ANC1, this includes women who are tested later in pregnancy (>ANC2), during labor & delivery (L&D), and while breastfeeding.

	AR	AS	AT	
Column Name	Total eligible for Post ANC1 retesting (FY23)	Yield (FY21 Results) (%)	Yield (FY23) (%)	Targeted A
UID	HTS_TST.PostANC1. Eligible.T	HTS_TST.PostANC1. Yield	HTS_TST.PostANC1. Yield.T	HTS_TS
Column Type?	assumption	calculation	assumption	
What type of data?	integer	percentage	percentage	
Prepopulated data?	N	N	N	
Enter or modify data?	N	N	N	
Calculated column?	Y	N	Y	
Linked column?	Y	Y	Y	

	AV	AW	AX
Column Name	Positive (FY23)	Negative (FY23)	Linked to ART (FY23)
UID	HTS_TST.PostANC1.Pos. T	HTS_TST.PostANC1.Neg. T	TX_NEW.PostANC1.T
Column Type?	target	target	reference
What type of data?	integer	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

11.8.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **HTS_TST PMTCT Post ANC1, Positive** *HTS_TST.PostANC1.Pos.T*
- **HTS_TST PMTCT Post ANC1, Negative** *HTS_TST.PostANC1.Neg.T*

11.8.2 Instructions

1. Review and adjust the Total eligible for Post ANC1 retesting, which is initially set equal to the number tested and found negative in initial ANC1 testing.
2. Review and adjust the Yield for PMTCT Post ANC1 HIV testing, which will initially be pre-populated based on FY21 results from DATIM, but can be adjusted as needed. Red highlights indicate percentages over 100% or under 0%.
3. Review Targeted ART Linkage Rates for linkage between HTS_TST: PMTCT Post ANC1, Positive and TX_NEW. This rate is locked in step with ART Linkage Rates set on the Cascade Tab, which default to 95%; return to that tab to adjust this rate, though note that this will alter linkage rates across all modalities.
4. Review targets for HTS_TST: PMTCT Post ANC1, Positive, which are set by multiplying Total eligible for Post ANC1 retesting, set in step 1, by the Yield rate set in step 2.
5. Review targets for HTS_TST: PMTCT Post ANC1, Negative, which are set by subtracting HTS_TST: PMTCT Post ANC1, Positive from the Total eligible for Post ANC1 retesting set in step 1.
6. Review modeled data for those tested and found positive for HIV post ANC1 who are linked to ART, set by multiplying those found positive by the Targeted ART Linkage Rate set in step 3, rounded to the nearest integer.

11.9 PMTCT: Testing Rationalization

	AY	AZ	
Column Name	Total PMTCT: Positives (From ANC1 & Post ANC1, incl. Known Pos) (FY23)	Total HTS_TST_POS (FY23)	Total Positives f
UID	PMTCT.Pos.T	HTS_TST.Pos.T	HTS_TS

	AY	AZ	
Column Type?	reference	reference	
What type of data?	integer	integer	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

	BC	BD	BE
Column Name	Total Positives from HTS_INDEX (FY23) (%)	Total Positives from TB_STAT (FY23) (%)	Total Positives from All Other Mod
UID	HTS_TST.Index.Pos. Share.T	HTS_TST.TB.Pos.Share. T	HTS_TST.Total_Other. P
Column Type?	reference	reference	reference
What type of data?	percentage	percentage	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

11.9.1 DATIM Import

No data from this section will be imported into DATIM.

11.9.2 Instructions

1. Review Total PMTCT: Positives (From ANC1 & Post ANC1), which represents the *sum* of the PMTCT_STAT Known Positive, PMTCT_STAT Newly Tested Positive, and HTS_TST Post ANC1 Positive targets. This column serves as the starting point of the EID modeling process on the EID tab. For more information about the role of this data relative to EID targets, see that section of this User Guide.

2. Use the remainder of this section of the PMTCT tab to analyze how PMTCT_STAT Newly Tested, Positives fit within the context of an overall testing strategy. In particular, consider how this modality contributes to total HTS_TST_POS in relation to HTS_INDEX, TB_STAT, and all other HTS modalities.

3. Review any cases where this section is highlighted red, indicating over- or under-allocation of HTS_TST_POS targets across contributing modalities. While these allocation issues may be more the result of a different modality(ies), analysis of these to confirm no adjustments to PMTCT_STAT are warranted may prevent issues and additional work in other sections of the DataPack.

4. Return to other tabs of the DataPack where issues flagged in this section require adjustment of either total HTS_TST_POS targets, or targets via other modalities. Similar Testing Rationalization sections can be also found in each of these other tabs of the DataPack. You may also use hyperlinks in column headers in this section to quickly navigate to the most relevant section of the DataPack.

Chapter 12

EID

12.1 EID: PMTCT_EID (N)

PMTCT_EID: Number of infants who had a first virologic HIV test (sample collected) by 12 months of age during the reporting period.

	C	D	
Column Name	Est. # infants born to HIV-positive women (FY23)	Targeted % HIV exposed infants tested by 2 mo (FY23) (%)	Targeted %
UID	PMTCT_EID.D.T	PMTCT_EID.2.Rt.T	
Column Type?	reference	assumption	
What type of data?	integer	percentage	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

12.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- $\leq$ **02mo** *PMTCT_EID.N.2.T*
- **02 – 12mo** *PMTCT_EID.N.12.T*

12.1.2 Instructions

The PMTCT_EID indicator measures the extent to which HIV-exposed infants receive a first virologic HIV test to determine their HIV status by either 2 months or 12 months of age. Ideally, 80% of infants should be tested within the first two months, and 90-95% within the first twelve months.

1. Review and adjust the assumptions for "Targeted % HIV exposed infants tested by 2 mo (%)" and "Targeted % HIV exposed infants tested by 12 mo (inclusive of tested by 2 mo) (%)". These will be set at a default of 95% and 95%, respectively. Red highlights indicate percentages over 100%; yellow highlights indicate percentages less than these default percentages.
2. Review the Estimated number of infants born to HIV-positive women. In absence of granular, reliable, widespread data to estimate rates of multiple births, still births, or infant mortality, this statistic is approximated using the total number of HIV-positive women presenting to ANC (column "Total PMTCT: Positives (From ANC1 & Post ANC1)" of the PMTCT tab). For more information about the assumptions underlying this data, see the section of this User Guide about the PMTCT tab.
3. Review modeled targets for "$\leq$ 02 mo" and "02 - 12 mo" PMTCT_EID, which are based on the proportions of HIV exposed infants (reflected in step 2) to be tested by 2 months and by 12 months (set in step 1). Return to steps 1 and 2 to make adjustments to the assumptions driving these two sets of targets.

12.2 EID: PMTCT_HEI_POS (N)

PMTCT_HEI_POS (N): Number of HIV-infected infants identified in the reporting period, whose diagnostic sample was collected by 12 months of age.

	H	I	J
Column Name	Est. Positivity Rate, = 02 mo (FY21 Results) (%)	Est. Positivity Rate, = 02 mo (FY23) (%)	Est. Positivity Rate, 02 - 12 mo (1
UID	PMTCT_HEI_POS.2. Yield.R	PMTCT_HEI_POS.2. Yield.T	PMTCT_HEI_POS.12.

	H	I	J
Column Type?	calculation	assumption	calculation
What type of data?	percentage	percentage	percentage
Prepopulated data?	N	N	N
Enter or modify data?	Y	Y	N
Calculated column?	N	Y	N
Linked column?	Y	Y	Y

	L	M	N	
Column Name	Total HIV+ infants identified (FY23)	Targeted ART Linkage Rate (FY23) (%)	HIV+ infants linked to ART (FY23)	Target
UID	PMTCT_HEI_POS.T	PMTCT_HEI_POS. Linkage.T	PMTCT_HEI_POS.Linked. T	
Column Type?	reference	assumption	reference	
What type of data?	integer	percentage	integer	
Prepopulated data?	N	N	N	
Enter or modify data?	N	N	N	
Calculated column?	Y	Y	Y	
Linked column?	Y	Y	Y	

	P	Q	R	
Column Name	HIV+ infants retained on ART at end of FY23	Targeted % EVLT (FY23) (%)	HIV+ Infants Eligible for VLT (FY23)	Ta
UID	PMTCT_HEI_POS. TX_CURR.T	PMTCT_HEI_POS. Eligible.Rt.T	PMTCT_HEI_POS.EVLT.T	
Column Type?	reference	assumption	reference	
What type of data?	integer	percentage	integer	
Prepopulated data?	N	N	N	

	P	Q	R
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	T	U	V
Column Name	HIV+ infants tested for VLS (FY23)	Targeted VLS Rate (FY23) (%)	HIV+ infants Virally Suppressed (FY23)
UID	PMTCT_HEI_POS. TX_PVLS.D.T	PMTCT_HEI_POS.VLS.Rt. T	PMTCT_HEI_POS. TX_PVLS.N.T
Column Type?	reference	assumption	reference
What type of data?	integer	percentage	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

12.2.1 DATIM Import

No data points will be imported into DATIM from this section.

12.2.2 Instructions

1. For historical context, review FY21 results for Estimated Positivity Rates both for infants tested before 2 months old, and those tested between 2 and 12 months old. These data reflect data as reported currently in DATIM.
2. Review and adjust assumptions for FY23 projections of Estimated Positivity Rates both for infants tested before 2 months old, and those tested between 2 and 12 months old. These data default to the same as those rates set in step 1, but can be adjusted as needed. Red highlights indicate percentages over 100% or less than 0%; yellow highlights indicate percentages that differ from those set in step 1.
3. Review Targeted proportion of HIV-infected infants linked to ART. This rate is defaulted to 95%.

4. Review Targeted TX Retention Rate (FY23) (%) which will default to 98%.
5. Review Targeted % Eligible for VLS Testing (FY23) (%) which will default to 70%.
6. Review Targeted % Eligible with Access to VLS Testing (FY23) (%) which will default to 100%.
7. Review Targeted VL Suppression Rate (FY23) (%) which will default to 95%.
8. Review "Total HIV infected infants identified" which will be the product of PMTCT_EID set in the previous section, multiplied by the Estimated Positivity Rates set in this section, summed across both PMTCT_EID age disaggregates. Please see below for a detailed formula of the calculation.
9. Review "HIV+ infants linked to ART (FY23)" which is the product of "Total HIV infected infants identified" and Targeted ART Linkage Rate (FY23) (%)from Step 3. Adjust this value with column L. This will be referenced back to the Cascade tab for the <01 age group.
10. Review "HIV+ infants retained on ART at end of FY23" which is the product of "HIV+ infants linked to ART (FY23)" and Targeted TX Retention Rate (FY23) (%) from Step 4. Adjust this value with column M. This will be referenced back to the Cascade tab for the <01 age group.
11. Review "HIV+ infants tested for VLS (FY23)" which is the product of "HIV+ infants linked to ART (FY23)" with both Review Targeted % Eligible for VLS Testing (FY23) (%) from Step 5 and Targeted % Eligible with Access to VLS Testing (FY23) (%) from Step 6. Adjust this value with columns N and O. This will be referenced back to the Cascade tab for the <01 age group.
12. Lastly, review "HIV+ infants Virally Suppressed (FY23)" which is the product of "HIV+ infants tested for VLS (FY23)" and Targeted VL Suppression Rate (FY23) (%) from Step 7. Adjust this value with columns P. This will be referenced back to the Cascade tab for the <01 age group.

12.2.3 PMTCT_HEI_POS (FY22)

To calculate the total number of HIV-infected infants to be tested and identified, the DataPack uses the following formula, rounding to the nearest integer:

$$PMTCT_HEI_POS.T = (PMTCT_EID.N.2.T \times PMTCT_HEI_POS.2.Yield.T) + (PMTCT_EID.N.12.T \times PMTCT_HEI_POS.12.Yield.T)$$

Chapter 13

TB

13.1 TB: TB_STAT (D)

TB_STAT (D): Total number of new and relapsed TB cases, during the reporting period.

	F	G	H
Column Name	FY22 Targets	Estimated Change in Incidence (%)	TB_STAT (D) (FY23)
UID	TB_STAT.D.T_1	TB_STAT.D.Growth.T	TB_STAT.D.T
Column Type?	past	assumption	target
What type of data?	integer	percentage	integer
Prepopulated data?	Y	N	N
Enter or modify data?	?	N	Y
Calculated column?	N	Y	Y
Linked column?	Y	Y	Y

13.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TB_STAT (D)** *TB_STAT.D.T*

13.1.2 Instructions

1. For historical context, review FY22 targets for TB_STAT (D), including in the DataPack reflective of data reported in DATIM.
2. Review and adjust the Estimated Change in Incidence to reflect most reliable projections of TB trends into FY23. This value defaults to 0%, though this should not be interpreted as a suggested epidemiological estimate. If the incidence of TB is expected to remain unchanged from FY22, this value should remain at 0%; if the incidence is expected to double, the cell should read "100%".
3. Review FY23 Targets for TB_STAT (D) and return to step 2 to adjust driving assumptions as necessary. In the case services are planned in FY23 where these were not provided in FY22, you may manually enter FY23 targets in this column.

13.2 TB: TB_STAT (N)

TB_STAT (N): Number of new and relapsed TB cases with documented HIV status, during the reporting period.

	I	J	K
Column Name	TB_STAT (N): New Positives (FY22 Targets)	Targeted TB_STAT Coverage (FY23) (%)	Est. % TB clients already Known H
UID	TB_STAT.N.New.Pos. T_1	TB_STAT.N.Rt.T	TB_STAT.N.Kn
Column Type?	past	assumption	calcula
What type of data?	integer	percentage	percent
Prepopulated data?	Y	N	N
Enter or modify data?	?	N	N
Calculated column?	N	Y	N
Linked column?	Y	Y	Y

	M	N	O
Column Name	Est. Yield among Newly Tested (FY21 Results) (%)	Projected Yield among Newly Tested (FY23) (%)	Total TB_STAT (N)
UID	TB_STAT.N.New.Yield. R	TB_STAT.N.New.Yield. T	TB_STAT.N.T
Column Type?	calculation	assumption	reference
What type of data?	percentage	percentage	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	N	Y	Y
Linked column?	Y	Y	Y

	Q	R
Column Name	Newly Tested, Positive	Newly Tested, Negative
UID	TB_STAT.N.New.Pos.T	TB_STAT.N.New.Neg.T
Column Type?	target	target
What type of data?	integer	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

13.2.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Known HIV Status, Positive** $TB_STAT.N.KnownPos.T$
- **Newly Tested, Positive** $TB_STAT.N.New.Pos.T$

- **Newly Tested, Negative** $TB_STAT.N.New.Neg.T$

13.2.2 Instructions

1. Review historic data for TB_STAT (N): New Positives from FY22 Targets for context.

2. Review and adjust Targeted TB_STAT Coverage. This defaults to 100%, reflecting that 100% of new and relapsed TB cases know their HIV status, but this rate can be adjusted as needed. Red highlights indicate percentages over 100%; yellow highlights indicate percentages under 100%.

3. Review FY21 Results for (a) Estimated % TB clients with already Known HIV Positive status, and (b) Estimated Positivity Rate among Newly Tested TB clients.

4. Review FY23 projections for (a) Estimated % TB clients with already Known HIV Positive status, and (b) Estimated Positivity Rate among Newly Tested TB clients. These data default to remain static from FY21 results trends, but can be adjusted as necessary. Red highlights indicate percentages over 100%; yellow highlights indicate percentages different from FY21 results.

5. Review modeled targets for Total TB_STAT (N), Known HIV Status, Positive, Newly Tested, Positive, and Newly Tested, Negative, and return to steps 1-4 to adjust driving assumptions as needed. See below for additional information.

13.2.3 Total TB_STAT (N)

Total TB_STAT (N) targets are modeled as follows, rounding to the nearest integer:

$$TB_STAT.N_t \;=\; TB_STAT.D_t \;\times\; Targeted\, TB_STAT\; Coverage_t$$

13.2.4 Known HIV Status, Positive

Known HIV Status, Positive targets are modeled as follows, rounding to the nearest integer:

$$TB_STAT.N.KnownPos_t \;=\; TB_STAT.N_t \;\times Estimated\; \%\; TB\; clients\; already\; Known\; HIV\; Positive_t$$

13.2.5 Newly Tested

Targets for TB_STAT (N): Newly Tested, Positive are modeled as follows, rounding to the nearest integer:

$$TB_STAT.N.New.Pos_t = (TB_STAT.N_t - TB_STAT.N.KnownPos_t) \times \text{Estimated Positivity Rate among Newly Tested}_t$$

Based on these and targets for Known HIV Status, Positive, targets for Newly Tested, Negative are modeled as a remainder, as follows:

$$TB_STAT.N.New.Neg_t = TB_STAT.N_t - TB_STAT.N.KnownPos_t - TB_STAT.N.New.Pos_t$$

13.3 TB_STAT_ART: TB_ART

TB_ART: Proportion of HIV-positive new and relapsed TB cases on ART during TB treatment.

	S	T	U
Column Name	Targeted ART Linkage Rate (FY23) (%)	Already on ART	New on ART
UID	TB_STAT.Linkage.T	TB_ART.Already.T	TB_ART.New.T
Column Type?	reference	target	target
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

13.3.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Already on ART** $TB_ART.Already.T$
- **New on ART** $TB_ART.New.T$

13.3.2 Instructions

1. Review Targeted ART Linkage Rate for linkage between TB_STAT (N) Newly Tested, Positive and TB_ART New on ART. This rate is locked in step with ART Linkage Rates set on the Cascade Tab, which default to 95%; return to that tab to adjust this rate, though note that this will alter linkage rates across all modalities.
2. Review modeled targets for Already on ART and New on ART, returning to the previous sections for TB_STAT (D) and TB_STAT (N) to adjust driving assumptions.

13.3.3 Already on ART

For the purposes of COP21 target setting in the DataPack, FY23 targets for TB_ART Already on ART are set assuming that 100% of those TB clients with already known HIV positive status are already on ART. In other words, the following holds true in the DataPack:

$$TB_ART.Already_t \; = \; TB_STAT.N.KnownPos_t$$

13.3.4 New on ART

FY23 Targets for TB_ART New on ART are based largely on TB_STAT Newly Identified HIV positive TB clients as follows, rounding to the nearest integer:

$$TB_ART.New_t \; = \; TB_STAT.N.New.Pos_t \; \times \; \text{Targeted ART Linkage Rate}_t$$

13.4 TB: Testing Rationalization

	V	W	X
Column Name	Total HTS_TST_POS (FY23)	Total Positives from TB_STAT (FY23) (%)	Total Positives from HTS_INDEX (FY23) (%)
UID	HTS_TST.Pos.T	HTS_TST.TB.Pos.Share. T	HTS_TST.Index.Pos. Share.T

	V	W	X
Column Type?	reference	reference	reference
What type of data?	integer	percentage	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	Z	AA	AB
Column Name	Total Positives from Post ANC1 (FY23) (%)	Total Positives from VMMC (FY23) (%)	Total Positives from All Other Modaliti
UID	HTS_TST.PostANC1.Pos. Share.T	HTS_TST.VMMC.Pos. Share.T	HTS_TST.Total_Other. Pos.Sl
Column Type?	reference	reference	reference
What type of data?	percentage	percentage	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

13.4.1 DATIM Import

No data from this section will be imported into DATIM.

13.4.2 Instructions

1. Use this section of the TB tab to analyze how TB_STAT Newly Tested, Positives fit within the context of an overall testing strategy. In particular, consider how this modality contributes to total HTS_TST_POS in relation to HTS_INDEX, PMTCT_STAT, Post ANC1 testing, VMMC_CIRC, and all other HTS modalities.

2. Review any cases where this section is highlighted red, indicating over- or under-allocation of HTS_TST_POS targets across contributing modalities. While these allocation issues may be more the result of a different modality(ies), analysis of these to confirm no adjustments to TB_STAT are warranted may prevent issues and additional work in other sections of the DataPack.

3. Return to other tabs of the DataPack where issues flagged in this section require adjustment of either total HTS_TST_POS targets, or targets via other modalities. Similar Testing Rationalization sections can be also found in each of these other tabs of the DataPack. You may also use hyperlinks in column headers in this section to quickly navigate to the most relevant section of the DataPack.

Chapter 14

VMMC

14.1 VMMC_CIRC_SUBNAT

	F	G	H
Column Name	Host Country Est. Male Population (FY22)	Host Country Est. PLHIV (FY22)	Host Country Est. HIV Prevalence (FY22) (%)
UID	POP_EST.T_1	PLHIV.T_1	HIV_PREV.T_1
Column Type?	reference	reference	reference
What type of data?	integer	integer	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	Y
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	I	J	K
Column Name	Host Country Est. TX_CURR_SUBNAT (FY22)	Host Country Est. ART Coverage (FY22) (%)	Host Country Est. PopVLS Ra
UID	TX_CURR_SUBNAT.T_1	TX_CURR_SUBNAT.Rt. T_1	PopVLS_SUB
Column Type?	reference	reference	refere
What type of data?	integer	percentage	percen
Prepopulated data?	N	N	N
Enter or modify data?	Y	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	L	M	
Column Name	Host Country VMMC_CIRC_SUBNAT (FY22)	Host Country VMMC_TOTALCIRC_SUBNAT (FY22)	Host Country Est. VMI
UID	VMMC_CIRC_SUBNAT.T_1	MMC_TOTALCIRC_SUBNAT. T_1	MMC_TOTALCIR
Column Type?	target	target	refe
What type of data?	integer	integer	perc
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

	O	P	
Column Name	Targeted Host Country VMMC Coverage (FY23) (%)	Targeted Host Country VMMC_TOTALCIRC_SUBNAT (FY23)	Targete
UID	MMC_TOTALCIRC_SUBNAT. Rt.T	MMC_TOTALCIRC_SUBNAT. T	
Column Type?	assumption	target	

	O	P	
What type of data?	percentage	integer	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

14.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Host Country VMMC_CIRC_SUBNAT (FY22)** *VMMC_CIRC_SUBNAT.T_1*
- **Host Country VMMC_TOTALCIRC_SUBNAT (FY22)** *VMMC_TOTALCIRC_SUBNAT.T_1*
- **Targeted Host Country VMMC_TOTALCIRC_SUBNAT (FY23)** *VMMC_TOTALCIRC_SUBNAT.T*
- **Targeted Host Country VMMC_CIRC_SUBNAT (FY23)** *VMMC_CIRC_SUBNAT.T*

14.1.2 Instructions

1. Review data for the following columns, all of which come from corollaries on the Cascade tab. Follow hyperlinks to navigate to the source of this data:

    a. Host Country Estimated Male Population (FY22)
    b. Host Country Estimated PLHIV (FY22)
    c. Host Country Estimated HIV Prevalence (FY22)
    d. Host Country Estimated TX_CURR_SUBNAT (FY22)
    e. Host Country Estimated ART Coverage (FY22)
    f. Host Country Est. PopVLS Rate (VLS/PLHIV) (FY22) (%)

2. If using Spectrum as the source for Host Country Context data, the following columns will initially be populated based on data from the Spectrum export dataset added to the Spectrum tab of the DataPack. Review these and return to Spectrum to adjust assumptions there as needed. With approval by your PPM and assigned DUIT Liaison, you may also identify and use another source for this data.

   a. Host Country VMMC_CIRC_SUBNAT (FY22)
   b. Host Country VMMC_TOTALCIRC_SUBNAT (FY22)

3. Review Host Country Estimated VMMC Coverage (FY22), which is calculated by dividing the FY22 Host Country Estimated VMMC_TOTALCIRC_SUBNAT by the FY22 Host Country Estimated Male Population.
4. Review Targeted Host Country VMMC Coverage (FY23), which is initially set to 80% per PEPFAR VMMC coverage goals, but you may adjust this based on PEPFAR Country-specific VMMC strategies and goals. Note that this statistic represents the targeted VMMC coverage to be achieved by October 2022.
5. Review modeled FY23 targets for Host Country VMMC_TOTALCIRC_SUBNAT and VMMC_CIRC_SUBNAT. Return to steps 1-4 to adjust underlying assumptions as needed.

14.2 VMMC: VMMC_CIRC

VMMC_CIRC: Number of males circumcised as part of the voluntary medical male circumcision (VMMC) for HIV prevention program within the reporting period.

Note: For FY23 targets, males less than 15 years old will not be eligible for PEPFAR-supported VMMC services.

	R	S	T
Column Name	PEPFAR VMMC_CIRC (FY21 Results)	PEPFAR VMMC_CIRC (FY22 Targets)	Est. PEPFAR Coverage of Host Country VM
UID	VMMC_CIRC.R	VMMC_CIRC.T_1	VMMC_CIRC.Natl
Column Type?	past	past	reference
What type of data?	integer	integer	percentag
Prepopulated data?	Y	Y	N
Enter or modify data?	?	?	N
Calculated column?	N	N	Y
Linked column?	Y	Y	Y

	V	W	
Column Name	_Military ONLY: Change in VMMC_CIRC FY22-FY23 (%)	Observed Indeterminate/Not Tested Rate (FY21 Results) (%)	Pro
UID	VMMC_CIRC.Change. Military	VMMC_CIRC.Unk.Rt.R	
Column Type?	assumption	calculation	
What type of data?	percentage	percentage	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	N	
Linked column?	Y	Y	

	Z	AA	AB	AC
Column Name	Projected Yield among Newly Tested (FY23) (%)	Total VMMC_CIRC	Indeterminate/Not Tested	HIV Positive
UID	VMMC_CIRC.Yield.T	VMMC_CIRC.T	VMMC_CIRC.Unk.T	VMMC_CIRC.Pos.T
Column Type?	assumption	reference	target	target
What type of data?	percentage	integer	integer	integer
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	N	N
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

	AD
Column Name	HIV Negative
UID	VMMC_CIRC.Neg.T
Column Type?	target

	AD
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

14.2.1 DATIM Import

The following data points will be imported into DATIM from this section:

- VMMC_CIRC Indeterminate/Not Tested $VMMC_CIRC.Unk.T$
- VMMC_CIRC HIV Positive $VMMC_CIRC.Pos.T$
- VMMC_CIRC HIV Negative $VMMC_CIRC.Neg.T$

14.2.2 Instructions

1. For historical context, review FY21 results and FY22 targets for PEPFAR VMMC_CIRC, supplied in the DataPack as an export from data currently reported in DATIM.
2. Review the FY22 estimated PEPFAR Coverage of Host Country VMMC_CIRC_SUBNAT, calculated by dividing FY22 PEPFAR VMMC_CIRC targets by the projected FY22 Host Country VMMC_CIRC_SUBNAT.
3. Review the FY23 PEPFAR coverage of Host Country VMMC_CIRC_SUBNAT, which is initially set equal to the FY22 estimated coverage rate set in step 2, but can be adjusted as needed.
4. For Military SNUs only, adjust the FY22 to FY23 Change in VMMC_CIRC. For Military SNUs, this defaults to zero, but can be adjusted to match strategic programming as necessary.
5. Review FY21 results for Observed Indeterminate/Not Tested Rate and Observed Positivity Rate among those VMMC clients newly tested for HIV, both of which are obtained from DATIM.

6. Review and adjust FY23 projections for Estimated Indeterminate/Not Tested Rate and Estimated Positivity Rate among VMMC clients newly tested for HIV. Both of these estimates are initially set equal to their counterpart set in step 5, but can be adjusted as needed. Red highlights in either indicate percentages above 100% or below 0%; yellow highlights in the Estimated Positivity Rate column indicate yields greater than 1%.

7. Review Targeted ART Linkage Rate for linkage between VMMC_CIRC: HIV Positive and TX_NEW. This rate is locked in step with ART Linkage Rates set on the Cascade Tab, which default to 95%; return to that tab to adjust this rate, though note that this will alter linkage rates across all modalities.

8. Review modeled targets for Total VMMC_CIRC. See below for more information. Return to steps 1-4 and the previous section for VMMC_CIRC_SUBNAT to adjust assumptions driving this target.

9. Review modeled targets for VMMC_CIRC Indeterminate/Note Tested, HIV Positive, and HIV Negative. See below for additional information about each of these.

10. Finally, review modeled data for those identified HIV positive via VMMC projected to be linked to ART, which is set by multiplying those identified HIV positive by the ART linkage rate reviewed in step 7.

14.2.3 Total VMMC_CIRC (FY23)

For Military organization units, FY23 targets for Total VMMC_CIRC is set as follows, rounding to the nearest integer:

$$VMMC_CIRC_t = VMMC_CIRC_{t-1} \times (1 + VMMC_CIRC.Change.Military_t)$$

For all other organization units, FY23 targets for Total VMMC_CIRC are set as follows, rounding to the nearest integer:

$$VMMC_CIRC_t = Targeted\ Host\ Country\ VMMC_CIRC_SUBNAT_t \times PEPFAR\ Coverage\ of\ Host\ Country\ VMMC_CIRC_SUBNAT_t$$

14.2.4 VMMC_CIRC Disaggregates (FY23)

In disaggregating total VMMC_CIRC for FY23 Targets, the DataPack will first set targets for those projected to have indeterminate HIV testing results or to deny testing, then targets for those identified positive, and finally those negative.

To set targets for Indeterminate/Not Tested, the DataPack will use the following formula, rounding to the nearest integer:

$$VMMC_CIRC.Unk_t = VMMC_CIRC_t \times Est.\ Indeterminate/Not\ Tested\ Rate_t$$

For VMMC_CIRC HIV Positive, the DataPack will set targets as follows, rounding to the nearest integer:

$$VMMC_CIRC.Pos_t = (VMMC_CIRC_t - VMMC_CIRC.Unk_t) \times \text{Est. Positivity Rate}_t$$

And finally, VMMC_CIRC HIV Negative targets will be set as a remainder function, as follows:

$$VMMC_CIRC.Neg_t = VMMC_CIRC_t - VMMC_CIRC.Unk_t - VMMC_CIRC.Pos_t$$

14.3 VMMC: ART Linkage

	AE	AF
Column Name	Targeted ART Linkage Rate (FY23) (%)	VMMC_CIRC_POS linked to ART
UID	VMMC_CIRC.Linkage.T	TX_NEW.VMMC.T
Column Type?	reference	reference
What type of data?	percentage	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

14.3.1 DATIM Import

No data will be imported into DATIM from this section.

14.3.2 Instructions

1. Review VMMC_CIRC_POS linked to ART which is determined as the product of using Targeted ART Linkage Rate (FY23) (%) that is pulled from the Cascade tab and HIV Positive from the previous VMMC_CIRC section. This is not reported in DATIM, but used as internal check against TX_NEW in TX tab.

14.4 VMMC: Testing Rationalization

	AG	AH	AI
Column Name	Total HTS_TST_POS (FY23)	Total Positives from VMMC_CIRC (FY23) (%)	Total Positives from HTS_INDEX (FY23) (%)
UID	HTS_TST.Pos.T	HTS_TST.VMMC.Pos. Share.T	HTS_TST.Index.Pos. Share.T
Column Type?	reference	reference	reference
What type of data?	integer	percentage	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	AK
Column Name	Total Positives from All Other Modalities (FY23) (%)
UID	HTS_TST.Total_Other. Pos.Share.T
Column Type?	reference
What type of data?	percentage
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

14.4.1 DATIM Import

No data will be imported into DATIM from this section.

14.4.2 Instructions

1. Use this section of the VMMC tab to analyze how VMMC_CIRC HIV Positives fit within the context of an overall testing strategy. In particular, consider how this modality contributes to total HTS_TST_POS in relation to HTS_INDEX, TB_STAT, and all other HTS modalities.

2. Review any cases where this section is highlighted red, indicating over- or under-allocation of HTS_TST_POS targets across contributing modalities. While these allocation issues may be more the result of a different modality(ies), analysis of these to confirm no adjustments to VMMC_CIRC are warranted may prevent issues and additional work in other sections of the DataPack.

3. Return to other tabs of the DataPack where issues flagged in this section require adjustment of either total HTS_TST_POS targets, or targets via other modalities. Similar Testing Rationalization sections can be also found in each of these other tabs of the DataPack. You may also use hyperlinks in column headers in this section to quickly navigate to the most relevant section of the DataPack.

Chapter 15

KP

NOTE: The HTS_TST, TX_NEW, TX_CURR, PrEP_CT, and PrEP_NEW indicators in the KP tab are related to Key Populations only and are not linked to other tabs that feature those indicators.

This tab is provided to facilitate and inform (1) data-driven program intent or relationships amongst indicators, where relevant, for KP programming and (2) easy review of all KP-related targets by virtue of having all KP-related targets in one tab. Importantly, pre-built algorithms and pre-set assumptions are NOT included in this tab. As such, entry of data into any columns labelled 'Assumptions' or 'Projected' MAY NOT automatically produce targets for the indicators listed.

Considerations as you complete and use this tab:

1. As per the COP22 Guidance, baseline data to support target development can come from bio-behavioral surveys (BBS) and size estimates, especially to understand current PLHIV burden and program results. Use the most recent and reliable estimates available where possible. For example, population size estimates and survey data on knowledge of status can inform PP_PREV and subsequent clinical cascade targets. The COP22 Guidance Section 6.6.2 has substantial guidance on expectations of an effective KP program, and should be reviewed before setting KP targets.

2. Where possible and relevant, use FY22 targets and, as available, results to inform FY23 targets (the 'Assumption' column for each indicator in the tab). But remember to consider expectations for scale-up based on current program needs and gaps. That is, FY21 results may not be the most relevant and appropriate base from which to develop FY23 targets.

3. As per COP22 Guidance, OUs should strive to ensure all KPs reached with KP programming (KP_PREV), who do not already know their HIV status are either tested for HIV or actively referred for HIV testing. Therefore, DataPacks will be reviewed for the relationship between KP_PREV to HTS for KP, and if the relationship is substantially different from one to one, it will be important to discuss rationale and context with Chair and PPM.

4. For clinical cascade indicators (HTS_TST, TX_NEW, etc.), consider the relationship amongst these indicators to ensure rates of linkage to treatment are in alignment with COP22 Guidance (i.e., high rates of linkage across all populations).
5. Recognize that Key Population disaggregates are a SUBSET of the regular Age/Sex disaggregates. Each PSNU must have a total of relevant Age/Sex disaggregates of the same indicator for targeting process to be correct (e.g., 15+ Men for MSM). This is also an important factor to consider on the PSNU x IM tab. You may construct additional formulae in the far right of the tab to check this, but it will also be checked by the validation apps and the KP Validation tab.
6. Therefore we have moved the KP tab earlier in the DataPack, and suggest that you start the KP tab early in the DataPack process, and regularly compare against Cascade, HTS, and PrEP tabs.
7. Also note that IMs that do not provide actual clinical services cannot report TX_NEW or TX_CURR. While those IMs should track linkage in their own data systems, there is no relevant MER indicator for that data.

15.1 KP: KP_ESTIMATES

	E	F	G
Column Name	Host Country Est. Total Size (FY22)	Host Country Est. KPLHIV (FY22)	Host Country Est. HIV Prevalence (FY22) (%)
UID	KP_ESTIMATES.Total.T	KP_ESTIMATES.Pos.T	KP_ESTIMATES.Prev.T
Column Type?	target	target	target
What type of data?	integer	integer	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	N	N	N
Linked column?	N	Y	Y

15.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Host Country Est. Total Size (FY22)** *KP_ESTIMATES.Total.T*

- **Host Country Est. KPLHIV (FY22)** *KP_ESTIMATES.Pos.T*
- **Host Country Est. HIV Prevalence (FY22) (%)** *KP_ESTIMATES.Prev.T*

15.1.2 Instructions

1. Enter data directly into columns "Host Country Est. Total Size (FY22)", "Host Country Est. KPLHIV (FY22)", and "Host Country Est. HIV Prevalence (FY22) (%)". As mentioned above, these data should come from reliable, approved sources and then be pasted directly into the respective columns in this tab and used as reference when setting targets throughout the rest of the KP tab. All data from these three columns will be imported into DATIM.
2. Where these data may not be available, the absence of this data will not adversely impact target-setting within the DataPack for Key Populations.

15.2 KP: PrEP_CT

PrEP_CT: Number of individuals, excluding those newly enrolled, that return for a follow up visit or re-initiation visit to receive pre-exposure prophylaxis (PrEP) to prevent HIV during the reporting period.

	H	I
Column Name	PrEP_CURR - KeyPop (FY22 Targets)	PrEP_CT - KeyPop (FY23)
UID	PrEP_CURR.KP.T_1	PrEP_CT.KP.T
Column Type?	past	target
What type of data?	integer	integer
Prepopulated data?	Y	N
Enter or modify data?	?	Y
Calculated column?	N	N
Linked column?	Y	Y

15.2.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **PrEP_CT - KeyPop** (FY23) *PrEP_CT.KP.T*

15.2.2 Instructions

1. For historical context, review column "PrEP_CURR - KeyPop (FY22 Targets)", which will come pre-populated with FY22 targets for PREP_CURR as currently reported in DATIM.

2. Manually enter FY23 PrEP_CT targets in the column titled, "PrEP_CT - KeyPop (FY23)".

NOTE: The PrEP_CT targets here on the KP tab are not linked to those on the PrEP tab, but should nonetheless represent a subset of the total PrEP_CT targets. Be sure to review KP targets against total population targets in the KP Validation tab to ensure total population targets do not exceed total population targets set on the PrEP tab. It may in fact be easier to set KP PrEP targets, other PrEP targets (like AGYW), and then set the general PrEP target.

NOTE: Historical PrEP_CURR targets and results are provided for context, but do not necessarily directly inform the targets for the new indicator PrEP_CT. See PrEP_CT on PrEP tab.

15.3 KP: PrEP_NEW

PrEP_NEW: Number of individuals who have been newly enrolled on antiretroviral pre-exposure prophylaxis (PrEP) to prevent HIV infection in the reporting period.

	J	K
Column Name	PrEP_NEW - KeyPop (FY22 Targets)	PrEP_NEW - KeyPop (FY23)
UID	PrEP_NEW.KP.T_1	PrEP_NEW.KP.T
Column Type?	past	target
What type of data?	integer	integer
Prepopulated data?	Y	N
Enter or modify data?	?	N
Calculated column?	N	N
Linked column?	N	Y

15.3.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **PrEP_NEW - KeyPop (FY23)** *PrEP_NEW.KP.T*

15.3.2 Instructions

1. For historical context, review column "PrEP_NEW - KeyPop (FY22 Targets)", which will come pre-populated with FY22 targets for PREP_NEW as currently reported in DATIM.
2. Manually enter FY23 PrEP_NEW targets in the column titled, "PrEP_NEW - KeyPop (FY23)".

NOTE: PrEP_NEW targets here on the KP tab are not linked to those on the PrEP tab, but should nonetheless represent a subset of the total PrEP_NEW targets. Be sure to review KP targets against total population targets in the KP Validation tab to ensure total population targets do not exceed total population targets set on the PrEP tab. It may in fact be easier to set KP PrEP targets, other PrEP targets (like AGYW), and then set the general PrEP target.

15.4 KP: KP_PREV

KP_PREV: Number of key populations reached with individual and/or small group-level HIV prevention interventions designed for the target population.

	L	M
Column Name	KP_PREV (FY22 Targets)	KP_PREV (FY23)
UID	KP_PREV.T_1	KP_PREV.T
Column Type?	past	target
What type of data?	integer	integer
Prepopulated data?	Y	N
Enter or modify data?	?	N
Calculated column?	N	N

	L	M
Linked column?	N	Y

15.4.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **KP_PREV (FY23)** *KP_PREV.T*

15.4.2 Instructions

1. For historical context, review column "KP_PREV (FY22 Targets)", which will come pre-populated with FY22 targets for KP_PREV as currently reported in DATIM.
2. Manually enter FY23 KP_PREV targets in the column titled, "KP_PREV (FY23)".

15.5 KP: TX_CURR

TX_CURR: Number of adults and children currently receiving antiretroviral therapy (ART).

	N	O	P	
Column Name	TX_CURR - KeyPop (FY21 Results)	TX_CURR - KeyPop (FY22 Targets)	TX_CURR - KeyPop (FY23)	TX_NET_NEW
UID	TX_CURR.KP.R	TX_CURR.KP.T_1	TX_CURR.KP.T	TX_NET
Column Type?	past	past	target	ref
What type of data?	integer	integer	integer	in
Prepopulated data?	Y	Y	N	
Enter or modify data?	?	?	N	
Calculated column?	N	N	N	
Linked column?	Y	Y	Y	

	N	O	P	

15.5.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TX_CURR - KeyPop (FY23)** *TX_CURR.KP.T*

15.5.2 Instructions

1. Review columns "TX_CURR - KeyPop (FY21 Results)" and "TX_CURR - > KeyPop (FY22 Targets)", which will be imported from DATIM for > reference.
2. Manually enter TX_CURR targets in the column titled, "TX_CURR - > KeyPop (FY23)". Be prepared to explain target setting processes > and justify variations from previous years if asked during or > prior to COP meetings.
3. Review "TX_NET_NEW - KeyPop (FY23)", which will be set by taking the > difference between "TX_CURR - KeyPop (FY23)" and "TX_CURR - KeyPop > (FY22 Targets)" and be used as further reference in setting KP > TX_NEW.

NOTE: TX_CURR targets here on the KP tab are not linked to those on the Cascade tab, but should nonetheless represent a subset of the total TX_CURR targets. Be sure to review KP targets against total population targets in the KP Validation tab to ensure total population targets do not exceed total population targets set on the Cascade tab.

15.6 KP: TX_NEW (N)

TX_NEW: Number of adults and children newly enrolled on antiretroviral therapy (ART).

	R	S	
Column Name	TX_NEW - KeyPop (FY22 Targets)	Proportion of TX_NET_NEW from New ART Initiation (FY23) (%)	Targeted Retention R
UID	TX_NEW.KP.T_1	TX_NET_NEW.KP.NewRt. T	TX_
Column Type?	past	assumption	
What type of data?	integer	percentage	

	R	S	
Prepopulated data?	Y	N	
Enter or modify data?	?	N	
Calculated column?	N	Y	
Linked column?	Y	Y	

15.6.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TX_NEW - KeyPop (FY23)** *TX_NEW.KP.T*

15.6.2 Instructions

1. Review column "TX_NEW - KeyPop (FY22 Targets)", which will come pre-populated with FY22 targets for reference.
2. Review and adjust the columns "Proportion of TX_NET_NEW from New ART Initiation (FY23) (%)", "Targeted Retention Rate - Already on ART (FY23) (%)", and "Targeted Retention Rate - New on ART (FY23) (%)", which will be prepopulated with 100%, 98%, and 98% respectively. These columns serve similar roles along the KP Cascade as seen on the Cascade tab.
3. Review modeled FY23 targets for TX_NEW – KeyPop, which are initially set by multiplying the FY23 target for TX_CURR – KeyPop by first the "Proportion of TX_NET_NEW from New ART Initiation (FY23) (%)", and then the "Targeted Retention Rate - New on ART (FY23) (%)". However, due to wide variation in KP programming, this value can be overwritten and manually adjusted as needed without further approval from PPMs or DUIT Liaisons.

NOTE: TX_NEW targets here on the KP tab are not linked to those on the Cascade tab, but should nonetheless represent a subset of the total TX_NEW targets. Be sure to review KP targets against total population targets in the KP Validation tab to ensure total population targets do not exceed total population targets set on the Cascade tab.

15.7 KP: TX_PVLS (D) & TX_PVLS (N)

TX_PVLS (D): Number of ART patients with a VL result documented in the medical or laboratory records/LIS within the past 12 months

TX_PVLS (N): Number of ART patients with suppressed VL results (<1,000 copies/mL) documented in the medical or laboratory results/LIS within the past 12 months.

	W	X	Y
Column Name	% of TX_NEW Eligible for VL Test (FY23) (%)	Proportion of eligible w/ access to VL testing (FY23) (%)	TX_PVLS (D) - Ke
UID	TX_PVLS.D.KP. Eligible	TX_PVLS.D.KP.Access	TX_PVLS.D
Column Type?	assumption	assumption	target
What type of data?	percentage	percentage	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	Z	AA
Column Name	Targeted VL Suppression Rate (FY23) (%)	TX_PVLS (N) - KeyPop (FY23)
UID	TX_PVLS.N.KP.Rt	TX_PVLS.N.KP.T
Column Type?	assumption	target
What type of data?	percentage	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

15.7.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TX_PVLS (D) - KeyPop (FY23)** *TX_PVLS.D.KP.T*
- **TX_PVLS (N) - KeyPop (FY23)** *TX_PVLS.N.KP.T*

15.7.2 Instructions

1. Review and adjust the columns "% of TX_NEW Eligible for VL Test (FY23) (%)" and "Proportion of eligible w/ access to VL testing (FY23) (%)", which will be prepopulated with 70% and 100%, respectively. These columns serve similar roles along the KP Cascade as seen on the Cascade tab.
2. Review modeled targets for "TX_PVLS (D) - KeyPop (FY23)", which will initially be set by multiplying the FY23 target TX_NEW – KeyPop first by "% of TX_NEW Eligible for VL Test (FY23) (%)" and then by "Proportion of eligible w/ access to VL testing (FY23) (%)". However, due to wide variation in KP programming, this value can be overwritten and manually adjusted as needed without further approval from PPMs or DUIT Liaisons.
3. Review and adjust the "Targeted VL Suppression Rate (FY23) (%)", which is set at a default 95% for all OUs, but can be changed with permission from your PPM and DUIT Liaisons. Decreasing the targeted suppression rate to any value below 95% will highlight the cell in Yellow, and in Red should it exceed 100% or drop below 0%.
4. Review modeled targets for "TX_PVLS (N) – KeyPop (FY23) (%)", which will initially be set by multiplying the Denominator Target for TX_PVLS – KeyPop by the "Targeted VL Suppression Rate (FY23) (%)".

   NOTE: The KP tab TX_PVLS (D) and TX_PVLS (N) are not linked to the Cascade tab, therefore be sure to review KP targets against total population targets in the KP Validation tab to ensure Key Population targets do not exceed total population targets set on the Cascade tab.

15.8 KP: HTS_TST

HTS_TST: Number of individuals who received HIV Testing Services (HTS) and received their test results.

	AB	AC	AD
Column Name	TX_NEW from Previously Diagnosed (FY23) (%)	TX_NEW from Previously Diagnosed (FY23)	TX_NEW from all other sou
UID	TX_NEW.KP.PrevDiag. Share.T	TX_NEW.KP.PrevDiag.T	TX_NEW.KP.Othe
Column Type?	reference	reference	reference

	AB	AC	AD
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	AF	AG	AH	AI
Column Name	KeyPop, Negative (FY22 Targets)	Targeted ART Linkage Rate (FY23) (%)	Yield (FY23) (%)	KeyPop, Positi
UID	HTS_TST.KP.Neg.T_1	HTS_TST.KP.Linkage.T	HTS_TST.KP.Pos.Yield. T	HTS_TST.K
Column Type?	past	assumption	assumption	target
What type of data?	integer	percentage	percentage	intege
Prepopulated data?	Y	N	N	N
Enter or modify data?	?	N	N	N
Calculated column?	N	Y	N	Y
Linked column?	N	Y	Y	Y

	AJ
Column Name	KeyPop, Negative (FY23)
UID	HTS_TST.KP.Neg.T
Column Type?	target
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N

	AJ
Calculated column?	Y
Linked column?	Y

15.8.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **HTS_TST KeyPop, Positive (FY23)** *HTS_TST.KP.Pos.T*
- **HTS_TST KeyPop, Negative (FY23)** *HTS_TST.KP.Neg.T*

15.8.2 Instructions

1. Review "TX_NEW from Previously Diagnosed (FY23) (%)", which will come prepopulated at 0%, but can be adjusted as needed. Note that this column serves a similar role along the KP Cascade as seen in the Cascade tab.
2. Review the number of "TX_NEW from Previously Diagnosed (FY23)", which is calculated by multiplying the rate from Step 1 by "TX_NEW - KeyPop (FY23)". Return to Step 1 to adjust this value.
3. Review "TX_NEW from all other sources (FY23)", which will be set taking the difference of "TX_NEW - KeyPop (FY23)" and "TX_NEW from Previously Diagnosed (FY23)".
4. The FY22 Targets for HTS_TST KeyPop Positive and Negative will be pulled from DATIM into this tab for added reference.
5. Review and adjust the "Targeted ART Linkage Rate (FY23) (%)", which is set at a default of 95% for all OUs. Change this value as needed, however, you must seek permission from your assigned PPM and DUIT Liaisons before decreasing the targeted suppression rate to any value below 95%. Red highlights in this column indicate percentages above 100% or below 0%; yellow highlights indicate percentages that have been altered to drop below 95%.
6. Set HTS_TST "Yield (FY23) (%)" which will resemble the Yield % that was set in the various modalities of the HTS tab and should be approached similarly.
7. Review modeled FY23 targets for HTS_TST KeyPop, Positive, which are the product of "TX_NEW from all other sources (FY23)" and the rate set in "Targeted ART Linkage Rate (FY23) (%)". However, due to wide variation in KP programming, this value can be overwritten and manually adjusted as needed without further approval from PPMs or DUIT Liaisons.

8. Lastly, review the modeled FY23 Targets for HTS_TST KeyPop, Negative, which will be calculated by first dividing the FY23 target for HTS_TST KeyPop, Positive by the Yield set in Step 5, and then subtracting the FY23 target for HTS_TST KeyPop, Positive. Due to wide variation in KP programming, this value can be overwritten and manually adjusted as needed without further approval from PPMs or DUIT Liaisons.

   NOTE: This HTS_TST on the KP tab is not linked to the HTS tab, therefore be sure to review KP targets against total population targets in the KP Validation tab to ensure Key Population targets do not exceed total population targets set on the Cascade tab.

15.9 KP: HTS_RECENT

HTS_RECENT: Number of newly diagnosed HIV-positive persons aged ≥ 15 years with a test for recent infection result during the reporting period.

	AK	AL
Column Name	% of HTS_TST KeyPop Positives (FY23) (%)	HTS_RECENT - KeyPop (FY23)
UID	HTS_RECENT.KP.Cov	HTS_RECENT.KP.T
Column Type?	assumption	target
What type of data?	percentage	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

15.9.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **HTS_RECENT - KeyPop (FY23)** *HTS_RECENT.KP.T*

15.9.2 Instructions

1. Review and adjust the "% of HTS_TST KeyPop Positives (FY23) (%)", which will be prepopulated at a default of 100%. This assumption resembles that of the % of Positives used to help set targets in the HTS_RECENT tab. Red highlights in this column indicate percentages over 100% or under 0%; yellow highlights indicate percentages that have been changed to be less than 100%.
2. Review and adjust the modeled FY23 targets for HTS_RECENT - KeyPop, which are the product of the rate set in step 1, and the FY23 Targets for HTS_TST KeyPop, Positives.

   NOTE: HTS_RECENT KeyPop is not linked to the HTS_RECENT tab. Be sure to review KP targets against total population targets in the KP Validation tab to ensure Key Population targets do not exceed total population targets set on the HTS_RECENT tab.

15.10 KP: HTS_SELF

HTS_SELF: Number of individual HIV self-test kits distributed.

	AM	AN
Column Name	HTS_SELF - KeyPop (FY22 Targets)	HTS_SELF - KeyPop (FY23)
UID	HTS_SELF.KP.T_1	HTS_SELF.KP.T
Column Type?	past	target
What type of data?	integer	integer
Prepopulated data?	Y	N
Enter or modify data?	?	N
Calculated column?	N	N
Linked column?	N	N

15.10.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **HTS_SELF - KeyPop (FY23)** *HTS_SELF.KP.T*

15.10.2 Instructions

1. For historical context, review FY22 Targets for HTS_SELF – KeyPop, which will be pulled from DATIM.
2. Manually populate FY23 Targets for HTS_SELF - KeyPop.

NOTE: HTS_SELF on this tab is not linked to the HTS tab. Be sure to review KP targets against total population targets in the KP Validation tab to ensure Key Population targets do not exceed total population targets set on the HTS tab.

Chapter 16

HTS

HTS_TST: Number of individuals who received HIV Testing Services (HTS) and received their test results.

16.1 HTS: Testing Summary from Other Tabs

	F	G	H
Column Name	Host Country Est. ART Coverage (FY22) (%)	Host Country Est. PopVLS Rate (VLS/PLHIV) (FY22) (%)	Total HTS_TST_P
UID	TX_CURR_SUBNAT.Rt. T_1	PopVLS_SUBNAT.Rt.T_1	HTS_TST.P
Column Type?	reference	reference	reference
What type of data?	percentage	percentage	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	Y
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	J	K	L
Column Name	HTS_INDEX Facility Positives (FY23)	PMTCT_STAT New Positives (FY23)	HTS_TST Post ANC1 New Positives (FY23)
UID	HTS_INDEX_FAC.New. Pos.T	PMTCT_STAT.N.New.Pos. T	HTS_TST.PostANC1.Pos. T
Column Type?	reference	reference	reference
What type of data?	integer	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	N	O
Column Name	VMMC_CIRC New Positives (FY23)	HTS_TST_POS from All Other Modalities (FY23)
UID	VMMC_CIRC.Pos.T	HTS_TST.Pos. Total_Other.T
Column Type?	reference	reference
What type of data?	integer	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

16.1.1 DATIM Import

No data will be imported from this section of the DataPack.

16.1.2 Instructions

1. For context, review the following data, pulled from other locations in the DataPack and gathered here for reference:

    a. Host Country ART Coverage (FY22)
    b. Host Country Est. PopVLS Rate (VLS/PLHIV) (FY22) (%)
    c. Total HTS_TST_POS (FY23)
    d. HTS_INDEX Community Positives (FY23)
    e. HTS_INDEX Facility Positives (FY23)
    f. PMTCT_STAT New Positives (FY23)
    g. HTS_TST Post ANC1 New Positives (FY23)
    h. TB_STAT New Positives (FY23)
    i. VMMC_CIRC New Positives (FY23)
    j. HTS_TST_POS from All Other Modalities (FY23)

16.2 HTS: HTS_TST – Distribution of Positive Tests

	P	Q	R	
Column Name	HTS_INDEX_COM: Positive (%)	HTS_INDEX_FAC: Positive (%)	PMTCT_STAT: New Positive (%)	HTS_TST PMTC
UID	HTS_TST.IndexCom.Pos. Share	HTS_TST.IndexFac.Pos. Share	HTS_TST.PMTCT.Pos. Share	HTS_TST.I
Column Type?	reference	reference	reference	
What type of data?	percentage	percentage	percentage	p
Prepopulated data?	N	N	N	
Enter or modify data?	N	N	N	
Calculated column?	Y	Y	Y	
Linked column?	Y	Y	Y	

	T	U	V	W
Column Name	TB_STAT: New Positive (%)	VMMC_CIRC: HIV Positive (%)	Facility - Inpatient (%)	Facility - Pediatric (%)
UID	HTS_TST.TB.Pos.Share	HTS_TST.VMMC.Pos. Share	HTS_TST.Inpat.Pos. Share	HTS_TST.Peds.Pos. Share
Column Type?	reference	reference	calculation	calculation
What type of data?	percentage	percentage	percentage	percentage
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	N	N
Calculated column?	Y	Y	N	N
Linked column?	Y	Y	Y	Y

	X	Y	Z	AA
Column Name	Facility - Malnutrition (%)	Facility - STI Clinic (%)	Facility - Emergency (%)	Facility - Other PITC (%)
UID	HTS_TST.Maln.Pos. Share	HTS_TST.STI.Pos. Share	HTS_TST.EW.Pos.Share	HTS_TST.Other.Pos. Share
Column Type?	calculation	calculation	calculation	calculation
What type of data?	percentage	percentage	percentage	percentage
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	N	N
Calculated column?	N	N	N	N
Linked column?	Y	Y	Y	Y

CHA

	AB	AC	AD	AE
Column Name	Facility - VCT (%)	Facility - SNS (%)	Community - Mobile (%)	Community - SNS (%)
UID	HTS_TST.VCT.Pos. Share	HTS_TST.SNS.Pos. Share	HTS_TST.MobileCom. Pos.Share	HTS_TST.SNSCom.Pos. S
Column Type?	calculation	reference	calculation	reference

	AB	AC	AD	AE
What type of data?	percentage	percentage	percentage	percentage
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	N	N
Calculated column?	N	N	N	N
Linked column?	Y	Y	Y	Y

	AF	AG
Column Name	Community - Other (%)	Distribution Check (%)
UID	HTS_TST.OtherCom.Pos. Share	HTS_TST.Pos. DistCheck
Column Type?	calculation	reference
What type of data?	percentage	percentage
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	N	Y
Linked column?	Y	Y

16.2.1 DATIM Import

No data will be imported from this section of the DataPack.

16.2.2 Instructions

1. Since index testing for case finding is a high priority intervention, the index modality is should be completed first on the Cascade tab. The positivity yield should be between 15 and 40% among adults and there are further requirements for the SGAC accepted proportion of positives coming from the index testing modality. Users should reference the COP 2022 Guidance document for the required parameters based on TX coverage.

2. Review data for what percent of HTS_TST_POS comes from modalities set in other sections or tabs of the DataPack. Note that to adjust these allocations, you must return to the section or tab of the DataPack where these are initially set. Hyperlinks in column headers can help you navigate to the exact column where this occurs. DO NOT adjust allocation percentages for these gray columns in this section of the HTS tab as this will NOT affect any final targets and will break linkages between this tab and source data. These modalities to be reviewed, but adjusted elsewhere include:

    a. HTS_INDEX_COM_POS (FY23)
    b. HTS_INDEX_FAC_POS (FY23)
    c. PMTCT_STAT: New Positives (FY23)
    d. HTS_TST PMTCT Post ANC1: Positives (FY23)
    e. TB_STAT: New Positives (FY23)
    f. VMMC_CIRC: HIV Positive (FY23)

3. Review and adjust planned percentage contributions to HTS_TST_POS from all other HTS modalities, which will initially be populated based on trends seen in FY22 targets, but can be adjusted as needed to align with COP22 - FY23 testing strategies. Note that as you adjust these allocation percentages, the number of projected individuals to be identified HIV positive will change in the corresponding modality block to the right. These modalities to be adjusted in this section include:

    a. Facility – Inpatient (FY23)
    b. Facility – Pediatric (FY23)
    c. Facility – Malnutrition (FY23)
    d. Facility – STI Clinic (FY23)
    e. Facility – Emergency (FY23)
    f. Facility – Other PITC (FY23)
    g. Facility – VCT (FY23)
    h. Facility - SNS (FY23)
    i. Community – Mobile (FY23)
    j. Community - SNS (FY23)
    k. Community - Other (FY23)

4. Use the Distribution Check column to confirm that distributions of HTS_TST_POS across all HTS modalities do not result in over- or under-allocation. Where this check column is either greater than or less than 100%, red highlights will appear across all modalities, indicating the need to adjust percentage allocations. You MUST resolve all cases where distribution does not sum to 100%.

16.3 HTS: HTS_TST – Modality Yields

	AH	AI	AJ
Column Name	Yield (%)	Positive	Negative
UID	HTS_TST.Inpat.Pos. Yield	HTS_TST.Inpat.Pos.T	HTS_TST.Inpat.Neg.T
Column Type?	calculation	target	target
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	N	Y	Y
Linked column?	Y	Y	Y

16.3.1 DATIM Import

The following data points will be imported into DATIM from this section:

- For each of the below modalities in these sections, the **Positive** and **Negative** target value will be imported into DATIM:
  - Inpatient (Facility)
  - Pediatric (Facility)
  - Malnutrition (Facility)
  - STI Clinic (Facility)
  - Emergency (Facility)
  - Other PITC (Facility)
  - VCT (Facility)
  - Mobile (Community)Other (Community)
  - SNS (Facility)
  - SNS (Community)

16.3.2 Instructions

1. For each of the modalities listed above, review and adjust Yield rates, which are initially populated from DATIM based on FY21 results but can be adjusted as needed. Red highlights indicate percentages over 100% or less than 0%; yellow highlights indicate cases either where:

    a. ART Coverage is greater than or equal to 70%, but yields are less than 10%; or

    b. ART Coverage is less than 70%, but yields are less than 5%.

2. Review targets for the number of individuals to be tested and found HIV Positive through each modality, using hyperlinks in column headers to return to the Distribution of Positive Tests section of this tab to adjust allocation rates as needed. Note that these are rounded to the nearest integer. See the following section for instructions as to how to identify and resolve rounding errors that may compound across modalities as a result.

3. Review targets for the number of individuals to be tested and found HIV Negative through each modality, which are based on the combination of allocations set in the Distribution of Positive Tests section of this tab, and yield rates set in step 1. Note that these are rounded to the nearest integer. See the following section for instructions as to how to identify and resolve rounding errors that may compound across modalities as a result. In cases where yields are 0%, but Negative test results are targeted, you may manually enter these in this step, though note that this will prevent further dynamic modeling of targets should Positive test result targets be needed in the future. Please also mind conditional formatting guiding entry of these targets against correct ages, which may differ across modality, particularly for Pediatric and Malnutrition modalities.

16.4 HTS: HTS_TST (Total)

These calculated columns provide a roll up sum of the total targets set by age, sex and modality in the rest of the HTS tab. This section should serve as a check and will not be uploaded into DATIM.

	BO	BP	BQ	
Column Name	Original HTS_TST_POS (FY23)	Final HTS_TST_POS (FY23)	HTS_TST_POS difference to adjust	HTS_INDEX Com
UID	HTS_TST.Pos.Original	HTS_TST.Pos.Total	HTS_TST.Pos.Diff	HTS_IND
Column Type?	reference	reference	reference	
What type of data?	integer	integer	integer	
Prepopulated data?	N	N	N	
Enter or modify data?	N	N	N	
Calculated column?	Y	Y	Y	

	BO	BP	BQ	
Linked column?	Y	Y	Y	

	BS	BT	BU
Column Name	HTS_INDEX Facility New Negatives (FY23)	PMTCT_STAT New Negatives (FY23)	HTS_TST Post ANC1 Negatives (FY23
UID	HTS_INDEX_FAC.New. Neg.T	PMTCT_STAT.N.New.Neg. T	HTS_TST.PostANC1.Neg. T
Column Type?	reference	reference	reference
What type of data?	integer	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	BW	BX	BY	BZ
Column Name	VMMC_CIRC Negatives (FY23)	Total HTS_TST_NEG (FY23)	Total HTS_TST (FY23)	Aggregate Yield Rate (FY23) (
UID	VMMC_CIRC.Neg.T	HTS_TST.Neg.Total	HTS_TST.Total	HTS_TST.Yield
Column Type?	reference	reference	reference	reference
What type of data?	integer	integer	integer	percentage
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	N	N
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

16.4.1 DATIM Import

No data points will be imported to DATIM from this section of the DataPack.

16.4.2 Instructions

1. Investigate and resolve issues related to rounding differences caused by allocations of remaining HTS_TST_POS on the HTS tab. See below for additional, detailed instructions. Any cell that is highlighted indicates that it is in a row that users should review the distribution of positives.

2. Review FY23 Targets for individuals to be tested and found HIV negative through PMTCT_STAT, HTS_TST Post ANC1, TB_STAT, and VMMC_CIRC. To adjust these values, follow hyperlinks to the source of data for these columns.

3. Review modeled targets for Total HTS_TST_NEG, Total HTS_TST, and the Aggregate Yield Rate, which is modeled simply by dividing the final HTS_TST_POS total by the total HTS_TST target.

16.4.3 Resolve HTS_TST_POS Rounding Differences

In the process of allocating HTS_TST_POS targets across HTS modalities, the multiplication of integer values representing whole people by percentage allocations, followed by rough rounding, often causes slight rounding errors to accumulate across ages, sexes, and geographies. In situations where there may be significantly small HTS_TST_POS targets being spread over multiple HTS modalities, the aggregation of many small rounding errors can lead to large differences in planned and final HTS_TST_POS. This section of the DataPack is built to help identify and resolve these cases, where they occur.

Prior to using this section, it is key that all allocations be complete, either in those modalities called out specifically in the Cascade tab, or in the HTS tab's Distribution of Positive Tests section. With this complete, only true rounding error cases will remain to be identified in this section of the DataPack.

Cases where rounding errors may have occurred will be highlighted in red formatting in the column titled, "HTS_TST_POS difference to adjust"; Excel filters may be helpful in narrowing to these rows.

By first reviewing and refining allocations in the Cascade tab of the DataPack for overall HTS_INDEX, PMTCT_STAT, HTS_TST PMTCT Post ANC1, TB_STAT, and VMMC_CIRC, any rounding errors still present on the HTS tab are more likely the result of distributions decided on this tab across the following modalities:

- Inpatient (Facility)
- Pediatric (Facility)
- Malnutrition (Facility)

- STI Clinic (Facility)
- Emergency (Facility)
- Other PITC (Facility)
- VCT (Facility)
- SNS (Facility)
- Mobile (Community)
- SNS (Community)
- Other (Community)

The process for resolving rounding errors across these modalities may involve some trial and error. In all cases, but especially for cases where total HTS_TST_POS is small and rounding errors could represent large swings in total targets, it is necessary to determine which modality(ies) should be allocated remainder HTS_TST_POS identified in this section. Iteratively return to the HTS_TST Distribution of Positive Tests section on this HTS tab to adjust allocations, then return to this section to check for lingering rounding remainders.

At the culmination of this iterative approach, there should be no values or highlighting remaining in the HTS_TST_POS difference to adjust column of this section.

16.5 HTS: HTS_SELF

HTS_SELF (N): Number of individual HIV self-test kits distributed.

	CA	CB	CC
Column Name	HTS_SELF (FY22 Targets)	% Change in HTS_SELF (%)	HTS_SELF (FY23)
UID	HTS_SELF.T_1	HTS_SELF.Growth	HTS_SELF.T
Column Type?	past	assumption	target
What type of data?	integer	percentage	integer
Prepopulated data?	Y	N	N
Enter or modify data?	?	N	N

	CA	CB	CC
Calculated column?	N	Y	Y
Linked column?	Y	Y	Y

16.5.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **HTS_SELF (FY23)** *HTS_SELF.T*

16.5.2 Instructions

1. Review FY22 targets for HTS_SELF included in the DataPack, reflecting data reported in DATIM.
2. Review and adjust the % Change in HTS_SELF to set the rate at which FY23 targets for HTS_SELF should either increase or decrease from FY22 Targets.
3. Review modeled FY23 targets for HTS_SELF and return to step 2 to adjust as needed. In the case services are planned in FY23 where these were not provided in FY22, you may manually enter FY23 targets in this column.

Chapter 17

CXCA

17.1 CXCA_SCRN

CXCA_SCRN (N): Number of HIV-positive women on ART screened for cervical cancer.

	F	G	H	I
Column Name	CXCA_SCRN (FY21 Results)	CXCA_SCRN (FY22 Targets)	TX_CURR (FY23)	Observed CXCA Screening Coverage
UID	CXCA_SCRN.R	CXCA_SCRN.T_1	TX_CURR.T	CXCA_SCRN.I
Column Type?	past	past	reference	calculation
What type of data?	integer	integer	integer	percentage
Prepopulated data?	Y	Y	N	N
Enter or modify data?	?	?	Y	Y
Calculated column?	N	N	Y	N
Linked column?	Y	N	Y	Y

17.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **CXCA_SCRN (FY23)** *CXCA_SCRN.T*

17.1.2 Instructions

This indicator is **ONLY REQUIRED** for PEPFAR Cervical Cancer Screening countries.

For countries that are **NOT REQUIRED** to report on this indicator, you do not have to complete this section unless you plan to offer cervical cancer-related services as per the relevant MER indicators. To remove all cervical cancer targets, change the value in column "Targeted CXCA Screening coverage rate (%)" to 0%.

1. For historical context, review FY21 results, FY22 targets, and FY21 Observed CXCA Screen Coverage rates as reported in DATIM, as well as FY23 Targets for TX_CURR from the Cascade tab of the DataPack.
2. Review and adjust Targeted CXCA Screening Coverage Rate (%). Column "Targeted CXCA Screening coverage rate (%)" will determine the proportion of HIV positive women currently on treatment that will receive cervical cancer screening in COP2120/FY22 implementation year. Each team will have a default value of 50% set in this column as in past years. However, please follow COP21 Guidance and adjust to approximate full coverage of TX_NEW and 25% of already on ART, depending on prior year achievements and any additional country specific guidance from your Chair and PPM. To remove all FY23 cervical cancer targets, set this column to 0%.
3. Review FY23 targets for CXCA_SCRN and return to steps 1 and 2 to adjust. This target is set based on the number of eligible women in the COP 21 TX_CURR cohort multiplied by the Targeted CXCA Screening Coverage Rate.

Chapter 18

HTS_RECENT

HTS_RECENT: Number of newly diagnosed HIV-positive persons aged ≥ 15 years with a test for recent infection result during the reporting period.

18.1 HTS_TST Modalities

	N	O
Column Name	% of Positives	# Tested for Recent Infection
UID	HTS_RECENT.IndexCom. Rt	HTS_RECENT.IndexCom. T
Column Type?	assumption	target
What type of data?	percentage	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

18.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- The **# Tested for Recent Infection** Target for each modality.

18.1.2 Instructions

1. The HTS_RECENT Tab contains 15 different Modalities for both Facility and Community level targets. Each modality consist of two columns. The first column in each modality is the "% of Positives" for the specific modality indicator. Each of these columns is prepopulated with a default of 100% for each modality reflecting COP 22 guidance that 100% of patients who test positive for HIV should also receive a recency test. These assumptions may be altered as needed by country teams, but they are conditionally formatted to highlight in Red should the percentage be over 100% and Yellow should they be less than 100%.
2. Review the target column for each of these modalities will be set in the column "# Tested for Recent Infection" and will be a product of the "% of Positives" and the "Newly Tested, Positive" targets that were set in previous tabs that relate to each modality column.
3. For example, the first Modality in this tab **PMTCT (Facilty)** will take the "% of Positives" and multiply it by the target that was set in column "Newly Tested, Positive" from the PMTCT tab. Each of the formulas that are prepopulated for each modality links back to the tab in which the main "Newly Tested, Positive" target was set. These reference tabs are: Cascade, PMTCT, TB, VMMC, and HTS.

18.2 HTS_RECENT (Total)

	AJ	AK	AL
Column Name	Total Recency Tests (FY23)	Final HTS_TST_POS (FY23)	Aggregate Recency Test Coverage Rate (FY23) (%)
UID	HTS_RECENT.T	HTS_TST.Pos.Total	HTS_RECENT.Rt.T
Column Type?	reference	reference	reference
What type of data?	integer	integer	percentage
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y

	AJ	AK	AL
Linked column?	Y	Y	Y

18.2.1 DATIM Import

No data points will be imported into DATIM from this section.

18.2.2 Instructions

1. Review "Total Recency Tests" column which is calculated by aggregating "# Tested for Recent Infection" across all modalities on the HTS_RECENT tab. To adjust individual targets by modality, return to the previous section. In some circumstances, it may also be necessary to return to the Cascade, PMTCT, TB, VMMC, or HTS tabs to adjust the number of HTS_TST_POS coming from each modality.
2. Review "Total HTS_TST_POS" column which references "Final HTS_TST_POS" targets on the HTS tab. This column is here for reference only and should not be changed as changed in this column will not be reflected on the HTS tab and will not be imported into DATIM final targets.
3. Finally, review the "Aggregate Recency Test Coverage Rate (%)" column to assess aggregate recency testing coverage across all modalities. If there are fewer recency tests done than there are HTS_TST_POS, or recency testing coverage is lower than 100%, then the column will be highlighted yellow. If this coverage is greater than 100% the cell will be highlighted Red.

Chapter 19

TX_TB_PREV

19.1 TX_TB_PREV: TX_TB (D)

TX_TB (D): Number of ART patients who were screened for TB at least once during the semiannual reporting period.

Note: Targets set across this tab are set at Coarse Age Bands, aggregating incoming data from any finer age bands to <15 or 15+.

	F	G	H	I
Column Name	TX_NEW (FY23)	TX_CURR (FY22)	Targeted coverage: New on ART (FY23) (%)	Targeted coverage: Already on ART
UID	TX_NEW.T	TX_CURR.T_1	TX_TB.D.New.Cov	TX_TB.D.Already.Cov
Column Type?	reference	reference	assumption	assumption
What type of data?	integer	integer	percentage	percentage
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	Y	Y
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

	J	K	
Column Name	Est. TB Screen Positivity Rate: New on ART (FY23) (%)	Est. TB Screen Positivity Rate: Already on ART (FY23) (%)	New o
UID	TX_TB.D.New.Yield	TX_TB.D.Already. Yield	TX_
Column Type?	calculation	calculation	
What type of data?	percentage	percentage	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	N	N	
Linked column?	Y	Y	

	N	O
Column Name	Already on ART, TB Screen +	Already on ART, TB Screen -
UID	TX_TB.D.Already.Pos. T	TX_TB.D.Already.Neg. T
Column Type?	target	target
What type of data?	integer	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

19.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **New on ART, TB Screen +** $TX_TB.D.New.Pos.T$
- **New on ART, TB Screen –** $TX_TB.D.New.Neg.T$

- **Already on ART, TB Screen +** $TX_TB.D.Already.Pos.T$
- **Already on ART, TB Screen –** $TX_TB.D.Already.Neg.T$

19.1.2 Instructions

1. Review Targeted coverage rates of TB testing both for those New on ART as well as for those Already on ART. These will both come pre-populated at 100% coverage, though can be adjusted as needed. Red highlights indicate percentages over 100%, or under 0%, or may also indicate where values have been left blank but are necessary for further steps; yellow highlights indicate percentages less than 100%.
2. Review and adjust Estimated TB Screen Positivity Rates, both for those New on ART as well as for those Already on ART. These will both come prepopulated based on FY21 Results in DATIM. Red highlights indicate percentages over 100%, or under 0%, or may also indicate where values have been left blank but are necessary for further steps.
3. For historical context, review FY23 Targets for TX_NEW and TX_CURR. Follow hyperlinks to see and adjust source data as needed.
4. Review modeled targets for the following columns. See below for additional information.
    a. New on ART, TB Screen +
    b. New on ART, TB Screen –
    c. Already on ART, TB Screen +
    d. Already on ART, TB Screen –

19.1.3 TX_TB (D) Disaggregates (FY23)

The DataPack will set FY23 targets for TX_TB (D) as laid out below.

Targets will be set for those New on ART and screened positive for TB as follows, rounded to the nearest integer:

$$TX_TB.D.New.Pos_t = TX_NEW_t \times Targeted\ Coverage: New\ on\ ART_t \times TB\ Screen\ Positivity\ Rate: New\ on\ ART_t$$

FY23 targets for those Already on ART, but found negative for TB will be set as follows, rounded to the nearest integer:

$$TX_TB.D.New.Neg_t = (TX_NEW_t \times Targeted\ Coverage: New\ on\ ART_t) - TX_TB.D.New.Pos_t$$

Similarly, targets for those Already on ART and screened positive for TB will be set as follows, rounded to the nearest integer:

$$TX_TB.D.Already.Pos_t = TX_CURR_t \times Targeted\ Coverage: Already\ on\ ART_t \times TB\ Screen\ Positivity\ Rate: Already\ on\ ART_t$$

And finally, targets for those Already on ART and screened negative for TB will be set as below, rounding to the nearest integer:

$$TX_TB.D.Already.Neg_t = (TX_CURR_t \times Targeted\ Coverage: Already\ on\ ART_t) - TX_TB.D.Already.Pos_t$$

TX_TB_PREV: TB_PREV (D)

TB_PREV (D): Number of ART patients who are expected to complete a course of TB preventive therapy during the reporting period (for programs using continuous IPT, this includes only the patients who are scheduled to complete the first 6 months of therapy).

	P	Q	
Column Name	Cumulative Previous Completion of TPT (Results FY17-21)	TB_PREV (N) - New on ART (FY22 Targets)	TB_PREV (N) - A
UID	TB_PREV.N.R	TB_PREV.N.New.T_1	TB_PI
Column Type?	calculation	past	
What type of data?	integer	integer	
Prepopulated data?	N	Y	
Enter or modify data?	N	?	
Calculated column?	N	N	
Linked column?	Y	Y	

	T	U	V
Column Name	Est. # Already on ART Eligible for TPT (FY23)	% TPT Initiation Rate - New on ART (FY23) (%)	% TPT Initiation Rate - Alr
UID	TX_TB.D.Already.Neg. Elig.T	TX_TB.D.New.Neg. Linkage	TX_TB.D.Alread
Column Type?	reference	assumption	assump
What type of data?	integer	percentage	percent
Prepopulated data?	N	N	N
Enter or modify data?	N	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

	T	U	V

	X
Column Name	Already on ART
UID	TB_PREV.D.Already.T
Column Type?	target
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

19.1.4 DATIM Import

The following data points will be imported into DATIM from this section:

- **TB_PREV (D): New on ART** *TB_PREV.D.New.T*
- **TB_PREV (D): Already on ART** *TB_PREV.D.Already.T*

19.1.5 Instructions

1. Review "Cumulative Previous Completion of TPT (Results FY17-21)" as well as "TB_PREV (N) - New on ART (FY22 Targets)" and "TB_PREV (N) - Already on ART (FY22 Targets)". These three columns will help calculate "Already on ART who have likely completed TPT in last 5 years (FY23) (%)".
2. Review "Already on ART who have likely completed TPT in last 5 years (FY23) (%)" which is the summation of the previous three columns from step 1 above, divided by the "TX_CURR (FY22)" value from column G of the TX_TB (D) section.
3. Review "Est. # Already on ART Eligible for TPT (FY23)" which is equivalent to "Already on ART, TB Screen -" set in the TX_TB (D) section, less the projected number of these who have likely already received TPT in the previous few years.

4. Review both "% TPT Initiation Rate - New on ART (FY23) (%)" and "% TPT Initiation Rate - Already on ART (FY23) (%)" which are defaulted to 100%. "% TPT Initiation Rate - New on ART (FY23) (%)" will flag yellow if it is less than 100% while "% TPT Initiation Rate - Already on ART (FY23) (%)" will flag if it is set less than 90%.

5. Review modeled targets for TB_PREV (D) New on ART — set by multiplying "New on ART, TB Screen -" and "% TPT Initiation Rate - New on ART (FY23) (%)" — and TB_PREV (D) Already on ART — set by multiplying "Est. # Already on ART Eligible for TPT (FY23)" by "% TPT Initiation Rate - Already on ART (FY23) (%)"

19.2 TX_TB_PREV: TB_PREV (N)

TB_PREV (N): Number of ART patients who completed a course of TB preventive therapy during the reporting period (for continuous IPT programs, this includes the patients who have completed the first 6 months of isoniazid preventive therapy (IPT)).

	Y	Z	AA	AB
Column Name	Targeted TPT completion (FY23) (%)	New on ART	Already on ART	Projected Change: New on ART (%
UID	TB_PREV.N.Cov	TB_PREV.N.New.T	TB_PREV.N.Already.T	TB_PREV.N.New.Growth. Target
Column Type?	assumption	target	target	reference
What type of data?	percentage	integer	integer	percentage
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	N	N
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

	AC
Column Name	Projected Change: Already on ART (%)
UID	TB_PREV.N.Already. Growth.Target
Column Type?	reference
What type of data?	percentage

	AC
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

19.2.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **TB_PREV (N): New on ART** *TB_PREV.N.New.T*
- **TB_PREV (N): Already on ART** *TB_PREV.N.Already.T*

19.2.2 Instructions

1. For historical context, review FY22 targets from DATIM for TB_PREV (N) for those New on ART and those Already on ART.
2. Review Targeted TPT completion rates, which will default to 90%, but can be adjusted as needed, taking into account persons who (1) are already on TB preventative therapy (2) will likely screen negative (3) will be medically ineligible for TPT (4) will be on TPT by the end of COP19. Note that data in this column will NOT be imported into DATIM. Red highlights indicate percentages over 100% or less than 0%; yellow highlights indicate percentages less than 90%.
3. Review modeled targets for TB_PREV (N) New on ART and Already on ART, set by multiplying TB_PREV (D) New on ART and TB_PREV (D) Already on ART, respectively, by the targeted TPT completion rates set in step 2. Return to step 2 or previous sections to adjust driving assumptions.
4. Review projected rates of change between FY22 targets and planned FY23 targets to identify cases where rates of change indicate significant departures from historic trends.

Chapter 20

PP

20.1 PP: PP_PREV

PP_PREV: Number of priority populations (PP) reached with the standardized, evidence-based interventions (s) required that are designed to promote the adoption of HIV prevention behaviors and service uptake.

	F	G	H
Column Name	FY22 Targets	Expected change in PP_PREV services (%)	PP_PREV (FY23)
UID	PP_PREV.T_1	PP_PREV.Growth.T	PP_PREV.T
Column Type?	past	assumption	target
What type of data?	integer	percentage	integer
Prepopulated data?	Y	N	N
Enter or modify data?	?	N	Y
Calculated column?	N	Y	Y
Linked column?	Y	Y	Y

20.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **PP_PREV (FY23)** *PP_PREV.T*

20.1.2 Instructions

1. "FY22 Targets" column will come prepopulated with FY22 PP_PREV targets as currently reported in DATIM. Countries will review this data, but should not make changes to it. Though this column does not prevent users from making edits, teams must receive approval from their PPM and assigned DUIT Liaison before doing so. Changes made in this column will NOT be reflected in DATIM.

2. Review and adjust the "Expected Change in PP_PREV services (%)". This defaults to 0%, though this reflects no suggestion of strategy from S/GAC. Adjust these growth rates to reflect intentional, data-driven, strategic programming. Values can be negative or positive percentages in this column, which will decrease or increase the FY23 target for PP_PREV respectively.

3. "PP_PREV (FY23)" targets will be set as a growth rate function of the FY22 Targets and the Expected change % set in the previous two columns. To make changes to the COP21 target in this column, increase or decrease the Expected Change in PP_PREV services. In the case services are planned in FY23 where these were not provided in FY22, you may manually enter FY23 targets in these columns.

Chapter 21

OVC

21.1 OVC: OVC_SERV

OVC_SERV: Number of beneficiaries served by PEPFAR OVC programs for children and families affected by HIV.

	F	G	H	I
Column Name	Host Country Est. PLHIV (FY22)	DREAMS SNU?	FY21 Results	FY22 Targets
UID	PLHIV.T_1	DREAMS_SNU.Flag	OVC_SERV.R	OVC_SERV.T_1
Column Type?	reference	calculation	calculation	calculation
What type of data?	integer	string	integer	integer
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	Y	Y
Calculated column?	Y	N	N	N
Linked column?	Y	Y	Y	Y

	J	K	
Column Name	Projected Net Change in OVC_SERV (%)	Targeted DREAMS % of Total OVC_SERV (FY23) (%)	Targeted Preventive % of
UID	OVC_SERV.Growth.T	OVC_SERV.DREAMS.Rt.T	OVC_S
Column Type?	assumption	assumption	as
What type of data?	percentage	percentage	pe
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	N	
Linked column?	Y	Y	

	N	O	P	Q
Column Name	Targeted Graduation Rate among Comprehensive (FY23) (%)	Total OVC_SERV	DREAMS	Preven
UID	OVC_SERV.Grad.Rt.T	OVC_SERV.T	OVC_SERV.DREAMS.T	OVC_SER
Column Type?	assumption	reference	target	targ
What type of data?	percentage	integer	integer	integ
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	N	N
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

	R	S
Column Name	Comprehensive - Graduated	Comprehensive - Active
UID	OVC_SERV.Grad.T	OVC_SERV.Active.T
Column Type?	target	target

	R	S
What type of data?	integer	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

21.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **DREAMS** *OVC_SERV.DREAMS.T*
- **Preventive** *OVC_SERV.Prev.T*
- **Comprehensive – Graduated** *OVC_SERV.Grad.T*
- **Comprehensive – Active** *OVC_SERV.Active.T*

21.1.2 Instructions

1. For historical context, review column "Host Country Est. PLHIV (FY22)", which will pull from the Cascade tab.
2. Review the "DREAMS SNU?" column, which will indicate whether an SNU is actively implementing DREAMS activities by using "Y" for Yes and "N" for No. This column will come prepopulated based on the most up-to-date, authoritative list of DREAMS SNUs as centrally maintained by PEPFAR O/GAC. To add or remove any SNUs on this list during the COP21 process, notify your assigned PPM, as well as DREAMS liaisons on the PEPFAR Program Quality Team to ensure these changes are reflected in your DataPack. After communicating and documenting these updates centrally, the DataPack Self-Service App will alert to an update in the DREAMS SNU list and provide an updated DataPack with updated data in this "DREAMS SNU?" column. Note that in the interim, you may manually overwrite or alter flags in this column, though any discrepancies between this column in the DataPack and the centrally-maintained list of DREAMS SNUs will be flagged in the DataPack Self-Service App and must be resolved prior to COP Approval and DATIM import.
3. Review columns "FY21 Results" and "FY22 Targets" which will come pre-populated with results and targets from DATIM and will serve as a baseline for COP21 target calculations.

4. Review the column "Projected Net Change in OVC_SERV (%)", which will be preset with a default rate of 0%. Alter this percent value to either increase or decrease the OVC targets for COP21. Changes in this column will affect the overall OVC_SERV targets reflected in column "Total OVC_SERV".

5. Review and adjust the allocation of total OVC_SERV across DREAMS, Preventive, and Comprehensive:

    a. For DREAMS, allocations are only allowable where a district is denoted as a DREAMS SNU — to adjust, return to step 2 — and for females ages 10 to 17.

    b. For Preventive services, allocations are only allowable for adolescents ages 5 to 14.

    c. All remaining OVC_SERV is automatically allocated to the Comprehensive service category. Red highlighting in the column, Comprehensive % of Total OVC_SERV, indicates cases where percentages are over 100% or less 0%.

6. Review and adjust the column "Targeted Graduation Rate among Comprehensive (%)", which is preset at a default value of 20%, per guidance from O/GAC. Adjust these values as necessary to align with the COP 2021 OVC strategy. Graduation rates can be set at any value between 0-100% but should not be a negative value. Red highlights indicate percentages over 100% or less than 0%; yellow highlights indicate graduation rates less than 20%.

7. Review modeled targets for "Total OVC_SERV", which are calculated by applying the net rate of change decided in step 4 by the FY22 target referenced in step 3. In the case services are planned in FY23 where these were not provided in FY22, you may manually enter FY23 targets in this column.

8. Review the number of OVC beneficiaries that are targeted by the DREAMS program COP21 implementation. This target is calculated by multiplying the total OVC_SERV target by the "Targeted DREAMS % of Total OVC_SERV (%) (FY23)" set in step 5. This formula is also dependent on the input into column "DREAMS SNU?", which must be marked with a "Y" to indicate the SNU is in fact a DREAMS SNU in order to set this target (see step 2).

9. Review the number of OVC beneficiaries that are targeted by the OVC Preventive program COP21 implementation. This target is calculated by multiplying the total OVC_SERV target by the "Targeted Preventive % of Total OVC_SERV (%) (FY23)", set in step 5.

10. Review the number of OVC beneficiaries that are targeted for graduation from OVC Comprehensive services during COP21 implementation. This target is a calculated by multiplying the Total OVC_SERV target by the "Targeted Comprehensive % of Total OVC_SERV (%) (FY23)" and "Targeted Graduation Rate among Comprehensive (%) (FY23)".

11. Review the targeted number of Active OVC Comprehensive beneficiaries for COP21. The Active OVC Comprehensive target is derived in the DataPack as a remainder of Total OVC_SERV to be served via Comprehensive services, less those captured in the "Comprehensive - Graduated" target. To make changes to "Comprehensive - Active" targets in the DataPack, adjust the proportion in the "Comprehensive % of Total OVC_SERV (%)" column, as set in step 5.

NOTE: There is no denominator for **OVC_SERV**

NOTE: Changing the values here will lead to downstream changes in **OVC_HIVSTAT** column U.

NOTE: Column N Target % Graduation Rate **does not** include Exited or Transferred Out in Denominator.

21.2 OVC: OVC_HIVSTAT

OVC_HIVSTAT: Number of orphans and vulnerable children (<18 years old) with HIV status reported, disaggregated by HIV status.

	T	U
Column Name	Targeted % Comprehensive OVC (<18) with reported HIV Status (FY23) (%)	# OVC with reported HIV Status (FY23)
UID	OVC_HIVSTAT.Rt.T	OVC_HIVSTAT.T
Column Type?	assumption	target
What type of data?	percentage	integer
Prepopulated data?	N	N
Enter or modify data?	N	N
Calculated column?	Y	Y
Linked column?	Y	Y

21.2.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **# OVC with reported HIV Status** $OVC_HIVSTAT.T$ – Note that this data will be aggregated across age group, resulting in one value per PSNU.

21.2.2 Instructions

1. Review the column "Targeted % OVC (<18) with reported HIV Status (%) (FY23)" which is prepopulated at 100% by default, representing a goal of having 100% of those served via OVC Comprehensive services under 18 years old with reported HIV status. Adjust these values to

either increase or decrease the COP22 target value in column "# OVC with reported HIV status". Red highlights indicate percentages greater than 100%, or less than 0%; yellow highlighting indicates percentages changed to less than 100%.

2. Review the target value in column ""# OVC with reported HIV status (FY23)", which is calculated by multiplying those allocated to the OVC_SERV Comprehensive services disaggregates, whether Active or Graduated, and also less than 18 years of age. To adjust these targets, return to step 1.

Chapter 22

GEND

22.1 GEND: GEND_GBV

GEND_GBV: Number of people receiving post-gender-based violence (GBV) clinical care based on the minimum package.

	C	D	E
Column Name	Physical/Emotional Violence (FY22 Targets)	Sexual Violence (FY22 Targets)	Projected change in GEND_GBV - Physical/
UID	GEND_GBV.PE.T_1	GEND_GBV.S.T_1	GEND_GBV.PE.Gr
Column Type?	past	past	assumption
What type of data?	integer	integer	percentage
Prepopulated data?	Y	Y	N
Enter or modify data?	?	?	N
Calculated column?	N	N	Y
Linked column?	Y	Y	Y

	F	G	H
Column Name	Projected change in GEND_GBV - Sexual Violence services (%)	Physical/Emotional Violence (FY23)	Sexual Violence (FY
UID	GEND_GBV.S.Growth.T	GEND_GBV.PE.T	GEND_GBV.S.T
Column Type?	assumption	target	target
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	Y
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

22.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Physical/Emotional Violence (FY23)** *GEND_GBV.PE.T*
- **Sexual Violence (FY23)** *GEND_GBV.S.T*

22.1.2 Instructions

1. For historical context, review FY22 targets for both the Physical/Emotional Violence and Sexual Violence service types, which are pre-populated from DATIM.
2. Review and adjust the "Projected change in GEND_GBV - Physical/Emotional Violence services (%)" and "Projected change in GEND_GBV - Sexual Violence services (%)" columns. These will default to 0%, though this reflects no suggested strategic direction.
3. Review FY23 targets for both the "Physical/Emotional Violence" and "Sexual Violence" service types. Each of these is calculated as a function of the expected change rate multiplied by the FY22 target for the related service type. In the case services are planned in FY23 where these were not provided in FY22, you may manually enter FY23 targets in these columns.

Chapter 23

AGYW

23.1 AGYW: AGYW_PREV

AGYW_PREV: Number of active DREAMS beneficiaries that have started or completed any DREAMS service/intervention as of the end of the reporting period.

	F	G	H
Column Name	Host Country Est. Female Population (FY22)	Host Country Est. Number of Vulnerable AGYW (FY22)	PrEP_NEW (FY23)
UID	POP_EST.T_1	AGYW_SUBNAT.T_1	PrEP_NEW.T
Column Type?	reference	assumption	reference
What type of data?	integer	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	N	N	Y
Calculated column?	Y	N	Y
Linked column?	Y	N	Y

	J	K	L	M
Column Name	PP_PREV (FY23)	HTS_TST_POS (FY23)	HTS_TST_NEG (FY23)	Primary Package Incomplete: Service St
UID	PP_PREV.T	HTS_TST.PostANC1.Pos. T	HTS_TST.PostANC1.Neg. T	AGYW_PREV.Starte
Column Type?	reference	reference	reference	past
What type of data?	integer	integer	integer	integer
Prepopulated data?	N	N	N	Y
Enter or modify data?	N	N	N	?
Calculated column?	Y	Y	Y	N
Linked column?	Y	Y	Y	Y

	N	O	
Column Name	Primary Package Incomplete: Service Completed (FY21 Results)	Primary Package Completed (FY21 Results)	Primary Pa
UID	AGYW_PREV.Incomplete. R	AGYW_PREV.Complete.R	AG
Column Type?	past	past	
What type of data?	integer	integer	
Prepopulated data?	Y	Y	
Enter or modify data?	?	?	
Calculated column?	N	N	
Linked column?	Y	Y	

	R	S	
Column Name	Observed Percent Completion (FY21 Results) (%)	Targeted Percent Completion (FY23) (%)	Projected Net Change in Total
UID	AGYW_PREV.N.Rt.R	AGYW_PREV.N.Rt.T	AGYW_
Column Type?	reference	assumption	a

	R	S	
What type of data?	percentage	percentage	
Prepopulated data?	N	N	
Enter or modify data?	N	N	
Calculated column?	Y	Y	
Linked column?	Y	Y	

	V
Column Name	Numerator - Completed at least Primary Package (FY23)
UID	AGYW_PREV.N.T
Column Type?	target
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	Y
Linked column?	Y

23.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Denominator - Started or Completed any DREAMS Service** *AGYW_PREV.D.T*
- **Numerator - Completed at least Primary Package** *AGYW_PREV.N.T*

23.1.2 Instructions

1. For historical context, review Host Country Estimated Female Population for FY22, which is referenced from the Cascade tab.

2. Enter values for the Host Country Estimated Number of Vulnerable AGYW projected as of September 2021, as available. These are for reference and not used to model targets in proceeding steps.
3. For context, review FY23 targets for PrEP_NEW, PrEP_CT, PP_PREV, HTS_TST_POS, and HTS_TST, set in other tabs of the DatatPack.
4. For additional context, review FY21 results for AGYW_PREV and Observed Percent Completion as reported in DATIM.
5. Review and adjust assumptions for Projected Net Change in Total AGYW_PREV from FY21 Results (%). This is defaulted to 0%, but can be adjusted as necessary. Red highlights indicate percentages over 100%; yellow highlights indicate percentages less than 100% but not 0%.
6. Review and adjust assumptions for Targeted Percent Completion. This is defaulted to 60%, but can be adjusted as necessary. Red highlights indicate percentages over 100%; yellow highlights indicate percentages less than 60%.
7. Review modeled FY23 targets for AGYW_PREV Denominator and Numerator, and return to steps 1-6 to adjust values as necessary. See below for additional information.

23.1.3 AGYW_PREV Denominator (FY23)

FY23 targets for AGYW_PREV Denominator are set as follows, rounding to the nearest integer:

$$AGYW_PREV.D_t \;=\; AGYW_PREV.D_r \;*(1 \;+\; Projected\ Net\ Change\ in\ Total\ AGYW_PREV_t)$$

Note that neither this target nor the target for AGYW_PREV Numerator are disaggregated by Service or Package Completion Status.

23.1.4 AGYW_PREV Numerator (FY23)

FY23 Targets for AGYW_PREV Numerator are similarly modeled very simply as follows, rounding to the nearest integer:

$$AGYW_PREV.N_t \;=\; AGYW_PREV.D_t \;*\; \text{Targeted Percent Completion}_t$$

Chapter 24

PrEP

24.1 PrEP: PrEP_NEW

PrEP_NEW: Number of individuals who have been newly enrolled on antiretroviral pre-exposure prophylaxis (PrEP) to prevent HIV infection in the reporting period.

	F	G	H	I
Column Name	Host Country Est. PLHIV (FY22)	HTS_TST_NEG (FY23)	AGYW_PREV (D) (FY23)	AGYW_PREV (N) (FY23)
UID	PLHIV.T_1	HTS_TST.Neg.T	AGYW_PREV.D.T	AGYW_PREV.N.T
Column Type?	reference	reference	reference	reference
What type of data?	integer	integer	integer	integer
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	Y	Y
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

	L
Column Name	PrEP_NEW (FY23)
UID	PrEP_NEW.T
Column Type?	target
What type of data?	integer
Prepopulated data?	N
Enter or modify data?	N
Calculated column?	N
Linked column?	N

24.1.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **Newly on PrEP (FY23)** *PrEP_NEW.T*

24.1.2 Instructions

1. Think through population specific target of PrEP with in country data, and population specific targets for AGYW, KP, zero-discordant couples and other at risk group, in line with COP22 Guidance.

2. Review the PrEP_NEW section which will be populated with assumptions of FY23 Targets set at other points in the Data Pack for "HTS_TST_NEG", "Host Country Est. PLHIV", "AGYW(PREV (D)", and "AGYW_PREV (N)". Also think through KP PrEP strategy and history.

3. Review data pulled from DATIM showing "PrEP_NEW (FY21 Results)", and "PrEP_NEW (FY22 Targets)".

4. Manually enter targets for "Newly on PrEP (FY23)".

24.2 PrEP: PrEP_CT

PrEP_CT: Number of individuals, excluding those newly enrolled, that return for a follow-up visit or re-initiation visit to receive pre-exposure prophylaxis (PrEP) to prevent HIV during the reporting period.

	M	N	O
Column Name	PrEP_CURR (FY21 Results)	PrEP_CURR (FY22 Targets)	PREP_CT (FY23)
UID	PrEP_CURR.R	PrEP_CURR.T_1	PrEP_CT.T
Column Type?	past	past	target
What type of data?	integer	integer	integer
Prepopulated data?	Y	Y	N
Enter or modify data?	?	?	N
Calculated column?	N	N	N
Linked column?	Y	Y	Y

24.2.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **PREP_CT Continuing on PrEP (FY23)** *PrEP_CT.T*

24.2.2 Instructions

1. Think through population specific target of PrEP with in country data, and population specific targets for AGYW, KP, zero-discordant couples and other at risk groups, in line with COP22 Guidance. For each of these populations think through how groups may continue to use PrEP and remain at risk, go off PrEP due to change in risk, or return to PrEP due to a change in risk. Note that PrEP_CT is a revised and different indicator from PrEP_CURR. While PrEP_CURR historical targets and results are provided for context and assistance, they do not necessarily provide direct insight into PrEP_CT targets.
2. Manually enter targets for “PrEP_CT (FY23)”.

Chapter 25

KP_MAT

KP_MAT: Number of people who inject drugs (PWID) on medication-assisted therapy (MAT) for at least 6 months

	E	F	G
Column Name	Host Country Est. KP_MAT_SUBNAT (FY22)	PEPFAR KP_MAT (FY22 Targets)	Observed PEPFAR Coverage of KP_MAT
UID	KP_MAT_SUBNAT.T_1	KP_MAT.T_1	KP_MAT.NatlCo
Column Type?	target	past	reference
What type of data?	integer	integer	percentage
Prepopulated data?	N	Y	N
Enter or modify data?	N	?	N
Calculated column?	N	N	Y
Linked column?	Y	Y	Y

	I	J	K
Column Name	Projected Change in KP_MAT (FY23) (%)	KP_MAT (FY23)	Host Country KP_MAT_SUBNAT (FY23)

	I	J	K
UID	KP_MAT.Growth.T	KP_MAT.T	KP_MAT_SUBNAT.T
Column Type?	assumption	target	target
What type of data?	percentage	integer	integer
Prepopulated data?	N	N	N
Enter or modify data?	Y	N	N
Calculated column?	Y	Y	Y
Linked column?	Y	Y	Y

25.0.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **KP_MAT (FY23)** *KP_MAT.T*
- **Host Country KP_MAT_SUBNAT (FY23)** *KP_MAT_SUBNAT.T*

25.0.2 Instructions

1. Enter values for column "Host Country Estimated KP_MAT_SUBNAT (FY22)", as available. Sources for this data should be approved by the PPM and DUIT Liaison assigned to your Country.
2. Review "PEPFAR KP_MAT (FY22 Targets)", pulled from DATIM as reference for historical context.
3. Review Observed PEPFAR Coverage of KP_MAT_SUBNAT (FY22 Targets), calculated by dividing FY22 PEPFAR KP_MAT targets by Host Country Estimated KP_MAT_SUBNAT (FY22).
4. Review "Targeted PEPFAR Coverage of KP_MAT_SUBNAT (FY23) (%)" which will pull directly from the previous column for FY22 that was calculated in the last step, but you may edit this as needed.
5. Review and adjust "Targeted Growth in KP_MAT (FY23) (%)". This will be prepopulated at 0%, but you may adjust this as needed.
6. Review "KP_MAT (FY23)" which will be the product of "PEPFAR KP_MAT (FY22 Targets)" multiplied against "Targeted Growth in KP_MAT (FY23) (%)". In the case services are planned in FY23 where these were not provided in FY22, you may manually enter FY23 targets in these columns.

7. Review "Host Country KP_MAT_SUBNAT (FY23)" and adjust previous assumptions as needed. The DataPack will model these targets based upon FY23 PEPFAR KP_MAT targets and the Targeted PEPFAR Coverage of KP_MAT_SUBNAT (FY23) (%).

Chapter 26

KP Validation

Each section of the KP_Validation tab looks at each indicator that sets a Key Population target to ensure the total for each of these Key Population disaggregated targets does not exceed the total Female and Male 15+ populations for each PSNU. Under each of these sections there is conditional formatting that will highlight any of the "KP Targets Validation" columns in red if those values exceed the Total Targets.

	C	D	E	F
Column Name	Female, 15+ (FY23)	AGYW, 15-29 (FY23)	Male, 15+ (FY23)	FSW
UID	PrEP_CT.Female.T	PrEP_CT.AGYW.T	PrEP_CT.Male.T	PrEP_CT.KP.FSW.T
Column Type?	reference	reference	reference	reference
What type of data?	integer	integer	integer	integer
Prepopulated data?	N	N	N	N
Enter or modify data?	N	N	N	N
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

	G	H	I	J
Column Name	MSM	People in prisons and other enclosed settings	PWID	TG
UID	PrEP_CT.KP.MSM.T	PrEP_CT.KP.Enclosed. T	PrEP_CT.KP.PWID.T	PrEP_CT.KP.TG.T
Column Type?	reference	reference	reference	reference
What type of data?	integer	integer	integer	integer
Prepopulated data?	N	N	N	N
Enter or modify data?	N	Y	Y	N
Calculated column?	Y	Y	Y	Y
Linked column?	Y	Y	Y	Y

26.0.1 DATIM Import

There are no data points that will be imported into DATIM from this tab.

26.0.2 Instructions

For each section of this tab, follow the below steps:

1. Review the Total Population targets in the "Female, 15+ (FY23)", "AGYW, 15+ (FY23)", and "Male, 15+ (FY23)" columns, which sum targets across all 15+ age groups from where these are set in previous tabs of the DataPack.

    a. Note that for the PrEP_CT and PrEP_NEW sections, the summation is pulling age group totals from the PrEP tab, TX sections from the Cascade tab, and HTS Sections from the HTS tab. Return to those tabs to investigate and adjust values. Changes made in this section of the KP Validation tab WILL NOT affect actual targets set in those tabs.

    b. **NOTE**: Confirm for PrEP indicators that DREAMS age groups are aligned between KP and Total Populations, and ensure there is sufficient excess to target AGYW demographics.

2. Review each column of the KP Targets Validation section. Data for these columns come originally from the KP tab of the DataPack. Return to that tab to investigate and adjust values. Changes made in this section of the KP Validation tab WILL NOT affect actual targets in the KP tab.

3. Review the “FSW” column and ensure the total in this column does not exceed the total target for “Female, 15+ (FY23)”. Cases where this does occur will be highlighted red.

4. Review the “MSM” column and ensure the total in this column does not exceed the total target for “Male, 15+ (FY23)”. Cases where this does occur will be highlighted red.

5. Review the final three columns “People in prisons and other enclosed settings”, “PWID”, and “TG” to ensure that the sum of these three columns does not exceed the remainder of KP’s — the remainder after subtracting the amounts targeted in the “FSW” and “MSM” columns. Cases where this does occur will be highlighted red.

Chapter 27

PSNU x IM

Upon completing previous sections of the DataPack, the PSNUxIM tab serves as a critical next step in allocating these targets to specific Implementing Mechanisms (IMs). To receive and populate a PSNUxIM tab, follow the below instructions.

27.0.1 DATIM Import

The following data points will be imported into DATIM from this section:

- **All mechanism integer value totals**
- **All deduplication proportions**

27.1 Receiving a PSNU x IM Tab for the First Time

Important Note:

Adding data to the PSNUxIM tab of your DataPack may cause the the filesize of your DataPack to increase, sometimes significantly. As this may have implications for the performance of your DataPack, it is recommended to run initial validations in the Self-Service App and ensure the DataPack is in a good state of completeness prior to generating the PSNUxIM tab. Although the App will give the option to generate the PSNUxIM tab each time you validate your tool, it is not required to complete this step until you are fully prepared to begin the mechanism allocation process.

Upon first receipt, the DataPack will not contain a populated PSNUxIM tab. To receive a populated version of this tab, follow the below instructions:

1) Submit a preliminary DataPack for validation to the self-service validation tool at datapack.DATIM.org.
2) The DataPack Self-Service App will automatically detect that the PSNUxIM tab has not yet been populated and will do so, returning a new copy of the DataPack with all other parts of the DataPack left unaltered, but containing a populated PSNUxIM tab. Note that this new copy of your DataPack will *not* automatically update any data derived from DATIM used across the rest of the DataPack, such as previous years' result or target data. To request a DataPack with updated DATIM data, contact your PPM and assigned DUIT Liaison for approval, then submit a ticket to the DataPack Support Team at DATIM.Zendesk.com.
3) Download the new copy of your DataPack generated by the Self-Service App and make it available to the rest of your team as appropriate.
4) Review the initial PSNUxIM tab for any obvious errors made in the automated generation process. Flag any issues to the DataPack Support Team at DATIM.Zendesk.com.

In producing a PSNU x IM tab for the first time, the DataPack Self-Service app will write data and formulas into this tab as follows:

- Each PSNU.
- DataPack Indicator Codes, which reference codes used throughout the DataPack hidden in row 14 on each tab.
- Age, Sex, & Key Population for each sub-population, where specified.
- Total DataPack Targets, as set in previous tabs of the DataPack. In adding these targets, the DataPack Self-Service App will write formulas allowing dynamic referencing of each target. In cases where additional updates to previous tabs of the DataPack may be necessary, any updates to target values will automatically be updated on this tab in this column.
- Rollup totals, summing allocated targets across all mechanisms. This column can be helpful in quickly assessing whether DataPack Target totals have been over- or under-allocated across DSD or TA, and IMs. Red highlighting indicates cases where Rollup sums differ from original DataPack Target totals.
- Percentage totals allocated to a column new in the COP22 Data Pack titled "Not PEPFAR", signifying targets that may have been modeled in the DataPack to allow a full picture of services to be demonstrated, but which will likely be implemented by another partner organization separately from PEPFAR's support. These values are considered in the Rollup totals to ensure complete allocation, but are dropped in passage to PAW, the Self Service App, and DATIM.
- Percentage allocations across IMs and DSD or TA, based on FY22 Target proportions as currently reported in DATIM. Note that these are based on a snapshot of DATIM taken at the time this data is originally written into the PSNUxIM tab. These allocation percentages will not automatically update once they have been first written into this tab. See below for how to either adjust existing allocations, or add new IMs and allocations to this section.
- Possible maximum and minimum Deduplicated Rollup Totals, Deduplicated DSD Totals, and Deduplicated TA Totals.
- Observed and Targeted Dedupe Resolution strategies as seen in DATIM-reported data for FY22 Targets, or based on allocations chosen in the DataPack. See below for additional information.

- Duplicated Rollups, summing by DSD, TA, and Total across all allocated mechanisms. These data will automatically update as allocations are adjusted on this tab, or as total targets are adjusted on other tabs.

- IM-level Target Values, as integers, calculated by multiplying DataPack Target totals by mechanism allocation percentages.

27.2 Adjusting IM Allocations

To adjust, remove, and add allocations across Mechanisms in the PSNUxIM tab, follow the below instructions:

1) Review initial allocations written automatically into the DataPack based on patterns observed in FY22 Targets in DATIM.

2) To adjust existing percentages, type over percentages already provided in the DataPack with new percentages reflecting COP22 strategic programming. Note that these allocations are both to distribute targets to mechanisms *as well as* to distribute them across DSD and TA. In other words, in a case with no deduplication, allocations should sum to 100%, representing how each target will be divided both across mechanisms and by service type.

3) To remove existing percentages, **DO NOT DELETE COLUMNS**. Instead, either replace the name of a mechanism in row 14 with a new name (following the format #####_DSD or #####_TA) and repurpose or replace the allocations in the rows below it, or delete only those percentage allocations for a given mechanism — but keeping the mechanism name in row 14 the same — effectively withdrawing it from a certain geography or population or program area.

4) To add new mechanisms for allocation, follow the below steps:

   a. Unhide the buffer of hidden green columns between pre-populated mechanism columns and the gray columns to the right describing Deduplicated Totals (Columns I – CE).

   b. Type the new mechanism name into the green cell in row 14, making sure to also denote the service type, whether DSD or TA. These names must be of the format: #####_DSD, or #####_TA. Do not leave any blank columns between mechanisms. Again, **DO NOT DELETE COLUMNS**.

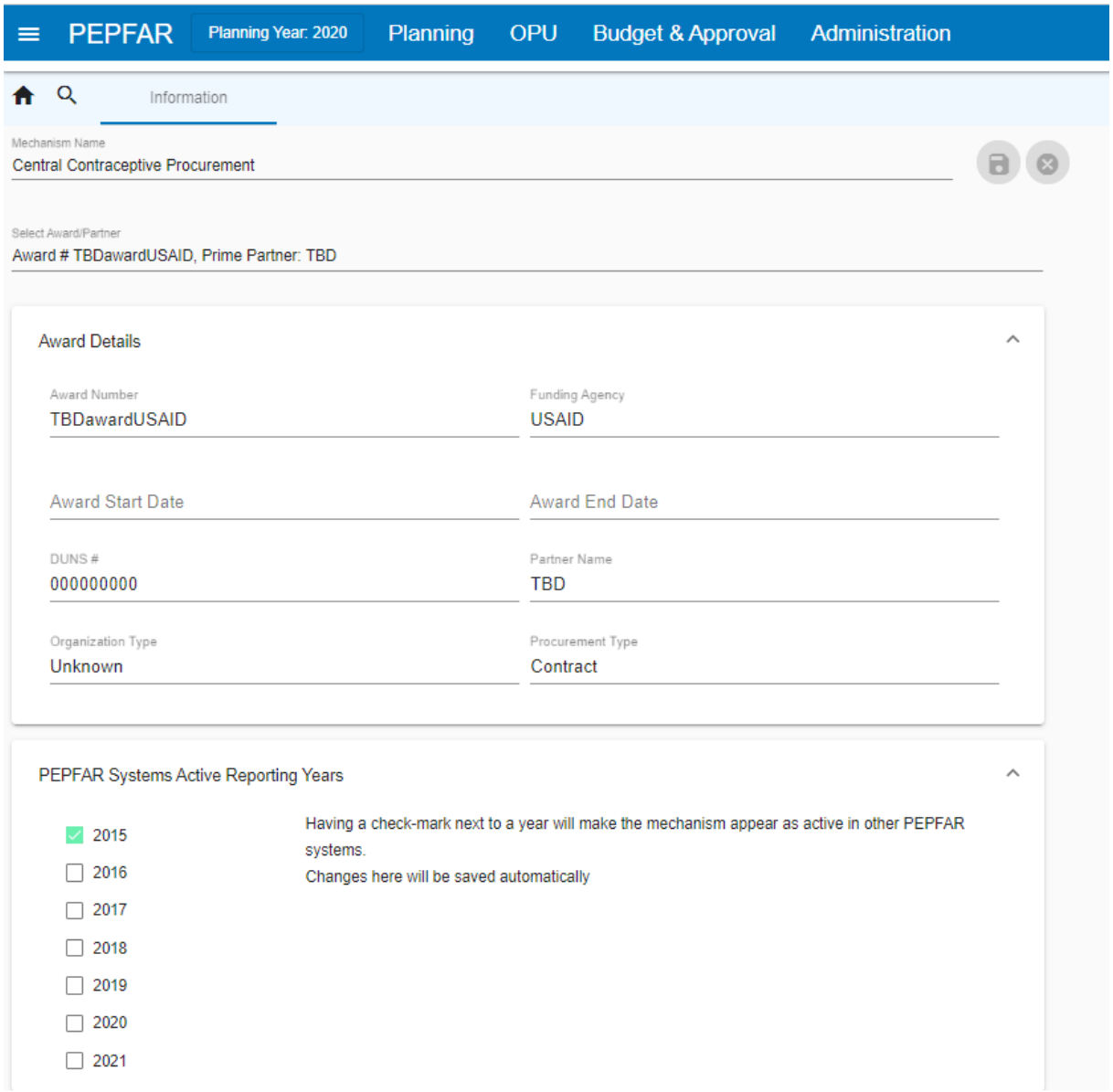
   c. Confirm that mechanisms added here are entered in FACTS Info, approved, and valid for MER data entry for COP22. While there can be up to a 24 hour delay in synchronizing these mechanisms from FACTS Info to DATIM, as soon as a mechanism is added and approved and valid in FACTS Info, its 4-6 digit numeric code can be entered here in the DataPack, and you can begin allocating targets to this new mechanism. However, note that in order to validate these data using the DataPack Self-Service App, mechanisms must have already been synchronized from FACTS Info to DATIM. Validation alerts in the DataPack Self-Service App will note where this may not be the case.

   d. Add allocations in the rows below any new mechanisms, making sure that new and old allocations still aggregate to no less than 100% allocation in all cases, and also no more than 100% allocation where no deduplication occurs.

27.3 Resolving Invalid Mechanism Errors

The PSNUxIM tab will only populate with mechanisms that are marked as "active" for the current COP year in DATIM. Any mechanisms that are manually added to the PSNUxIM tab that are not active and valid will be flagged by the Self-Service App.

To ensure a mechanism is valid for the current COP year, go into the COP module in FACTS Info-Next Gen (FI-NG) and check the box for "PEPFAR Systems Active Reporting Years" for the appropriate COP year. Please note that it may take up to 24 hours for active mechanism flags to be carried over into DATIM and resolve validation errors in the Self-Service App.


PEPFAR
Planning Year: 2020
Planning
OPU
Budget & Approval
Administration
Information
Mechanism Name
Central Contraceptive Procurement
Select Award/Partner
Award # TBDawardUSAID, Prime Partner: TBD
Award Details
Award Number
TBDawardUSAID
Funding Agency
USAID
Award Start Date
Award End Date
DUNS #
000000000
Partner Name
TBD
Organization Type
Unknown
Procurement Type
Contract
PEPFAR Systems Active Reporting Years
2015
2016
2017
2018
2019
2020
2021
Having a check-mark next to a year will make the mechanism appear as active in other PEPFAR systems.
Changes here will be saved automatically

27.4 Note on Peace Corps Mechanisms

As in COP21, Peace Corps will no longer report targets under their older mechanisms, and will instead report all targets under Management & Operations (M&O) mechanisms. Note that the PSNUxIM tab will initially populate mechanisms and distributions based on previous year targets, so there may be cases where you will need to shift Peace Corps targets to M&O mechanisms from previous mechanisms by changing the IM reference number at the top of the tab to the appropriate M&O IM code.

27.5 Resolving Rounding Errors

Due to the combination of multiplication of percentage values against target values coming from other parts of the DataPack, and rounding of all mechanism target values to integers, target values allocated against mechanisms may roll up with some slight difference from DataPack Targets. It may be necessary to iteratively adjust rounding errors and deduplications throughout the IM allocation process, though in general it is a good practice to resolve rounding errors as much as possible before moving on to deduplication. To resolve rounding errors, adjust percentages gradually, as follows:

1) If you had previously unhid the buffer of green Percentage Allocation columns (the section between columns I and CE) while adding new mechanisms, or the Deduplication columns in columns CF to CV, it may be helpful to hide columns in these sections again now to more easily see both Percentage Allocations and Target Values at the same time on your screen.

2) It may also be helpful to review Duplicated Rollup values in columns CW to FS in addition to DataPack Targets in column G so as to consider rounding errors distinctly from the impacts of deduplication.

3) While maintaining overall distribution patterns as intended, gradually adjust percentage allocations under affected mechanisms in columns I through CE to increase or decrease Duplicated Rollups as needed.

Note that while all rounding errors should be resolved if possible, a small margin of error around some values is permissible, so long as this does not exceed an absolute value of 2 in either direction of the DataPack Target in column G.

27.6 Performing Deduplication

Follow the below steps to perform all Deduplication associated with IM allocations of targets. Note that all deduplication must be performed here in the PSNUxIM tab, and will not be permitted for COP22 targets in DATIM.

1. If you had previously unhid the buffer of green Percentage Allocation columns (columns I – CE), it may be helpful to hide empty columns in this section again now.

2. Review Duplicated Rollups for DSD, TA, and total targets. These are dynamically summed across all mechanism targets allocated in the PSNU x IM tab to the right of these columns. To adjust these totals, return to the Percentage Allocation section.

3. Review TA Deduplication, DSD Deduplication, and Crosswalk Deduplication (recommended in that order for each row):

    a. Where only a single mechanism is assigned targets under either DSD or TA (for DSD and TA Deduplication), where deduplicated DSD and TA totals aggregate to less than or equal to DataPack targets (for Crosswalk Deduplication), or where total mechanism targets aggregate to less than or equal to DataPack Targets, gray highlighting in these sections indicates that deduplication is not necessary or permitted.

    b. Review allowable ranges for possible deduplicated totals by referencing the SUM and MAX rollup columns. As in the DATIM Deduplication App, SUM values represent cases with zero deduplication, and MAX rollups represent application of the most deduplication possible, resulting in values equivalent to the largest IM target among either the DSD or TA mechanisms (for DSD or TA deduplication), or the larger of either DSD or TA deduplicated totals (for crosswalk deduplication).

    c. Review Observed Dedupe Resolutions seen in FY22 Target allocations. These are provided for reference, and indicate which deduplication approach was used in FY22 Target deduplication, performed in the DATIM Deduplication App.

    d. For cases where Custom deduplication was used in FY22 Targets, review the Custom Dedupe Allocation observed in FY22 Targets. Percentages here are calculated by dividing the DSD or TA deduplication value (for DSD or TA deduplication) or the sum of Deduplicated DSD and Deduplicated TA (for crosswalk deduplication) by the sum of all mechanisms and deduplication values, across both DSD and TA. As such, these values are all negative or zero, and can be easily compared against target allocation percentages used in columns I – CE.

    e. In columns CT for TA, CN for DSD, and CH for Crosswalk, manually type the deduplication resolution approach to be used to resolve deduplication issues, as follows:

        i. "CUSTOM" or "custom" or "Custom"
        ii. "SUM" or "sum" or "Sum"
        iii. "MAX" or "max" or "Max"

    f. Where Custom deduplication is selected, also indicate the percentage allocation to be assigned to the deduplication value in the column to the immediate right. Again, a reminder that these values should all be negative or zero, and represent the proportion of deduplication values relative to the DataPack Target total in column I. Initially upon indicating Custom deduplication, the DataPack will preset this deduplication allocation equal to the value observed in FY22 Targets, if any. You may alter and adjust this value as needed, so long as it is negative or zero. Also note that it is not enough to only type in a percentage deduplication allocation; you must also enter "CUSTOM", "SUM", or "MAX", as explained in the previous step. Note that instead of entering "SUM", it is possible to enter "CUSTOM" but enter a deduplication percentage allocation of 0%; and instead of entering "MAX", it is possible to enter "CUSTOM" but enter a deduplication percentage allocation that results in the equivalent of the MAX value shown in columns CG, CL, or CR.

4. Review the Rollup values in column H for any mismatch against DataPack Targets in column G that may necessitate adjustment of Deduplication allocations. Note that while it is not a strict requirement that percentage allocations across mechanisms and deduplication add to 100%, it is a requirement that integer values add to equal the DataPack Target in column G, ± 2. Red highlights in column H indicate values more than 2 (integer, absolute value) away from the DataPack Targets in column G; yellow highlights indicate values 1 or 2 (integer, absolute value) away from the DataPack Targets column G.

Chapter 28

Datapack Self-service App

The DataPack self-service app provides a one-stop shop for validating and analyzing your DataPack. After logging into the app, you can upload a copy of your DataPack, and receive feedback regarding the structure and content of the DataPack. The app will attempt to provide feedback regarding any errors which may prevent the import of your DataPack into DATIM. In general, all errors must be resolved prior to any approval or import of data into DATIM. Warning messages should be carefully reviewed. While these may not prevent import of your data, ignoring them may lead to data quality problems. The app also provides a number of charts and tables to assist with review of your DataPack. Each of these functions will be described in more detail in the remained of this chapter.

28.1 Logging in

In order to access the app, you will need to login with your DATIM credentials. If you do not have a DATIM username and password or if your account has been deactivated, please contact DATIM support.

28.2 Uploading a DataPack

Once you have logged into the app, choose "Browse" from the left side pane. Select the DataPack you wish to validate. Please be sure to use an "XLSX" file! Other formats such as XLSB or ZIP archives of your DataPack are not supported, and cannot be used.

Once you file is completely uploaded to the server, the "Validate" button should become active.

28.3 Validating your DataPack

After pressing the "Validate" button on the left-side pane, the app will perform a number of structural checks on your file. It is critical that the structure of the DataPack matches that which was provided to you. Any tabs or columns which have been removed will result in a parsing error, and these will need to be fixed prior to import. Other checks include:

- Altered formulas: Generally, formulas should not be altered, but there can be valid programmatic reasons for doing so. These warnings are provided in order to allow those reviewing the DataPack to make a determination as to whether they are valid changes or not.

- Decimal values: In general, all values (with a few exceptions) should be whole integer numbers. Decimals cannot be imported into DATIM, and thus must be rounded prior to import. This can lead to variations in the numbers which are visible in the DataPack and those which are imported into DATIM.
- Negative numbers: In general, all numbers in the DataPack should be whole, positive integers.
- Non-numeric values: Any values which are not numeric, e.g. characters, is not allowed.
- Imbalanced PSNUxIM distribution: When distributing data from the main DataPack tabs, to the PSNUxIM tab, small varations due to rounding may result. As an example, if a target of 100 has been set in the main tab, and is then distributed evenly between three partners, each with a target value of 33, a value of 1 remains undistributed. To avoid this situation you may need to use allocation targets of 34%,34%,32% instead, which would ensure that the values allocated in the PSNUxIM tab match those in the main programmatic area tabs.
- Threaded comments: This type of comment, as opposed to the previous type of Notes used in Microsoft Excel, causes corruption issues when the app attempts to update your PSNUxIM tab. Prior to submitting for an updated PSNUxIM tab, you MUST remove all threaded comments. For more information about the differences between threaded comments and notes visit this link.
- Duplicated rows: There should be no duplicated rows in any of the main tabs or the PSNUxIM tab.
- Invalid organisation units: All PSNUs referened in the DataPack must exist in DATIM.
- Missing metadata: Certain columns such as the PSNU, Indicator code, Age, Sex and KeyPop columns must always be present. If any of these values is for some reason missing, please find the location of the error and fix the issue.

28.4 Validation rule checks

Validation rules provide additional data quality controls between certain indicators. As a simple example, the number of persons testing positive for HIV should be less than or equal to the number of individuals tested. Under most circumstances, validation rules should not be violated, but there can be certain programmatic reasons why these violations should be waived.

A number of rules have been created, and many of them are enforced in the DataPack itself. However, not all rules have been implemented in the DataPack, and due to formula changes and subtleties in how targets are allocated at the PSNUxIM level, additional review of the data in the PSNUxIM tab and main tabs may be required. During the validation of the datapack, all data contained in the PSNUxIM tab will be checked against all of the validation rules defined in DATIM. If there are any violations of the validation rules, the app will provide detailed feedback in regards to which PSNUxIM combination is affected. In order to resolve these, you will need to carefully review how the PNSUxIM allocations have been made to respective mechanisms in the PSNUxIM tab.

While validation rule violations will not prevent the import of your data into DATIM, they may lead to data quality problems in both DATIM and downstream systems such as Panorama and PAW. If there are any validation rule issues, your PPM and DUIT can be requested to waive these at their discreation.

28.5 Analytics checks

Analytics checks provide an additional type of data quality control. As an example, one analytics check looks for VMMC indeterminate rates greater than 5 percent. Ideally, the indeterminate rate should be a low as possible, but if for some reason targets have been set where the rate is greater than 5 %, the app will

inform you about the specific PSNUxIM where this occurs. Again, these flags will not prevent the import of your data into DATIM, but are provided to help reviewers to make a determination regarding the approval of the DataPack for import.

The app will provide a list of all analytics checks which have been flagged in the "Analytics checks" tab on the right side of the app pane.

28.6 Indicator summary

This table provides a high-level SNU level summary of indicators from each of the main tabs of the DataPack. Note, that this data is NOT drawn from the PSNUxIM tab. This can be a useful first check of your DataPack, prior to the allocation of the data in the PSNUxIM tab.

28.7 SNUlevel summary

This table listing provides all of the data from each of the main DataPack tabs summarized by the SNU level.

28.8 Validation rules

This tab provides a listing of all validation rule violations, if any. The table provides the following fields

- PSNU: The specific PSNU where the violation occurs
- Mechanism: The specific mechanism where the violation occurs.
- Formula: The rule is specified with a left side, a right side, and an operator. The left and right side correspond to a data element (or data elements) located in the PSNUxIM tab. Using a combination of filters (PSNU, Mechanism and Data elemement), you should be able to locate the specific rows in the PSNUxIM tab which are leading to the validation rule violation.
- Diff (%) : Provides the percentage difference between the left and right side.
- Diff (Absolute) : Provides the numeric difference between the left and right side.

Validation rule	PSNU	Mechanism	Formula	Diff (%) (Absolute)	Diff
PMTCT_STAT (N, DSD, Age/Sex/ KnownNewResult) TARGET <= PMTCT_STAT (D, DSD, Age/Sex) TARGET	Namuno	160448	5317 <= 5316	0.02	1

Chapter 29

Appendix

29.1 Reference Materials

- COP/ROP 2022 Guidance: https://www.state.gov/wp-content/uploads/2020/12/PEPFAR-COP21-Guidance-Final.pdf
- MER Data Validation Rules User Guide: https://datim.zendesk.com/hc/en-us/articles/360055112711-MER-Validation-Guide
  - This Document has been designed to communicate all validation rules that the DataPack, as well as other COP21 documents, will go through in the validation and upload process. A description of the validation rules, their definitions and user actions to correct any flagged errors can be found in this document.
- Monitoring, Evaluation, and Reporting Indicator Reference Guide (MER) v2.5: https://datim.zendesk.com/hc/en-us/articles/360000084446-MER-Indicator-Reference-Guides
- MER 2.5 Training Videos: https://datim.zendesk.com/hc/en-us/articles/360051593031-MER-2-5-Training-Videos