

PrEP-it Pilot User Guide Version 1.0

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Acronyms

AGYW	Adolescent girls/young women
AIM	AIDS Impact Model
ART	Antiretroviral therapy
ARV	Antiretroviral
BFW	Breastfeeding women
EATAP-II	Efficiency and Accountability Technical Assistance to Partners II
FSWs	Female sex workers
HIV	Human immunodeficiency virus
HP+	Health Policy Plus
KP	Key population
M&E	Monitoring and evaluation
MSM	Men who have sex with men
OPTIONS Consortium	Optimizing Prevention Technology Introduction on Schedule Consortium
PEPFAR	U.S. President's Plan for Emergency AIDS Relief
PrEP	Pre-exposure prophylaxis
PrEP-it	Pre-exposure prophylaxis implementation tool
PW	Pregnant women
PWID	People who inject drugs
SDCs	Serodiscordant couples
SDU	Service delivery unit
TW	Transgender women
USAID	U.S. Agency for International Development
USD	United States dollar
VMMC	Voluntary medical male circumcision
WHO	World Health Organization

Introduction

Governments, donors, and other stakeholders in countries at the forefront of oral pre-exposure prophylaxis (PrEP) delivery have encountered several programmatic challenges such as difficulty in setting targets, tracking the continuum of PrEP delivery, and estimating program costs and impact. In response, through the U.S. Agency for International Development (USAID)'s Optimizing Prevention Technology Introduction on Schedule (OPTIONS) Consortium, Health Policy Plus (HP+) project, and Efficiency and Accountability Technical Assistance to Partners II (EATAP-II) project, the U.S. President's Plan for Emergency AIDS Relief (PEPFAR) has developed a Microsoft Excel-based tool called PrEP-it for oral PrEP implementation planning, monitoring, and evaluation. PrEP-it assists with planning and monitoring via six primary functions:

- Assesses sites' service delivery capacity and identifies site-level bottlenecks for oral PrEP delivery
- Monitors program by tracking monthly PrEP initiation and continuation rates
- Helps with national or subnational target-setting, allowing users to generate and analyze numerical targets based on population-based coverage or service delivery capacity
- Forecasts drug supply needs based on targets or program implementation
- Estimates program costs based on targets or program implementation¹
- Examines a program's projected impact (number of HIV infections averted) based on targets or past delivery

Who can use PrEP-it?

PrEP-it is freely available to anyone who wants to use it, including government officials, donors, implementing partners, and researchers. This user guide assumes the PrEP-it user has experience working in Excel. For basic instructions for Excel, please see <https://support.office.com/en-us/excel>.

PrEP-it users may be working at different levels of PrEP programming within a country, such as national, district, program, or site. While PrEP-it can be used at any level, it is designed to be used only at one level at a time. However, users can create multiple copies of the tool if they want to simultaneously monitor or compare different sublocations. For example, if managers for one program wanted to compare PrEP-it output for three districts, they would make three copies of the workbook, one for each district.²

¹ For those interested only in annual cost estimates, go directly to page 24 of the user guide.

² One exception to the "only one level" rule is that the **Capacity** module worksheet allows one to list subunits, from which the total capacity can be calculated. See page 19 for more details.

Available outputs

The lists below detail the potential outputs one can obtain from PrEP-it. The outputs on the left are associated with a single function, while those on the right are multi-function (e.g., completed [Targets](#) and [Costs](#) modules).

SINGLE-FUNCTION OUTPUTS

- Summary of PrEP cascade metrics from HIV testing to initiation
- Forecast client visits for coming months based on recent past initiations and continuation rates
- Aggregated service delivery capacity
- Capacity bottlenecks for each service delivery unit and summary of capacity bottlenecks
- Annual and monthly initiation targets per priority population
- Target disaggregation by sublocation and age/sex
- Cost per person on PrEP for an entire year

MULTI-FUNCTION OUTPUTS

- Track service delivery against targets
- Set targets based on capacity for service delivery
- View potential capacity gaps based on service delivery forecasts or targets
- Forecast annual and monthly costs, accounting for continuation
- Estimate monthly and total costs associated with targets or service delivery
- Estimate the number of HIV infections averted based on targets or service delivery
- Estimate costs per HIV infection averted
- Annual costs per client initiated, accounting for continuation curves
- Monthly drug needs and costs based on service delivery or targets

Preliminary steps

STEP 1





Download the most recent version of PrEP-it 1.0 at:
<https://www.prepwatch.org/resource/prep-it>

STEP 2

Install the Solver function in Microsoft Excel. PrEP-it uses the Solver function for calculating targets based on coverage (Option 1 in target setting). The Solver function is not separate software, but rather a feature that needs to be activated. Persons using PrEP-it to generate targets based on coverage should install the Solver function by following the instructions on pages 55-57.

Getting Started

PrEP-it requires users to input their data in order to generate custom results. The **color key** below indicates data input cells in the workbook. Light orange cells contain drop-down menus, while darker orange input cells are for direct entry of numbers or text. Grey cells indicate either reference data or calculations. Grey cells have been locked and cannot be edited by the user. Green cells indicate that the user has set a selection to "Yes."

Color Key	
	Light yellow input cell: drop-down menu
	Orange input cell: numbers or text
	Gray cells: reference data or calculations (cannot be edited)
	Green cells: selected to "Yes"

PrEP-it has several functions; not all users will want to use every function. For example, a program planner may want to set national targets based on coverage and estimate costs associated with these targets. In contrast, an implementing partner may want to use PrEP-it to track their progress against previously established targets and estimate the number of HIV infections averted based on their service delivery. Due to these varying needs and corresponding functions, PrEP-it has built-in features to guide users through the tool and direct them to the inputs necessary to generate their desired outputs.

The Getting Started tab has four initial steps:

STEP 1 Select country. Using the drop-down menu in cell B7, select the country where PrEP-it will be used. By selecting the country, the tool will pre-populate country-specific default values for several inputs throughout the tool. See [Appendix A](#) for more information on the country-specific defaults.

Mozambique

Step 1: Select country from drop-down menu on left




STEP 2
(optional) Enter the name of the program or geographic area for which PrEP-it will be used in cell B8. This step is optional and intended for situations in which a user is working with multiple versions of PrEP-it for different geographic areas. If desired, leave cell B8 blank.

STEP 3

Select PrEP-it functions. From cell B12 to B37, use the drop-down menus to select “Yes” or “No” for each of the corresponding potential functions of PrEP-it described in column C. For example, if generating targets based on coverage is a desired function, select “Yes” in B12.

Yes/No	PrEP-it Functions
	TARGETS
Yes	Targets Option 1: Generate national or subnational targets based on coverage



Multiple functions can be selected at the same time. The table below shows where a user selected five functions.

Yes/No	PrEP-it Functions
	TARGETS
Yes	Targets Option 1: Generate national or subnational targets based on coverage
No	Targets Option 2: Generate targets based on capacity
No	Targets Option 3: Enter previously established targets (to link with other modules)
Yes	Disaggregate targets by age/sex/PSNU
	COSTS
No	<i>Estimate annual PrEP costs per person only. (Click HERE to go to Costs Lite for stand-alone costing.)</i>
Yes	Estimate costs associated with targets using the Costs Lite module
No	Estimate costs associated with service delivery using the Costs Lite module
No	Estimate costs associated with targets using the Detailed Costs module
No	Estimate costs associated with service delivery using the Detailed Costs module
Yes	Estimate the cost effectiveness of PrEP delivery (cost per HIV infection averted) using Costs Lite
No	Estimate the cost effectiveness of PrEP delivery (cost per HIV infection averted) using Detailed Costs
	IMPACT
Yes	Estimate program impact (HIV infections averted) based on targets
No	Estimate program impact (HIV infections averted) based on service delivery
	CAPACITY
No	Estimate program capacity to deliver PrEP
No	Check for capacity gaps based on targets
No	Check for capacity gaps based on prior service delivery
	PROGRAM DATA MONITORING AND FORECASTING
No	Monitor monthly program data on the cascade of PrEP delivery
No	Estimate continuation rates with a sample of client records
No	Track service delivery progress against targets
No	Forecast upcoming clients based on service delivery data
No	Forecast the number of drugs needed based on targets
No	Forecast the number of drugs needed based on service delivery data

There are a few specific issues to note when selecting functions.

- PrEP-it allows for three separate approaches for target setting. See page 34 for details on the differences between the approaches.
- Two cost modules are included in the tool, and only one should be selected at a time. The [Detailed Costs](#) module allows for more comprehensive cost specification and is suited for economists and costing experts, while the [Costs Lite](#) module requires fewer inputs. Further details on the difference between the two modules are found on page 23.
- If one is only interested in using PrEP-it for estimating annual PrEP costs per person, they can click directly on the hyperlink in cell C17.

STEP 4

Review data requirements and complete input tabs. Based on the functions selected in Step 3, PrEP-it will indicate the necessary input tabs. The table below (starting in cell B38) indicates the input tabs and data requirements for each tab. The minimum data requirements are specified in column C. These indicate the data elements needed to link to other modules in the tool in order to perform the selected functions. On the tool, the minimum inputs will be identified for each input page (see text in dark red). For many input tabs, there are additional variables for data entry that allow for greater specificity or additional outputs. The cells with no data requirement indicate that the input step is not required for the functions the user selected. The complete table can be found in [Appendix B](#) on page 53.

starting from top to bottom. The data requirements are listed below.		
INPUT STEP	MINIMUM DATA REQUIREMENTS	ADDITIONAL DATA ENTRY (OPTIONAL)
Populations	Select at least one priority population that will be receiving PrEP.	Allows for up to 10 different priority populations
Continuation	Specify at least one continuation curve by entering the percent of initiations continuing at months 1, 3, 6, and 12 after initiation; assign a curve for each priority population.	Allows for up to six different continuation curves
Initiation		
Capacity		
Costs Lite	Specify at least one visit schedule for one year and assign a schedule to each population. Enter monthly ARV and adherence support costs. Enter costs by visit type for personnel, labs, other recurrent, and capital costs (suggested default values are provided at the top). Enter above-site costs.	Allows for up to three different visit schedules
Detailed Costs		
Targets	Specify target-setting period. For each priority population, enter population size, % in PrEP-eligible geographic areas, HIV prevalence, % indicated for PrEP (default estimates provided). Specify scale-up trends. Select target-setting option:	
Impact	No inputs required unless user has specified custom priority populations. For custom priority populations, specify impact factor among provided default values.	Users may adjust impact factors if deemed relevant.
Disaggregate Targets	Specify reporting period. Specify which age/sex groups are included for each priority population. Enter subnational names and population members over age 15.	
Drug Forecasting		
Continuation Calculator		

The necessary input tabs can also be seen on the Navigation Bar on the left side of the [Getting Started](#) tab and all other tabs in the tool. It is recommended that users complete the inputs by working from top to bottom. The required input tabs for the selected functions are in white and underlined, while the others are in blue and indicate a user does not need to complete these tabs. The names of the input tabs are hyperlinks, so one can click on the links in the Navigation Bar to go directly to the input tab. For most functions, users will start by going to the [Populations](#) tab.

NAVIGATION BAR

INPUTS

- [Getting Started](#)
- [Populations](#) ← Start with [Populations](#)
- [Continuation](#)
- Initiation
- Capacity
- [Costs Lite](#)
- Detailed Costs
- [Targets](#)
- [Impact](#)
- [Disaggregate Targets](#)
- Drug Forecasting
- Continuation Calculator

OUTPUTS

- [Results Dashboard](#)
- [Results by Month](#)
- [Targets by District](#)
- [Targets Output for PEPFAR](#)

After [Getting Started](#), complete input steps from TOP to BOTTOM

USER NOTES (OPTIONAL)

For all input pages, users can document their decisions by clicking on the link in cell B1 where it says: "Click HERE to record decisions in User Notes"

This cell hyperlinks to the User Notes page. Return to the input page by clicking the page

	A	B
1	POPULATIONS	Click HERE to record decisions in User Notes ←
2	NAVIGATION BAR	
3		Select up to 12 priority populations from the dropd

link in the Navigation Bar.

Populations

The purpose of this input tab is to designate the priority populations for PrEP. The selections made on this tab feed into the other tabs in the tool. PrEP-it allows users to either specify their own “custom” populations or select from a list of common priority populations for PrEP, including the following:

- Serodiscordant couples (SDCs)
- Female sex workers (FSWs)
- Men who have sex with men (MSM)
- People who inject drugs (PWID)
- Transgender women (TW)
- Adolescent girls/young women 15-19 years old (AGYW 15-19)
- Adolescent girls/young women 18-19 years old (AGYW 18-19)
- Adolescent girls/young women 20-24 years old (AGYW 20-24)
- Pregnant women (PW)
- Breastfeeding women (BFW)

When users select priority populations from the drop-down list, they have access to default data used for target setting, cost, and impact calculations, whereas custom populations do not. At least one priority population must be specified, and users can select up to 12 different priority populations.

STEP 1

Select whether serodiscordant couples are a priority population.³ Start with cell B5 and use the drop-down menu to select whether or not serodiscordant couples are a priority population. If selected, the acronym SDC will appear in cell C5 and will populate throughout the tool to indicate data inputs relevant for SDCs. If SDCs are not a priority population, leave blank.

Select priority populations	
Serodiscordant couples	SDCs

³ Because SDC populations are treated differently when setting targets, this selection is required first.

STEP 2

Select other priority populations. In cells B6 through B16, select any additional priority populations from the drop-down list. For populations not specified in the drop-down list, select “custom group” and indicate a name for the population in column C by typing over the word “specify.” In the example below, a user created a custom group for truck drivers.

Select priority populations	
Serodiscordant couples	SDCs
Female sex workers	FSWs
● Custom group	truck drivers ●

First, select “custom group”

Second, write “truck drivers” over “specify”

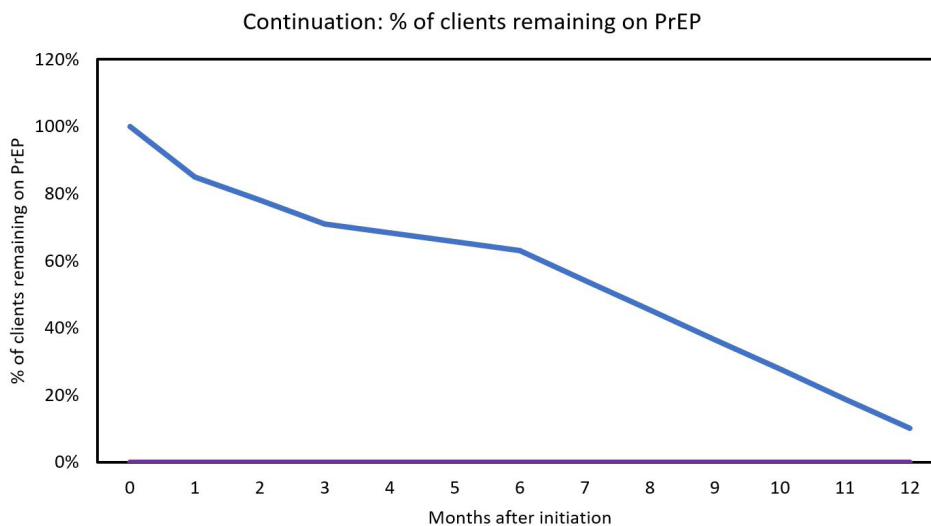
If one is not tracking PrEP data by priority populations, then select “custom group” from the drop-down menu and write “all PrEP clients” over “specify” in column C. Once this input step is completed, move to the next input step indicated on the Navigation Bar.

Continuation

The purpose of this input tab is to specify PrEP continuation curves and assign them to priority populations. The continuation curves specified on this tab link with other modules to generate targets, estimate costs and impact, and forecast short-term demand and drug supply needs.

What are continuation curves?

The continuation curve represents how long a population of clients stays on PrEP. In demonstration studies to date, most users do not stay on PrEP for longer than a year. By specifying the proportion of clients still on PrEP at months 1, 3, 6, and 12 after initiation, PrEP-it generates a “continuation curve,” which, in combination with numbers of initiations, allows PrEP-it to estimate how many continuing PrEP clients there will be at different points in time.



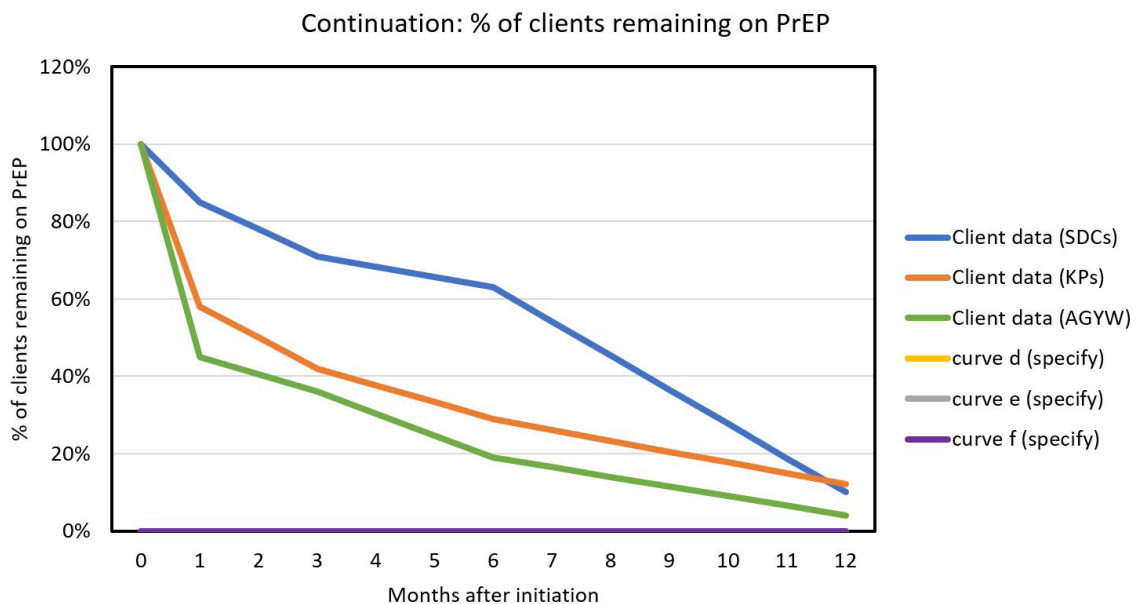
Ideally, the continuation rates at the four points in time are known or can be approximated from existing monitoring and evaluation (M&E) systems or program evaluation findings. If continuation rates are not known, PrEP-it also contains a [Continuation Calculator](#) worksheet, where one can enter a sample of individual data to calculate continuation rates needed to specify the continuation curve. More detail on the [Continuation Calculator](#) is provided on page 45. Additionally, PrEP-it contains the continuation rates from empirical studies of PrEP continuation that can be used as defaults if no program data is available. See [Appendix A](#) for more details.

Continuation curves	After 1 month	After 3 months	After 6 months	After 12 months
POWER Study	43%	20%		
SDC (Partners Demonstration Project)		93%	84%	50%
FSW (TAPS Study)	53%	44%	30%	22%
MSM (IPCP Kenya)	33%	22%	15%	
Young Women (IPCP Kenya)	26%	17%	10%	

STEP 1

Enter continuation curves. Users must specify at least one continuation curve but can specify up to six different curves. In the example below, the user entered continuation data for three groups; one for serodiscordant couples, one for key populations, and one for adolescent girls/young women. The corresponding continuation curves are displayed below.

Continuation curves	After 1 month	After 3 months	After 6 months	After 12 months
Client data (SDCs)	85%	71%	63%	10%
Client data (KPs)	58%	42%	29%	12%
Client data (AGYW)	45%	36%	19%	4%



STEP 2

Assign a continuation curve to each priority population. Using the drop-down menus, select which continuation curve should be assigned to each priority population. Note that two or more priority populations can have the same curve.

Priority populations	Continuation curve
SDCs	Client data (SDCs)
FSWs	Client data (KPs)
MSM	Client data (KPs)
AGYW 15-19	Client data (AGYW)
AGYW 20-24	Client data (AGYW)



Initiation

The purpose of this input tab is to track the cascade of PrEP initiation activities. The monthly number of initiating PrEP clients entered on this tab links to other modules in order to estimate the costs and impact associated with service delivery, generate short-term forecasts for service delivery and drug supply needs, and track service delivery against targets. Additionally, this tab allows users to enter other data elements to identify potential areas for program improvement in initiating clients and to track indicators on seroconversions and serious side effects.

The table below shows the potential metrics that can be entered in this page and the purpose for examining each metric.

METRIC	PURPOSE FOR TRACKING	NUMERATOR	DENOMINATOR
% testing HIV negative	Examine if reaching the correct population	# tested HIV negative	# tested for HIV
% HIV negative screened for PrEP	Examine whether an increase in PrEP screening is needed	# screened for PrEP	# tested HIV negative
% screened for PrEP deemed eligible	Review eligibility rates within different populations	# deemed eligible	# screened for PrEP
% deemed eligible offered PrEP	Ensure that those eligible are being offered PrEP	# offered PrEP	# deemed eligible
% offered PrEP initiated	Examine PrEP acceptability among those offered PrEP	# initiated PrEP	# offered PrEP
% reinitiated PrEP	Examine proportion of PrEP initiations who have taken PrEP previously	# reinitiations	# initiated PrEP
% initiated seroconverted	Track seroconversions (WHO-recommended indicator)	# seroconversions	# initiated PrEP
% initiated with serious side effects	Track side effects (WHO-recommended indicator)	# serious side effects	# initiated PrEP

Note: WHO (World Health Organization)

STEP 1

Indicate what data elements are available for monthly data entry.

Using the drop-down menus, users select the data elements that will be entered monthly. There are three important things to note in this step:

- For “# screened for PrEP,” some programs may have a one-step screening process, while others have a two-step process where clients are first screened by risk eligibility and then by clinical eligibility. If a one-step process is used, select “one-step” in cell D6 and the screening data elements will automatically be set. Similarly, if a two-step screening process is used, select “two-step” in D6. If data on screening is not available, select “No data.”
- The selection for “# initiated PrEP (including reinitiations)” is set to “Yes” because this is the only required data element necessary for using the [Initiation](#) page. All other inputs are optional.
- Space is available for up to three custom indicators that users can define based on their own program characteristics. If a custom indicator is selected to “Yes” in column C, then the description in column B will turn orange, indicating a need to specify the indicator by writing over the text in that cell. In the example below, the program distributes referral vouchers for PrEP and wants to track how many clients are originating from vouchers.

Data elements	Have data?	
# tested for HIV	Yes	
# tested HIV negative	Yes	
# screened for PrEP, one-step screening	Yes	One-step
# screened for risk eligibility	No	
# screened for clinical eligibility	No	
# deemed eligible for PrEP	Yes	
# offered PrEP	Yes	
# initiated PrEP (including reinitiations)	Yes	
# reinitiated PrEP	Yes	
# seroconversions to HIV positive on PrEP	No	
# experienced serious side effects	No	
# referral vouchers	Yes	
# custom indicator 2 (specify)	No	
# custom indicator 3 (specify)	No	

STEP 2

Specify the time period for data entry. Using the drop-down menus, select the first and last month and year for data entry. The most recent month/year should be updated each time new data are entered. This is necessary for proper calculations and visualizations elsewhere in the tool.

Specify the first month/year for data aggregated in this tool.

First month/year for program data	September	2018
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Specify the most recent month/year of data. This is necessary for proper calculations and visualizations elsewhere in the tool.

Most recent month/year of program data	August	2019
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STEP 3

Enter program data each month. Starting in cell D28, enter data for each month by priority population in the orange cells, which turn orange based on the selections in step 1. As mentioned previously, if initiation data are not categorized by priority population, then a custom group for “all clients” should be specified on the [Populations](#) page and all client data can be entered under that priority population.

Sep-2018	Data	SDCs	FSWs	MSM	AGYW 15-19	AGYW 20-24
# tested for HIV	Yes	45	23	32	48	81
# tested HIV negative	Yes	45	21	30	44	80
# screened for PrEP, one-step screening	Yes	42	18	21	36	72
# screened for risk eligibility	No					
# screened for clinical eligibility	No					
# deemed eligible for PrEP	Yes	42	18	20	31	70
# offered PrEP	Yes	39	17	18	29	55
# initiated PrEP (including reinitiations)	Yes	32	14	11	19	38
# reinitiated PrEP	Yes	8	5	5	4	6
# seroconversions to HIV positive on PrEP	No					
# experienced serious side effects	No					
# referral vouchers	Yes	4	5	12	5	17
# custom indicator 2 (specify)	No					
# custom indicator 3 (specify)	No					

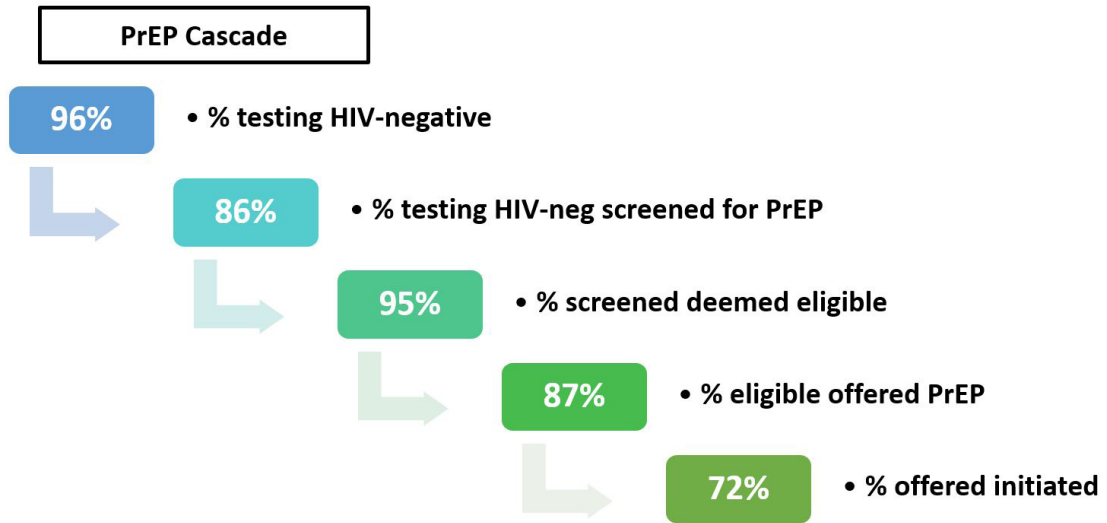
STEP 4

Review results. To review the summary of data entered on this tab, click on cell E19, where it says, “Click HERE to view Initiation Results.” To return to the Initiations data entry tab, click on cell R1 (second column) of the Initiation Results tab. Results are presented overall, by priority population, and over time. The default setting for the results are for all years and all populations. Use the drop-down menus in cells S3 and S4 to choose results for specific priority population or by year.

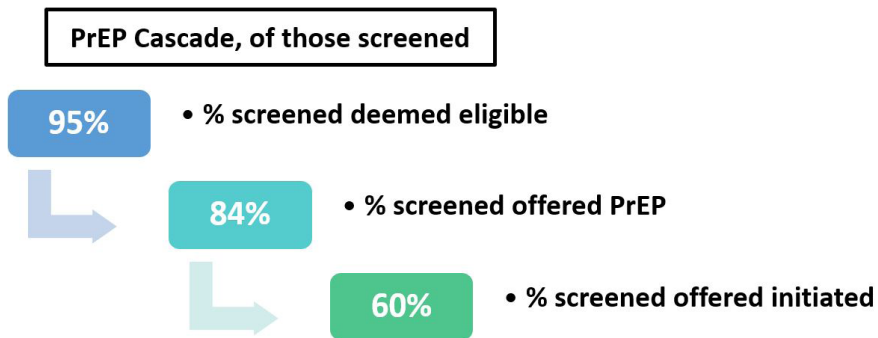
Select priority populations
Select time period

TOTAL
All Year Totals

Summary cascade metrics are presented in cells S7 to S16, with corresponding graphics on the right. The first *PrEP Cascade* (S7–S11) shows results in which for each step in the cascade, the denominator is the previous step.



In contrast, the *PrEP Cascade of those screened* (S13–S16) shows the cascade where the denominator is consistently among those screened for PrEP.



Further details on the totals and percentages for each measure are presented in rows 20 through 55. Data for all years are presented first and one can scroll right to see data presented by year. If users want to include custom metrics, they can add formulas in rows 47 through 49.

Capacity

The purpose of this input tab is to calculate the number of clients a program can serve each month. If the monthly service delivery capacity is already known, it can be entered directly into cell C3. This number will then link with the other modules in PrEP-it so that users can set targets based on capacity or examine potential capacity gaps when compared against forecasts produced elsewhere in the tool. When monthly capacity is not already known, this tab allows users to input capacity variables by “service delivery units,” typically delivery sites or outreach teams. The capacity at each service delivery unit is then aggregated to calculate total capacity.

STEP 1

Specify the number of staffing minutes needed for initiation and continuation visits. Depending on the program, PrEP staffing needs may include nurses, counselors, clinicians, and outreach workers. Choose either one or two staff types that serve as potential bottlenecks for PrEP delivery and specify the number of minutes of staffing time needed per initiation and continuation visit for each. Default values based on averages from costing studies are provided. If only one type of staff person is being considered as a bottleneck, put 0 minutes for Staff type B in cells C8 and C9.

Staff type A minutes per initiation visit	20
Staff type A minutes per continuation visit	5
Staff type B minutes per initiation visit	60
Staff type B minutes per continuation visit	15

Replace with 0s if you only want to consider one staff type as a potential bottleneck for PrEP delivery.

STEP 2

Estimate the proportion of total visits that are initiations. Because more staffing time and laboratory capacity are usually needed for initiation visits compared to continuation visits, users need to estimate what percent of all visits are initiations. The proportion that are continuations is automatically calculated. The mixture of initiation and continuation visits will likely change over time, so it is recommended to put the current estimated value and then experiment with different values. Users are advised to revisit this tab as the percentage changes within their program.

Estimate the proportion of all client visits that are PrEP initiations.

Proportion of all visits that are initiations	40%
Proportion of all visits that are continuations	60%

STEP 3

Enter data on total capacity and pills per client-day. Drug capacity is typically determined at the national or regional level. In cell C17, specify the annual PrEP drug capacity as the number of available pills, followed by the number of pills needed per client per day in cell C18. The monthly drug capacity is then calculated, and an algorithm is used to distribute it down to each service delivery unit (SDU), based on the other factors of capacity.

Enter data on total drug capacity and pills per client-day.

Annual PrEP drug capacity, # of pills	2,000,000
Number of pills per client per day	1
Monthly capacity, # of clients	5,556

STEP 4

List each service delivery unit for PrEP. In column B, starting in cell B23 list each service delivery unit delivering PrEP within the area or program for which the tool is being applied. One can also include service delivery units that are not currently providing PrEP but that would be able to do so if needed.

STEP 5

Specify the staffing capacity for staff types A and B for each service delivery unit. For each service delivery unit, specify the number of Type A staff available each day who can deliver PrEP (column C), the average number of minutes available for PrEP per day (column D), and the average number of days per week staff are available to deliver PrEP (column E). Repeat this process for Type B staff if two types of staff are being considered as potential bottlenecks in columns F, G, and H.

Monthly capacity worksheet	Staff capacity, type A		
	# Type A PrEP providers available per day	# of minutes available for PrEP per day	# days per week staff are available for PrEP
Service Delivery Unit			
clinic 1	1	240	4
clinic 2	2	300	7
clinic 3	2	90	4
clinic 4	1	60	3
clinic 5	3	240	4

STEP 6

Specify capacity for initiation labs for each service delivery unit. For each service delivery unit, enter the number of PrEP initiation labs that can be processed daily (column I) and the number of days per week PrEP labs are processed (column J). If one does not want to consider laboratory capacity as a limiting factor for PrEP delivery, leave columns I and J blank.

Laboratory capacity	
# PrEP initiation labs that can be processed daily	# days per week labs are processed
25	5
11	7
10	4
8	5

STEP 7

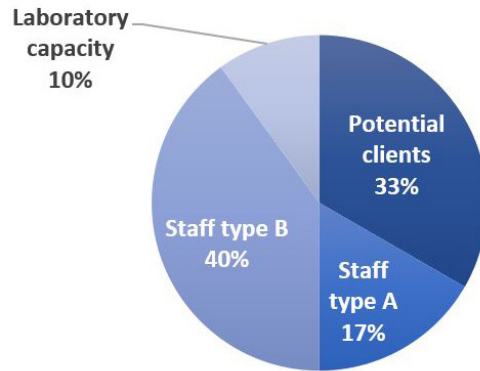
Specify monthly demand for each service delivery unit. While staffing, laboratory, and drug capacity are all important supply-side factors related to overall PrEP capacity, another limiting factor is the demand for PrEP. In column K, enter the number of potential clients per month for each service delivery unit. This input could be based on the average number of new clients testing HIV negative each month or other factors related to PrEP demand. If one does not want to consider demand as a limiting factor for PrEP delivery, leave column K blank.

Demand
Potential clients per month
450
600
100
200

STEP 8

Review results. In addition to the total capacity result, which links to other modules, there are two additional outputs on the Capacity tab. First, Column R shows the bottleneck for each service delivery unit, meaning the limiting factor preventing greater PrEP provision. Looking across service delivery units, the pie chart at the top of the tab shows a summary of bottlenecks, so users can identify what factors are most limiting for PrEP provision. Program managers may want to consider strategies for increasing capacity based on what the primary bottlenecks are. See <https://www.prepwatch.org/prep-planning/delivery/> for guidance on delivery considerations and best practices for PrEP delivery.

Bottleneck by SDU



IF YOUR PRIMARY BOTTLENECK IS...	...YOU MAY WANT TO
Staffing	hire or train more staff
Laboratory	increase lab capacity
Drugs	advocate for more drugs
Demand	increase demand

Another result is the monthly surplus staff hours shown in cells J7-J9. The results indicate the number of staff hours available for PrEP that are not used, due to other bottlenecks. This is particularly important when staff are dedicated to PrEP and do not share their time with other programs.

Surplus staff hours due to bottleneck, per month

Staff type A	1,959
Staff type B	1,966
Total	3,924

Additionally, cells J12 and J13 show the number of pills needed for full capacity.

Number of pills needed for full capacity

Monthly	166,548
Annual	1,998,576

Costs

The cost modules are used to estimate PrEP costs for the purposes of budgeting and cost-effectiveness analysis. One key feature of cost estimation in PrEP-it is that costs are input for initiation and continuation visits. When used in conjunction with other modules in PrEP-it, the cost modules estimate costs and cost-effectiveness associated with targets and/or current levels of service delivery.

Two different cost modules are provided in PrEP-it. [Costs Lite](#) is a simplified approach that can be used when the user does not have a costing background or detailed cost data. [Detailed Costs](#) allows for a more comprehensive cost specification and is best suited for economists and other costing experts. Below are some considerations when choosing between the two modules.

- If users only want to estimate the annual PrEP costs per person and do NOT want to link with the other modules in the tool, they can go directly to [Costs Lite](#) and use it on its own.
- In both modules, users need to specify monthly ARV drug costs and costs by visit type (initiation and continuation). Default values are provided in both modules based on prior costing studies. Further details on prior costing studies are provided in the Cost Support tab, which can be accessed by clicking on links in both modules.
- In both modules, users can specify costs by priority population and set different visit schedules for different populations.
- The [Detailed Costs](#) module allows further specification of costs by:
 - Adjusting the staffing type, salaries, and staffing minutes for initiation and continuation visits
 - Specifying different delivery strategies for PrEP delivery, which is any way in which costs can vary, e.g., service delivery models, population within a service delivery model, urban/rural, difference provinces, different implementers
 - Specifying laboratory test costs and different laboratory testing schedules
 - Including pre-initiation costs for clients that begin the PrEP screening process but do not initiate PrEP

Costs Lite

STEP 1

Specify visit schedule(s). Using the drop-down menu, build an annual visit schedule for PrEP clients based on when they are supposed to come in for visits if they were to stay on PrEP for an entire year. All schedules begin with an initiation visit in Month 0. Indicate when continuation visits are intended to occur throughout the year.

Months after initiation	Schedule 1
0	Initiation Visit
1	Cont. Visit
2	None
3	None
4	Cont. Visit
5	None
6	None
7	Cont. Visit
8	None
9	None
10	Cont. Visit
11	None
12	None

Use drop-down menus to indicate when continuation visits are supposed to occur

Some priority populations may have a different schedule compared to others. For example, perhaps SDCs receive the visit schedule specified above but AGYW are supposed to visit more frequently. In this case, one would want to specify a separate visit schedule, as indicated below. Users may define up to three different visit schedules.

Months after initiation	Schedule 1	Schedule 2
0	Initiation Visit	Initiation Visit
1	Cont. Visit	Cont. Visit
2	None	None
3	None	Cont. Visit
4	Cont. Visit	None
5	None	Cont. Visit
6	None	None
7	Cont. Visit	Cont. Visit
8	None	None
9	None	Cont. Visit
10	Cont. Visit	None
11	None	Cont. Visit
12	None	None

STEP 2 **Enter monthly ARV and adherence support costs.** For each priority population, enter the monthly ARV costs in row 23. If adherence support (e.g., text message reminders or phone counseling) is provided, enter the monthly costs in row 24.

STEP 3 **Assign a visit schedule to each priority population.** In row 26, use the drop-down menu to assign one of the visit schedules created in Step 1 to each priority population.

Cost categories	SDCs	FSWs	AGYW 15-19
Costs per person-month on PrEP	\$ 10.00	\$ 10.00	\$ 10.00
ARVs	\$ 10.00	\$ 10.00	\$ 10.00
Adherence support	\$ -	\$ -	\$ -
Costs per visit			
Assign continuation visit schedules	Schedule 1	Schedule 1	Schedule 2



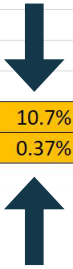
STEP 4 **Enter the PrEP costs per person for initiation visits and continuation visits in the specified cost categories.** Starting in row 28, enter the personnel costs, lab costs, other recurrent costs, and capital costs associated with both initiation (rows 28-31) and continuation visits (rows 33-36). Repeat for each priority population. The costs per visit are totaled in the header rows in grey.

Initiation visit, excluding ARVs	\$ 5.98	\$ 4.17	\$ 4.17
Personnel	\$ 4.38	\$ 2.75	\$ 2.75
Initiation visit labs	\$ 1.00	\$ 1.00	\$ 1.00
Other recurrent (other commodities, overhead, training)	\$ 0.58	\$ 0.40	\$ 0.40
Capital costs (equipment, building, vehicles, other)	\$ 0.02	\$ 0.01	\$ 0.01
Continuation visit, excluding ARVs	\$ 4.56	\$ 3.03	\$ 3.03
Personnel	\$ 3.11	\$ 1.73	\$ 1.73
Continuation visit labs	\$ 1.00	\$ 1.00	\$ 1.00
Other recurrent (other commodities, overhead, training)	\$ 0.44	\$ 0.29	\$ 0.29
Capital costs (equipment, building, vehicles, other)	\$ 0.02	\$ 0.01	\$ 0.01

To assist with estimating the cost inputs above, default values are provided in the table starting at cell G5. The values in the default table are based on an analysis of several cost studies and country-specific personnel costs. Default estimates for other recurrent and capital costs are calculated based as a percent of personnel and lab costs. Based on prior studies, the default percentages are 10.7% for other recurrent and 0.37% for capital costs. These percentages are editable if users want to adjust up or down according to the specifics of their program by changing the percentage values in column N.

Default costs per visit.

Mozambique	SDC		Key Pops		AGYW	
Cost categories	Initiation	Continuation	Initiation	Continuation	Initiation	Continuation
Personnel	\$ 4.38	\$ 3.11	\$ 2.75	\$ 1.73	\$ 2.60	\$ 1.50
Labs	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00	\$ 1.00
Other recurrent	\$ 0.58	\$ 0.44	\$ 0.40	\$ 0.29	\$ 0.39	\$ 0.27
Capital costs	\$ 0.02	\$ 0.02	\$ 0.01	\$ 0.01	\$ 0.01	\$ 0.01
Total	\$ 5.98	\$ 4.56	\$ 4.17	\$ 3.03	\$ 4.00	\$ 2.78



10.7%
0.37%

STEP 5

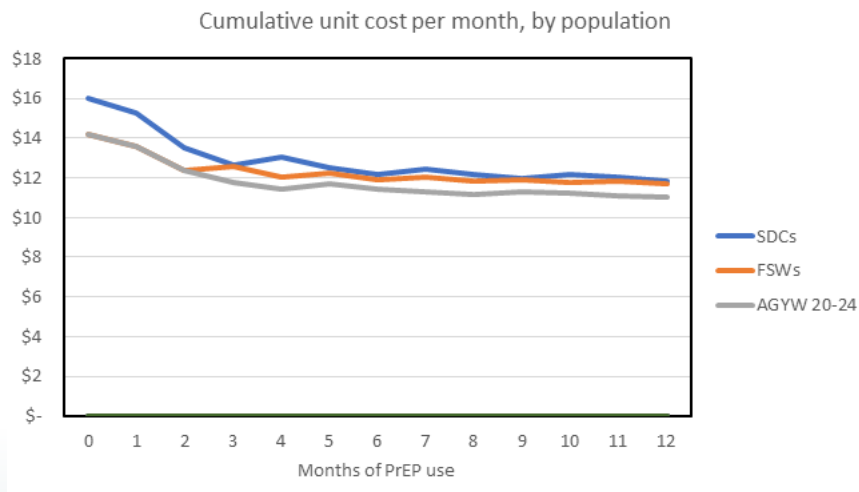
Enter lump sum costs. In row 37, users may enter any annual above-site lump-sum costs including training, demand creation, guideline development, and other above-site costs. Note that these costs are annual costs, not per visit costs.

STEP 6

Review cost outputs. Based on the prior data entry steps, two annual unit costs are calculated for each priority population. Row 40 shows the cost for a person to stay on PrEP for an entire year, while row 41 shows the annual cost per person initiated (excluding lump-sum costs). The second cost is lower because it accounts for the continuation rates specified on the [Continuation](#) tab, whereby most PrEP clients do not take PrEP for an entire year.

Annual unit costs	SDCs	FSWs	AGYW 20-24
Cost for a person to stay on PrEP for an entire year	\$ 144.21	\$ 142.37	\$ 133.27
Cost per person initiated, accounting for continuation	\$ 89.05	\$ 56.53	\$ 54.01

Rows 45-57 detail the cumulative unit cost per month of PrEP use, excluding annual lump-sum costs, by priority population. The corresponding graphic typically shows a decline in average monthly costs over time because initiation visit costs are generally higher than continuation costs.



Detailed Costs

STEP 1 **Choose Detailed Costs.** The default cost module used by PrEP-it is [Costs Lite](#) unless the user selects [Detailed Costs](#) using the drop-down menu in cell B5.

Select costing module: Costs Lite (default) or Detailed Costs

Use Detailed Costs



STEP 2 **Specify service delivery strategies.** Within a program, PrEP costs may differ by geographic location (e.g., urban vs. rural), implementation approaches (e.g., mobile outreach vs. facility-based), or visit schedules (e.g., AGYW having more frequent visits). To accommodate these cost variations, users specify the different “service delivery strategies” used to deliver PrEP in row 24 (cells E24 to N24) by typing over the existing values (e.g., Strategy #1). Only one strategy is required (E24), but there is space for up to 10 different strategies. In the example below, three different strategies are specified based on different implementation models (E24, F24, G24).

Public Facilities | Private Facilities | Mobile Outreach

STEP 3 **Detail the personnel who will be delivering PrEP and select and review salaries.** Personnel costs are a function of staffing time and salaries. In cells B26 to B42, list the type of providers who deliver PrEP for initiation and continuation visits. Note that you may add “Other” to the list or change the labels on the other cadres. Next, review the country-specific salary estimates by educational code provided in cells N10 through N14 and adjust as deemed necessary. Review and adjust the educational codes assigned to each of the cadres as shown in column C. The corresponding salaries will automatically appear in column D.

Ed. Code	Salary
I	\$ 3,742
II	\$ 4,880
III	\$ 6,442
IV	\$ 10,431
V	\$ 15,658

Personnel minutes by cadre	Ed. Code	Salary
Initiation visit (minutes per cadre by strategy)		
Counselor	III	\$ 5,829
Nurse	III	\$ 5,829
Pharmacy technician	III	\$ 5,829
Continuation visit (minutes per cadre by strategy)		
Counselor	III	\$ 5,829
Nurse	III	\$ 5,829
Clinical Officer	IV	\$ 9,438
Pharmacy technician	III	\$ 5,829
Outreach worker	II	\$ 4,415
Peer educator	II	\$ 4,415
Other		\$ -
Other		\$ -

STEP 4

Select and adjust staffing minutes from default data. In rows 9-21, data from prior PrEP costing studies have been collated to estimate the average number of staffing minutes for different staff types in delivering PrEP. These data serve as defaults for PrEP-it users to reference when estimating personnel costs. Starting in column E, use the drop-down menus in row 25 and 34 to select the default patterns most relevant for each service delivery strategy. The staffing minutes will automatically populate, and users can then adjust if deemed necessary.

Public Facilities	Private Facilities	Mobile Outreach
Public Health C	Public Hospital	Key Pops
64	59	40
24	5	31
0	12	0
Public Health C	Public Hospital	Key Pops
37	42	27
17	4	16
0	12	0
0	5	0
0	0	15
0	0	0

STEP 5

Specify laboratory test costs and assign them to visits. Default laboratory test costs are provided, which can be adjusted as needed. There are spaces for two additional custom laboratory tests. Using the drop-down menus in column D, select “Yes” for laboratory tests that are required during an initiation visit. Starting in column E, indicate the required labs for continuation visit A. If not all continuation visits are the same, users can specify up to four additional continuation visits in columns F through I. Lab tests for continuation visits may vary by service delivery strategy, priority population, or the time at which the visit occurs. In the example below, the user specified two different continuation visits.

Laboratory tests	Unit cost	Initiation Visit	Cont. Visit A	Cont. Visit B
HIV rapid test	\$ 0.51	Yes	Yes	Yes
ELISA	\$ 4.02	No	No	No
HBsAg (Hepatitis B)	\$ 9.14	Yes	No	No
ALT	\$ 3.31	Yes	No	No
Pregnancy test (urine)	\$ 0.21	Yes	Yes	Yes
Rapid syphilis test	\$ 0.90	No	No	No
RPR titre	\$ 2.28	Yes	No	No
Creatinine	\$ 2.21	No	No	Yes
PrEP drug level test	\$ -	No	No	No
Other	\$ -	No	No	No
Other	\$ -	No	No	No

STEP 6

Specify visit schedule(s) and assign to service delivery strategies. Using the drop-down menu, build an annual visit schedule for PrEP clients based on when they are supposed to come in for visits if they were to stay on PrEP for an entire year. At least one visit schedule must be specified, with an option to specify up to three. All schedules begin with an initiation visit in Month 0. You may name the different schedules or leave them as Schedule 1, etc. Indicate when continuation visits are intended to occur throughout the year and select which continuation visit type occurs at each visit among those specified in the prior step. In the example below, the user specified a “regular” schedule with more labs needed at month seven (Cont. Visit B) and an “outreach” schedule with more frequent continuation visits, all with the same lab tests.

Months after initiation	Regular	Outreach
0	Initiation Visit	Initiation Visit
1	Cont. Visit A	Cont. Visit A
2	None	None
3	None	Cont. Visit A
4	Cont. Visit A	None
5	None	Cont. Visit A
6	None	None
7	Cont. Visit B	Cont. Visit A
8	None	None
9	None	Cont. Visit A
10	Cont. Visit A	None
11	None	Cont. Visit A
12	None	None

Can name schedules or leave as Schedule 1, Schedule 2, etc.

Use drop-down menus to indicate when continuation visits are supposed to occur

Using the drop-down menus in row 78, assign a visit schedule for each service delivery strategy.

Service delivery strategies	Public Facilities	Private Facilities	Mobile Outreach
Assign continuation visit schedules	Regular	Regular	Outreach

STEP 7

Allocate the proportion of each priority population across service delivery strategies. For each priority population, indicate how the members will be reached via the different service delivery strategies. Some priority populations may only be reached via one strategy, while others may be reached by multiple strategies. Make sure the row total sums to 100% for each priority population; the sum is in column M. In the example below, SDCs and AGYW are expected to be served by a mix of public and private facilities, while FSWs and MSM are expected to be served via mobile outreach only.

Service delivery strategies	Public Facilities	Private Facilities	Mobile Outreach
Assign continuation visit schedules	Regular	Regular	Outreach
SDCs	80%	20%	
FSWs			100%
MSM			100%
AGYW 15-19	25%	50%	25%
AGYW 20-24	50%	40%	10%

STEP 8

Enter monthly ARV and adherence support costs. For each service delivery strategy, enter the monthly ARV costs in row 95. If adherence support (e.g., text message reminders or phone counseling) is provided, enter the monthly costs in row 96.

STEP 9

Enter pre-initiation costs. Pre-initiation costs are intended to capture the costs associated with potential clients who were screened but did not initiate PrEP either due to being ineligible or preferring to not start PrEP. If the number of individuals screened and initiated was entered on the [Initiation](#) tab, then the “ratio of pre-initiations to initiations” in row 98 will already be completed. If not, for every initiation, estimate the number of pre-initiations that do not result in an initiation. Next, enter pre-initiation personnel costs in row 100. Other recurrent, overhead, and capital costs will automatically be calculated based on the personnel and lab costs multiplied by the default ratios in column M. Adjust the default ratios as deemed necessary.

Cost categories	Public Facilities	Private Facilities	Mobile Outreach
Costs per person-month on PrEP	\$ 10.00	\$ 10.00	\$ 11.20
ARVs	\$ 10.00	\$ 10.00	\$ 10.00
Adherence support	\$ -	\$ -	\$ 1.20
Pre-initiation costs	\$ 1.82	\$ 2.57	\$ 3.54
Ratio of pre-initiations to initiations	1.2	1.2	0.6
HIV rapid test	\$ 0.51	\$ 0.51	\$ 0.51
Personnel	\$ 1.10	\$ 1.80	\$ 2.70
Other recurrent (other commodities)	\$ 0.10	\$ 0.10	\$ 0.10
Overhead (including site-level training)	\$ 0.11	\$ 0.16	\$ 0.22
Capital costs (equipment, building, vehicles, other)	\$ 0.01	\$ 0.01	\$ 0.01

If [Initiation](#) tab has tracked #screened and #initiated, value will appear. If not, provide estimate.

STEP 10

Review costs per visit and enter percent receiving pregnancy test.

The personnel costs per visit are automatically calculated based on the personnel salaries and staffing minutes selected in steps 3 and 4. Similarly, the laboratory costs are calculated from Step 5. Other recurrent costs are calculated as a function of the number of lab tests, based on a regression equation derived from the primary data. Overhead and Capital costs are calculated as a percentage of other costs based on default ratios in column M, which can be changed. Review the calculated costs and adjust as deemed necessary. In rows 107 and 114, estimate the percent of clients who will receive a pregnancy test at initiation and continuation visits.

Costs per visit						
Initiation visit, excluding ARVs	\$	22.19	\$	21.46	\$	21.11
Initiation lab tests, per visit	\$	15.40	\$	15.40	\$	15.35
% receiving pregnancy test		75.0%		75.0%		50.0%
Personnel	\$	4.85	\$	4.17	\$	3.90
Other recurrent (other commodities)	\$	0.49	\$	0.49	\$	0.49
Overhead (including site-level training)	\$	1.38	\$	1.33	\$	1.31
Capital costs (equipment, building, vehicles, other)	\$	0.07	\$	0.07	\$	0.07
Continuation visit, excluding ARVs	\$	4.76	\$	5.67	\$	4.06
Continuation lab tests, per visit	\$	1.22	\$	1.22	\$	0.62
% receiving pregnancy test		75.0%		75.0%		50.0%
Personnel	\$	3.02	\$	3.86	\$	2.99
Other recurrent (other commodities)	\$	0.22	\$	0.22	\$	0.20
Overhead (including site-level training)	\$	0.29	\$	0.35	\$	0.25
Capital costs (equipment, building, vehicles, other)	\$	0.02	\$	0.02	\$	0.01

STEP 11 Enter annual lump-sum costs. In rows 120-123, specify the annual lump sum costs for above-site, demand creation, training, and other fixed costs.

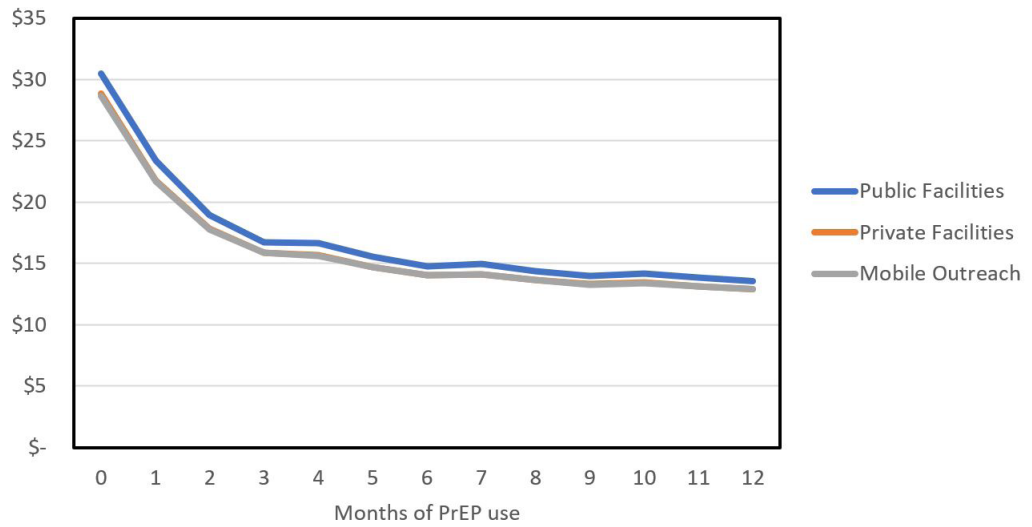
Annual lump-sum costs	\$	-	\$	15,000.00	\$	9,000.00
Above-site costs (annual lump sum)	\$	-	\$	-	\$	-
Demand creation (annual lump sum)	\$	-	\$	15,000.00	\$	4,000.00
Training (annual lump sum)	\$	-	\$	-	\$	5,000.00
Other fixed costs (annual lump sum)	\$	-	\$	-	\$	-

STEP 12 Review cost results. Three annual unit costs are calculated in this module. Row 126 shows the cost for a person to stay on PrEP for an entire year by service delivery strategy. When looking at costs by priority population, row 128 shows costs for a person to stay on PrEP for an entire year. Row 129 shows the cost per person initiated, accounting for the continuation rates specified on the [Continuation](#) tab. Annual lump-sum costs are not included in these costs per person but are included in the total cost results found on the [Results Dashboard](#).

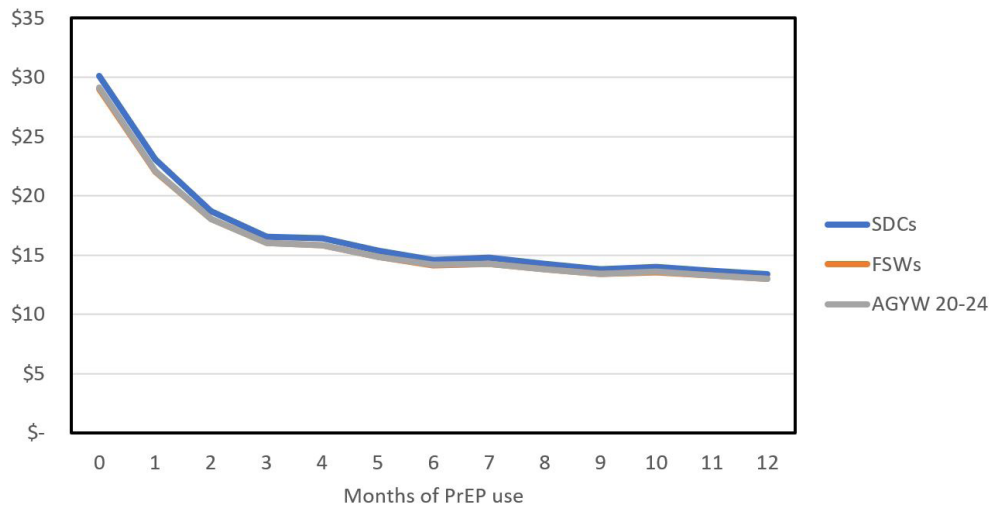
Annual unit costs, excl. annual lump-sum	Public Facilities	Private Facilities	Mobile Outreach
Cost for a person to stay on PrEP for an entire year	\$ 163.44	\$ 167.22	\$ 181.97
Annual unit costs, excl. annual lump-sum	SDCs	FSWs	MSM
Cost for a person to stay on PrEP for an entire year	\$ 164.20	\$ 181.97	\$ 181.97
Cost per person initiated, accounting for continuation	\$ 120.55	\$ 87.18	\$ 56.83

Additionally, rows 133-145 detail the cumulative unit cost per month of PrEP use, excluding annual lump-sum costs, by service delivery strategy. The corresponding graphic typically shows a decline in average monthly costs over time because initiation visit costs are generally higher than continuation costs. Rows 149-161 show similar results, but by priority population.

Cumulative unit cost per month, by strategy



Cumulative unit cost per month, by population



Note: Results shown in these figures differ from those shown in the [Costs Lite](#) section because different example data were used.

Targets

The purpose of this tab is to generate or enter targets. The inputs from this tab link with other modules to estimate costs and impact, and track implementation progress against targets. PrEP-it has three approaches for target-setting:

- **Option 1: COVERAGE** – generates targets based on the proportion of population indicated for PrEP that will be taking PrEP by the end of the target period. This is the most commonly used approach for setting targets.
- **Option 2: CAPACITY** – generates targets based on capacity for PrEP provision.
- **Option 3: MANUAL ENTRY** – allows users to enter previously established targets to link with other modules. This is likely the preferred approach for implementing partners that have been assigned targets.

For each target-setting option, users must first complete the [Populations](#) and [Continuation](#) tabs. If setting targets via Option 2, users must first complete the [Capacity](#) tab.

STEP 1

Define the target-setting period. Using the drop-down menus, indicate the months and years to define the target-setting period. If the [Initiations](#) tab is also being used, the target-setting period cannot start earlier than the first month of program data. The target-setting period can extend for up to 10 years.

Start month/year	October	2019
End month/year	September	2022

STEP 2

Specify population data (required only for Option 1). For each population, specify the population size, percent in PrEP-eligible geographic areas, and percent indicated for PrEP in columns C-F. This step is required for setting targets by coverage (Option 1). If Options 2 or 3 is being used, it is still recommended to complete this step to examine the coverage results based on targets.

Priority populations	Population Size	% in PrEP-eligible geographic areas	HIV Prevalence	% Indicated for PrEP
SDCs	684,998	100%	0%	20%
FSWs	27,000	100%	37%	100%
MSM	15,800	100%	25%	75%
AGYW 15-19	1,778,158	100%	2%	2%
AGYW 20-24	1,479,200	100%	5%	3%

- **Population size:** The number of people in the priority population.
- **% in PrEP-eligible geographic areas:** This can be used to adjust the population size number. For example: if a national estimate of AGYW is entered in population size but PrEP is only being offered to AGYW in three provinces that represent 25% of the population, then 25% would be entered in this column.
- **HIV prevalence:** Estimated HIV prevalence for each priority population.
- **% Indicated for PrEP:** Estimated proportion of HIV-negative people within the priority population who should be using PrEP, typically because they are at an elevated risk for HIV.

For non-Custom priority populations, default national values are provided in the [Target Support](#) tab to assist users. These defaults are based on data from United Nations Department of Political Affairs, Joint United Nations Program on HIV/AIDS 2018 report, Demographic Health Surveys, PEPFAR country operational plan guidance, various publications, and other sources and assumptions listed in [Appendix A](#) on page 51. One may use the default values or other data sources and assumptions to complete this table. Access the defaults by clicking on the link in cell F4. From the Target Support tab, click on cell G5 to return to the [Targets](#) tab.

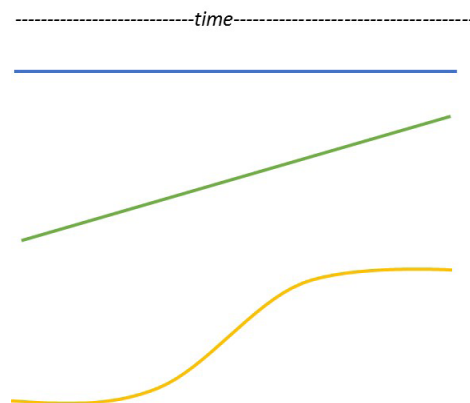
STEP 3 **Review continuation curves.** Note that the continuation curves specified on the [Continuation](#) tab are linked to the [Targets](#) tab and in gray to indicate that no inputs are needed. If adjustments to the continuation rates are needed, do so on the [Continuation](#) tab.

STEP 4 **Specify scale-up trends.** The scale-up trend indicates how PrEP will be rolled out over time during the target-setting period. Up to three scale-up trends can be defined. The figure below shows three different types of scale-up patterns.

Constant – assumes the same number of initiations each month

Linear – assumes a steady increase in initiations each month

S-shaped – assumes a gradual start in early months with steep increase before reaching eventual plateau of initiations (user can set shape parameters)

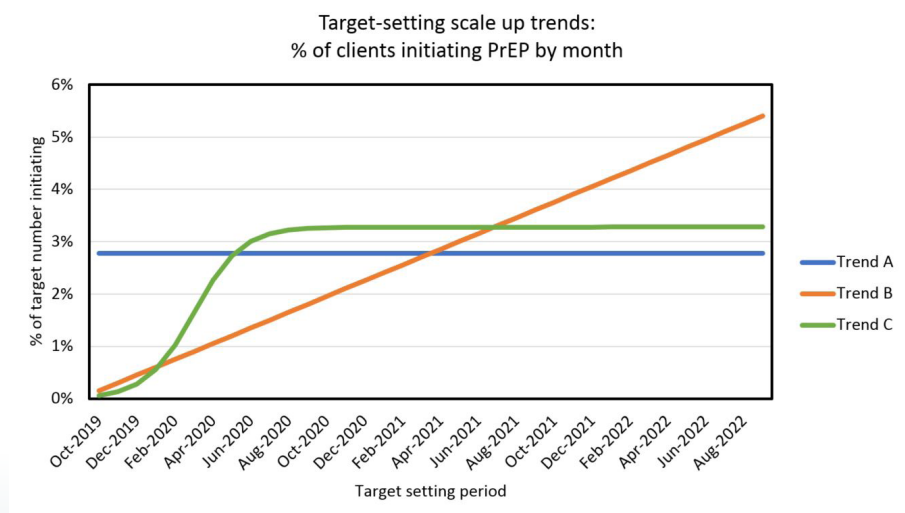


The S-shaped option reflects a common pattern seen in program scale-up. The number initiating PrEP will increase slowly at first, then rapidly, and then slowly again as service delivery plateaus. Users can modify the curve by adjusting two parameters:

- The midpoint is the number of months it takes for scale-up to reach the inflection point of the s-shaped curve (where the curve shifts direction – see arrow above). Shifting the midpoint stretches or shrinks the s-shaped curve, thereby increasing or decreasing the time it takes to reach the plateau (where the curve flattens at the top).
- The speed of scale-up controls the steepness of the s-shaped curve. Smaller values make the curve more linear, and larger values accentuate the s-shape.

Starting in cell C33, users select the first scale-up trend shape using the drop-down menu. For s-shaped curves, further specification is done in column D. At least one scale-up trend is required and up to three scale-up trends can be specified if different scale-up patterns are expected for different priority populations. A corresponding graphic on the right visually represents the specified scale-up trends.

Scale up trends			
Trend A	Constant		
Trend B	Linear		
Trend C	S-shaped	6.0 0.80	Set midpoint of S-shaped curve Set initial speed of scale up



STEP 5 **Assign scale-up trends.** After specifying the scale-up trend in Step 4, assign one to each of the priority populations starting in cell C42.

Priority populations	Scale Up Trend
SDCs	Trend A
FSWs	Trend B
MSM	Trend B
AGYW 15-19	Trend C
AGYW 20-24	Trend C

STEP 6 **Select target-setting Option 1, 2, or 3.** Based on which option is used, follow the instructions in the table below.

OPTION 1: COVERAGE	OPTION 2: CAPACITY	OPTION 3: MANUAL ENTRY
<ul style="list-style-type: none"> Ensure that the Solver add-in is installed. See Appendix C for more details. Enter % coverage at end of target-setting period in cells C64-C75. Click on the “Run Solver” button in cell G79. 	<ul style="list-style-type: none"> Ensure that Capacity tab is completed. Enter the percent of total capacity to be utilized in cell E69. Allocate capacity among priority populations in cells C64-C75. Column must sum to 100%. 	<ul style="list-style-type: none"> Ensure that cells C64-C75 are set as numbers and not percentages. Enter target numbers in cells C64-C75.

% covered at end of target period (e.g. 10%)

% capacity allocated to each priority population (e.g. 25%)

Target numbers (e.g. 1,000)

Priority populations	Target value
SDCs	20.00%
FSWs	25.00%
MSM	25.00%
AGYW 15-19	10.00%
AGYW 20-24	20.00%
-	0.00%
-	0.00%
-	0.00%
-	0.00%
-	0.00%
-	0.00%
-	0.00%
-	0.00%

Notes on Option 1

- When entering the percent expected or desired coverage at the end of the target period, keep in mind that PrEP uptake, continuation, and percent of the population indicated for PrEP will be important factors in choosing realistic coverage estimates. Consider any prior experience and knowledge around PrEP uptake in determining your coverage percent entries. For example, if one has information that an average of 50% of MSM who are offered PrEP choose to start PrEP, then any coverage over 50% would be unrealistic.
- The Solver function calculates the number of initiations needed to reach the coverage levels, factoring in the number of potential users, the continuation curves, and the scale-up patterns. When cells C80-C92 are bright yellow, it indicates one needs to click on the “Run Solver” button.

Impact

The purpose of this input tab is to designate the impact factors associated with each of the priority populations specified on the [Populations](#) tab. The impact factors are then used with other inputs to estimate the number of HIV infections averted based on targets and/or service delivery.

STEP 1

Select reference country for PrEP impact. Cell D4 will automatically be set to the country selected on the [Getting Started](#) page. However, impact factors are only available for countries with generalized epidemics. If working with a country that is not on the list, choose the country that is most similar to make PrEP impact projections.

Mozambique



STEP 2

Select baseline scenario. Using the drop-down menu in cell D6, select between two baseline scenarios: (1) constant coverage where antiretroviral therapy (ART) and voluntary medical male circumcision (VMMC) maintain 2017 coverage levels into the future, or (2) 90-90-90 where ART is scaled up to 90-90-90 by 2020 and 95-95-95 by 2030, and VMMC is scaled up to 80% by 2020. At present, the 90-90-90 scenario is the default. PrEP impact is higher in the constant coverage scenario, because HIV incidence is higher when ART and VMMC are not scaled up. These two scenarios provide a range of values between which the actual PrEP impact likely lies.

constant coverage



STEP 3

Review and/or select base defaults. The appropriate impact factor is automatically selected for the pre-populated priority populations (e.g., SDC, FSW). For custom populations, the base defaults need to be specified by selecting from the provided defaults. In the example below, the user had a custom population of “truckers” and selected the impact factor for high-risk heterosexual men. More details on the default impact factors are described in [Appendix A](#).

Priority populations	Base default	Adjustment factor
SDCs	0.090	1.0
FSWs	0.129	1.0
MSM	0.019	1.0
AGYW 15-19	0.062	2.0
AGYW 20-24	0.062	2.0
truckers	0.067	1.0
-		
-		
-		
-		
-		
-		

Priority populations	Constant Coverage	90-90-90
SDCs	0.0900	0.0900
FSWs	0.0889	0.1287
MSM	0.0196	0.0195
AGYW 15-19	0.0722	0.0615
AGYW 18-19	0.0722	0.0615
AGYW 20-24	0.0722	0.0615
TW	0.0353	0.1070
PWID	0.0124	0.0153
PW	0.0131	0.0112
BFW	0.0131	0.0112
General population women	0.0131	0.0112
Medium risk women	0.0094	0.0085
General population men	0.0082	0.0076
Medium risk men	0.0159	0.0175
High risk heterosexual men	0.0667	0.0770

STEP 4

Specify the adjustment factor. The purpose of the adjustment factor is to allow users to increase the impact of PrEP if they believe individuals receiving PrEP are at higher risk than the rest of the priority population to which they belong. For example, the impact factors for AGYW are set for the entire national population of that age group/sex. If AGYW are being selected for PrEP based on living in geographic areas of higher incidence or are being risk screened, they may be at higher risk than the rest of the AGYW in the country. The adjustment factor represents the relative risk of the individuals receiving PrEP compared to the rest of the indicated population. The adjustment factor represents the relative risk of the individuals receiving PrEP compared with the entire indicated population. So, if AGYW receiving PrEP have twice the HIV incidence compared to the entire population of AGYW in the country, the adjustment factor would be 2. If people receiving PrEP in a particular program are at higher risk than the indicated population, the number should be higher than 1. Otherwise, it is fine to leave this number set to 1.0.

Priority populations	Base default	Adjustment factor
SDCs	0.090	1.0
FSWs	0.129	1.0
MSM	0.019	1.0
AGYW 15-19	0.062	2.0
AGYW 20-24	0.062	2.0
truckers	0.067	1.0

Disaggregate Targets

The purpose of the target disaggregation tab is to support programs with the disaggregation of targets using the [Targets](#) tab to indicate district, age, and sex.

STEP 1

Specify the reporting period for disaggregation. Using the drop-down menu in cells C6 and C7, select the first and last month and year for the reporting period. By default, the reporting period is identical to the target-setting period in PrEP-it and must lie within it; however, it can be shorter. In the example below, the target-setting period is over three years, while the reporting period is for the first year only.

Reporting period			Target-setting period		
Start month	October	2019	Start month	October	2019
End month	September	2020	End month	September	2022

Based on prior inputs, PrEP-it calculates PrEP_NEW, PrEP_CURR, and Currently on PrEP for each priority population and reports the results in rows 10-13. The definitions of these indicators are below.

- *Initiations*: total number of clients newly initiating during the reporting period
- *PrEP_CURR*: total number of individual clients who received PrEP (initiating or continuing) in the past six months
- *Currently on PrEP*: total number of clients taking PrEP the last month of the reporting period

STEP 2

Specify the age and sex groups to disaggregate the targets for each priority population. For each priority population, use the drop-down menu to select “Yes” for age group and sex to be included in the disaggregation.

Age	Sex	SDCs	FSWs	MSM	AGYW 15-19	AGYW 20-24
15-19	Female	Yes	Yes	No	Yes	No
20-24	Female	Yes	Yes	No	No	Yes
25-29	Female	Yes	Yes	No	No	No
30-34	Female	Yes	Yes	No	No	No
35-39	Female	Yes	Yes	No	No	No
40-44	Female	Yes	Yes	No	No	No
45-49	Female	Yes	Yes	No	No	No
50+	Female	Yes	Yes	No	No	No
15-19	Male	Yes	No	Yes	No	No
20-24	Male	Yes	No	Yes	No	No
25-29	Male	Yes	No	Yes	No	No
30-34	Male	Yes	No	Yes	No	No
35-39	Male	Yes	No	Yes	No	No
40-44	Male	Yes	No	Yes	No	No
45-49	Male	Yes	No	Yes	No	No
50+	Male	Yes	No	Yes	No	No

STEP 3

Enter the district names and population above age 15. Starting in cell C36, list the names of the districts where PrEP will be provided and enter the population above age 15 in each district.

Province Name	District Name	Population 15+	Percent
Province 1	District 1	91,465	5.5%
Province 1	District 2	111,995	6.7%
Province 1	District 3	132,082	7.9%
Province 1	District 4	101,699	6.1%
Province 1	District 5	46,491	2.8%
Province 2	District 1	166,714	9.9%
Province 2	District 2	488,936	29.2%
Province 2	District 3	63,218	3.8%
Province 2	District 4	88,776	5.3%
Province 2	District 5	194,489	11.6%
Province 2	District 6	92,662	5.5%
Province 2	District 7	98,668	5.9%

STEP 4

Review results. Based on the inputs specified on this tab, PrEP-it distributes the targets by population and applies the age/sex distribution from the AIDS Impact Model (AIM) for generalized HIV epidemics. The results by district are found on the **Target by District** output tab, which can be accessed from the Navigation Bar. Similarly, the **Targets Output for PEPFAR** shows disaggregation that can be copied into the PEPFAR country operational plan data pack.

Drug Forecasting

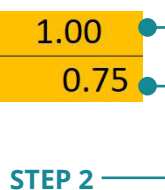
The purpose of this input tab is to forecast the monthly antiretroviral drug (ARV) demand for supply chain planning and expected costs. On this tab, the user enters details on PrEP drugs; these inputs link with the targets and/or the service delivery statistics. Prior to completing the inputs on this tab, one needs to complete the [Populations](#), [Continuation](#), and the [Initiations](#) and/or [Targets](#) tabs.

Only two input steps are needed.

STEP 1 | **Enter the number of pills per client per day (in cell C4).** The default provided is one pill per day. Adjust if necessary.

STEP 2 | **Enter the cost per pill (in cell C5).** The currency calculations are set to USD; however, any currency can be used.

Number of pills per client per day	1.00
Cost per pill	\$ 0.75



No further inputs are required. The outputs on the tab show the monthly number of pills needed and the estimated drug costs.

Continuation Calculator

The purpose of this tab is to enable users to enter a sample of client-level data in to generate continuation curves for input on the [Continuation](#) tab. The calculator uses the dates of service and the number of days of drug supply provided to calculate how long an individual has continued on PrEP. Two additional features are included. First, one can calculate the proportion of initiating clients who are discontinuing PrEP and then reinitiating, also known as “cycling,” which can be used to inform inputs on the [Initiation](#) tab. Second, users can specify reasons for PrEP discontinuation and track the primary reasons by priority population. If data on discontinuation is available, this can be particularly useful in determining the proportion of people discontinuing PrEP who are no longer at elevated risk for HIV, which has meaningful program implications.

STEP 1

Set reinitiation gap. In order to calculate the proportion of PrEP clients that discontinue and reinitiate, users need to define the “reinitiation gap,” which is the number of days PrEP clients have been without their drug supply when one is considered to have discontinued use. Any PrEP use beyond the reinitiation gap will be considered a reinitiation.

Reinitiation gap, in days

STEP 2

Enter the cost per pill (in cell C5). The currency calculations are set to USD; however, any currency can be used.

% Among discontinuing
no longer high-risk
minor side effects
serious side effects
seroconversion
stigma
lost to follow-up

Can type over defaults to customize

STEP 3

Enter client data at initiation. Starting in row 26, enter client data for the following fields:

- *PreP identification number.* This field is to keep track of individual client information.
- *Priority population.* Use the drop-down list to choose from the populations specified on the [Populations](#) tab.

STEP 3

- *Discontinuation reason.* If tracking reasons, use the drop-down list from reasons specified in the prior step.
- *Date initiated.* The date the client started PrEP, defined as the day they were first given drugs.
- *# Days drug supply.* This field records the number of days of drug supply given to the client, assuming one pill per day. If the exact drug supply for each client is unknown, users can enter their best estimation based on clinical practices for their particular program (e.g., 30 days at initiation and 90 days at each continuation visit).

PrEP ID	Priority population	Discontinuation reason	Date initiated	# Days drug supply
100001	FSWs	lost to follow-up	2-Jun-18	30
100002	MSM	minor side effects	3-Jun-18	30
100003	AGYW 15-19	lost to follow-up	3-Jun-18	30

STEP 4

Enter return date and # days drug supply each time a client has a return visit. For any visits after initiation, record in columns G-Z, the visit date and the number of pills disbursed. If a client misses a scheduled visit, one should not skip to enter data in a later return visit space. In the example below, the second client was late for their first return visit. The first return, regardless of when it happened, should be recorded in columns G and H.

CORRECT

		Return 1		Return 2	
Date initiated	# Days drug supply	Date returned	# Days drug supply	Date returned	# Days drug supply
2-Jun-18	30	26-Jun-18	90	23-Sep-18	90
3-Jun-18	30	10-Jul-18	90	12-Oct-18	90
3-Jun-18	30	6-Aug-18	30		

INCORRECT

		Return 1		Return 2	
Date initiated	# Days drug supply	Date returned	# Days drug supply	Date returned	# Days drug supply
2-Jun-18	30	26-Jun-18	90	23-Sep-18	90
3-Jun-18	30	10-Jul-18	90	12-Oct-18	90
3-Jun-18	30			6-Aug-18	30

Do not include gaps

STEP 5

Review results. The results are presented at the top of the worksheet and can also be found on the [Continuation](#) tab to assist with data entry.

	TOTAL	SDCs	FSWs	MSM	AGYW 15-19	AGYW 20-24
Number initiating	100	20	26	28	14	12
% Continuation among initiating						
continued to month 1	45%	90%	46%	29%	21%	33%
continued to month 3	35%	75%	23%	29%	21%	25%
continued to month 6	16%	40%	4%	14%	21%	0%
continued to month 12	2%	5%	0%	4%	0%	0%
% Among discontinuing						
no longer high-risk	9%	25%	4%	4%	7%	8%
minor side effects	13%	5%	15%	14%	14%	17%
serious side effects	6%	5%	8%	7%	7%	0%
seroconversion	0%	0%	0%	0%	0%	0%
stigma	4%	5%	4%	0%	14%	0%
lost to follow-up	62%	55%	65%	68%	50%	67%
re-initiated PrEP	10%	10%	8%	11%	7%	17%

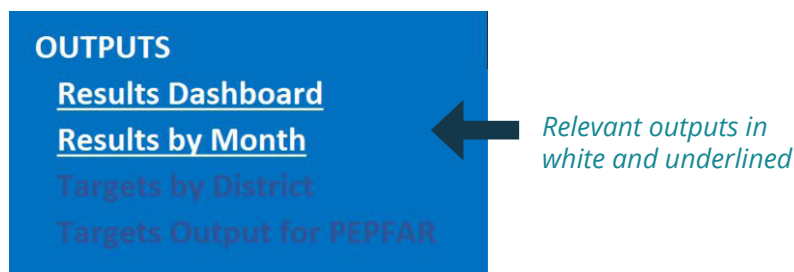
Reviewing Results

Many of the input tabs contain module-specific results, as described in previous sections of this user guide. The following results can be found on, or linked directly to, individual input tabs, as seen in the box below.

SINGLE FUNCTION OUTPUTS

- **Initiation** – PrEP cascade metrics and graphics by year and priority population
- **Capacity** – total monthly capacity, site-level capacity and bottlenecks, distribution of bottlenecks, monthly surplus staff hours due to bottleneck
- **Costs Lite** – annual cost for a person to stay on PrEP for an entire year (by population); annual cost per person initiated, accounting for continuation (by population)
- **Detailed Costs** – annual cost for a person to stay on PrEP for an entire year (by service delivery strategy and by population); annual cost per person initiated, accounting for continuation (by population)
- **Drug Forecasting** – monthly drug supply needs and costs based on targets or program data
- **Continuation Calculator** – continuation curves by priority population, metrics related to discontinuation and reinitiation

Further results can be reached via the Outputs section of the Navigation Bar. As with the input tabs, the Navigation Bar will indicate which output tabs are relevant for reviewing results.



The Results table seen on the next page can be accessed by clicking on the link in cell B2 of the Results Dashboard. This table indicates the location of the various results and their required inputs. Users can click on the table titles to go directly to the results.

Results

QUESTIONS	NECESSARY INPUTS	RESULTS LOCATION	TABLE LOCATION
<ul style="list-style-type: none"> How do our actual program costs compare with the expected costs based on the per visit costs I input? What is the projected impact of the PrEP we have already provided? 	Populations, Continuation, Initiation, Costs Lite OR Detailed Costs, Impact	Table 1a: Impact and costs based on program accomplishments	Dashboard
<ul style="list-style-type: none"> How much will it cost to achieve these targets? What impact will we get for the money? 	Populations, Continuation, Costs Lite OR Detailed Costs, Targets, Impact	Table 1b: Impact and costs based on targets	Dashboard
<ul style="list-style-type: none"> What is the cost and cost-effectiveness of providing PrEP to the different priority populations, taking continuation rates into account? 	Populations, Continuation, Costs Lite OR Detailed Costs, Initiation OR Targets	Table 2: Impact, cost and cost-effectiveness, by priority population	Dashboard
<ul style="list-style-type: none"> How many visits can I expect in the next three months based on prior implementation trends? 	Populations, Continuation, Initiation	Table 3a: Projected visits based on program data	Dashboard
<ul style="list-style-type: none"> How do the projected numbers of visits compare with our capacity? 	Populations, Continuation, Initiation, Capacity	Table 3b: Projected capacity and capacity gaps based on program data	Dashboard
<ul style="list-style-type: none"> How do our actual expenditures compare with what we thought the program should cost based on inputs? 	Populations, Continuation, Initiation, Costs Lite OR Detailed Costs	Table 4: Theoretical annual costs based on program data	Dashboard
<ul style="list-style-type: none"> What can we expect to spend based on the targets that we set? 	Populations, Continuation, Targets, Costs Lite OR Detailed Costs	Table 5: Projected annual costs based on targets	Dashboard
<ul style="list-style-type: none"> How many clients were estimated to be “on PrEP” in a given month, given numbers of initiations and continuation rates? 	Populations, Continuation, Initiation, Costs Lite OR Detailed Costs, Impact	Table 6a: Monthly summary of program indicators	Results by Month

QUESTIONS	NECESSARY INPUTS	RESULTS LOCATION	TABLE LOCATION
<ul style="list-style-type: none"> Based on the targets and scale-up patterns that we set, how many initiations can we expect in each month? Continuation visits? People “on PrEP?” What will be the costs in each month? At which point in our scale-up will we exceed our current capacity to deliver services? 	Populations, Continuation, Costs Lite OR Detailed Costs, Targets, Impact	Table 6b: Monthly summary of indicators associated with targets	Results by Month
<ul style="list-style-type: none"> How should we distribute our targets across subnational regions? 	Populations, Continuation, Targets, Disaggregate Targets	Table 7: Targets disaggregated by district, by priority population	Targets by District
<ul style="list-style-type: none"> Additional outputs 	Populations, Continuation, Targets, Disaggregate Targets	Table 8: Targets output for PEPFAR	Targets Output for PEPFAR

Appendix A

COUNTRY-SPECIFIC DEFAULT VALUES

Continuation

DEFAULT VALUES AND DEFINITIONS	PRIORITY POPULATIONS	SOURCE AND/OR ASSUMPTIONS
Continuation curve	AGYW 15-19, AGYW 20-24	POWER Study in Kenya and South Africa
	SDC	SDC (Partners Demonstration Project) in Kenya and Uganda
	FSW	FSW (TAPS Study) in South Africa
	MSM	MSM (IPCP Kenya) in Kenya
	AGYW 15-19, AGYW 20-24	Young Women (IPCP Kenya) in Kenya

Targets

DEFAULT VALUES AND DEFINITIONS	PRIORITY POPULATIONS	SOURCE AND/OR ASSUMPTIONS
National priority population size	SDC	World Population Prospects 2019 (calculated Pop 15-64 * Prev 15-49 * % married)
	MSM	UNAIDS data 2018; KP Atlas; World Population Prospects 2019
	FSW	UNAIDS data 2018; Vandepitte et al., 2006
	TW	1% of MSM population size
	PWID	UNODC 2013; UNAIDS data 2018
	AGYW 15-19	World Population Prospects 2019 with medium variant estimate
	AGYW 18-19	
	AGYW 20-24	
	Pregnant women	World Population Prospects 2019 with medium variant estimate multiplied to most recent DHS data estimates on % pregnant and breastfeeding Countries with DHS data unavailable: regional average for PrEP countries
	Breastfeeding women	
HIV prevalence	SDC	Definition of SDC partner
	MSM	UNAIDS data 2018; KP Atlas; World Population Prospects 2019
	FSW	UNAIDS data 2018; Kerrigan et al. 2013

DEFAULT VALUES AND DEFINITIONS	PRIORITY POPULATIONS	SOURCE AND/OR ASSUMPTIONS
HIV prevalence (<i>continued</i>)	TW	UNAIDS data 2018; KP Atlas; World Population Prospects 2019 (50% greater than MSM)
	PWID	UNODC 2013; UNAIDS data 2018
	AGYW 15-19	Spectrum 2018
	AGYW 18-19	
	AGYW 20-24	
	Pregnant women	85% of HIV prevalence for all women of reproductive age
	Breastfeeding women	
STI symptoms: % of women who reported having an STI, a genital sore, or genital discharge in the last 12 months	AGYW (15-19)	Most recent DHS data Countries with DHS data unavailable: regional average for PrEP countries
	AGYW (18-19)	
	AGYW (20-24)	
	Pregnant women	
	Breastfeeding women	
Multiple partners and condomless sex: % of women reporting having more than one partner in the past year and did not use a condom at last sex with at least one of three most recent partners	AGYW (15-19)	Most recent DHS data Countries with DHS data unavailable: regional average for PrEP countries
	AGYW (18-19)	
	AGYW (20-24)	
	Pregnant women	
	Breastfeeding women	
% at high risk of HIV among KPs	SDC	PrEP global stakeholder consultations
	MSM	
	FSW	
	TW	
	PWID	

Impact

DEFAULT VALUES AND DEFINITIONS	PRIORITY POPULATIONS	SOURCE AND/OR ASSUMPTIONS
Base default for number of HIV infections averted per person-year on PrEP	SDC	Country-specific goals model
	FSW	
	MSM	
	AGYW 15-19	
	AGYW 20-24	

Appendix B

PREP-IT DATA INPUT REQUIREMENTS

INPUT STEP	MINIMUM DATA REQUIREMENTS	ADDITIONAL DATA ENTRY (OPTIONAL)
<u>Populations</u>	Select at least one priority population that will be receiving PrEP.	Allows for up to 10 different priority populations
<u>Continuation</u>	Specify at least one continuation curve by entering the percent of initiations continuing at months 1, 3, 6, and 12 after initiation; assign a curve for each priority population.	Allows for up to six different continuation curves
<u>Initiation</u>	Enter monthly data for PrEP initiations.	Other PrEP metrics related to initiation, including numbers for those: tested for HIV, tested HIV negative, screened for PrEP, eligible for PrEP, offered PrEP, reinitiated PrEP, seroconversions, serious side effects, and three custom indicators
<u>Capacity</u>	Enter monthly capacity to deliver PrEP (number of persons who can be served each month).	Complete worksheet that calculates the monthly capacity for PrEP delivery. Inputs include staffing minutes per initiation and continuation visit, proportion of visits that are initiations, annual drug supply and pills per client day, staffing by site, laboratory capacity for initiations by site, potential demand for PrEP by site
<u>Costs Lite</u>	Specify at least one visit schedule for one year and assign a schedule to each population. Enter monthly ARV and adherence support costs. Enter costs by visit type for personnel, labs, other recurrent, and capital costs (suggested default values are provided at the top). Enter above-site costs.	Allows for up to three different visit schedules

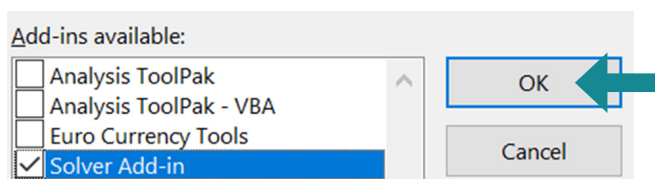
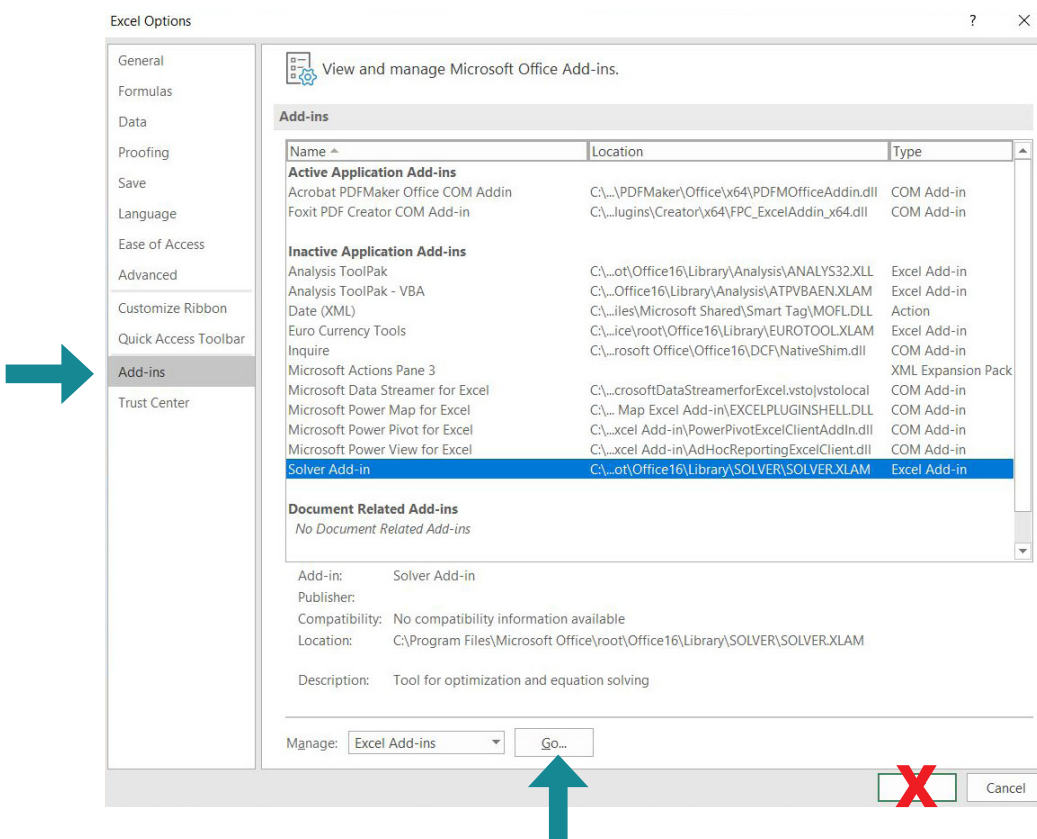
INPUT STEP	MINIMUM DATA REQUIREMENTS	ADDITIONAL DATA ENTRY (OPTIONAL)
<u>Detailed Costs</u>	Review and adjust salaries for PrEP personnel. Specify at least one PrEP delivery strategy and assign a default staffing pattern. Adjust staffing patterns as desired. Enter lab costs for included lab tests and specify required labs at initiation and continuation visits. Specify at least one visit schedule and assign schedule to strategies. Allocate priority populations to strategies. Enter pre-initiation costs, costs per visit (personnel, other recurrent, overhead, capital, above-site), and annual lump sum costs.	Allows for up to 10 different delivery strategies, two other cadre types and staffing minutes, five different kinds of continuation visits, and three different visit schedules. Adjust default percentages for overhead and capital costs, as desired.
<u>Targets</u>	Specify target-setting period. For each priority population, enter population size, % in PrEP-eligible geographic areas, HIV prevalence, % indicated for PrEP (default estimates provided). Specify scale-up trends. Select target-setting option: <ul style="list-style-type: none"> • Option 1 - Enter desired coverage of population by the end of the target-setting period • Option 2 - Allocate capacity to priority populations • Option 3 - Directly enter targets 	
<u>Impact</u>	No inputs required unless user has specified custom priority populations. For custom priority populations, specify impact factor among provided default values.	Users may adjust impact factors if deemed relevant.
<u>Disaggregate Targets</u>	Specify reporting period. Specify which age/sex groups are included for each priority population. Enter subnational names and population members over age 15.	
<u>Drug Forecasting</u>	Enter number of pills needed per client per day and cost per pill.	
<u>Continuation Calculator</u>	Enter individual-level client data for age, sex, priority population, dates for each visit, and number of pills disbursed at each visit.	Users can specify reasons for discontinuation and assign reason for each client.

Appendix C

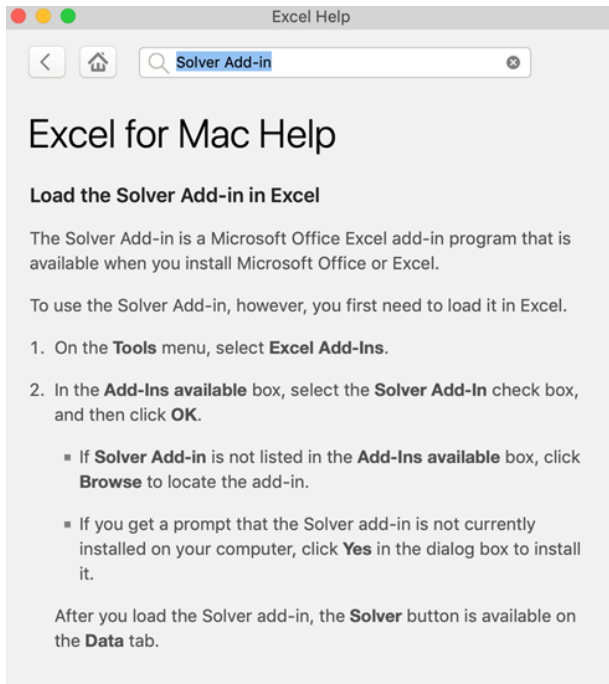
INSTRUCTIONS FOR INSTALLING AND USING SOLVER

PC instructions for installation

1. Open Microsoft Excel
2. Go to **File** → **Options** (on the left-hand side) -> **Add-ins**
3. Select **Solver Add-in** – typically the last add-in listed and select “**Go**” (caution: do not select OK here)
4. In the pop-up box, select the **Solver Add-in** and, this time, click OK.



Mac instructions for installation



Using Solver

The Solver function is used when generating targets based on coverage (Option 1). For each priority population specified, the Solver function solves an equation to determine the number of clients that need to initiate during the target period in order to reach the coverage level entered, given the number of potential users, the continuation rates, and the scale-up patterns. If one is using a version of PrEP-it with macros, then one should press the Solver button in cell G80 on the [Targets](#) tab. For those using a version without macros or who are unable to run macros, then the following steps are needed to run Solver:

1. Click on the **Data** menu in the Ribbon/toolbar.



2. Click on the icon on the far right.

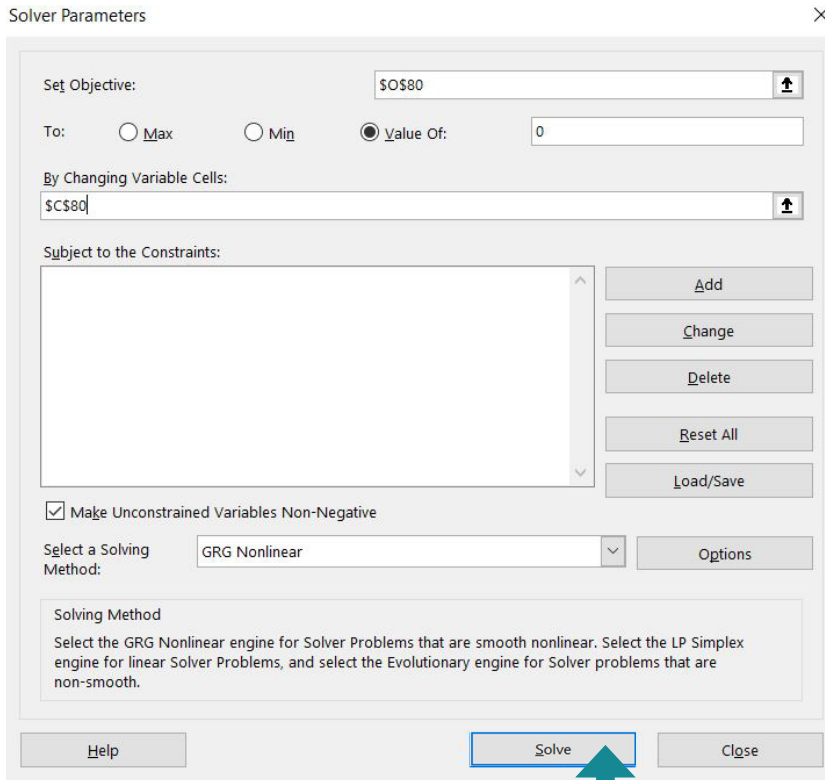


3. If one has SDC as a priority population, start with row 80, set the Solver parameters as detailed below.

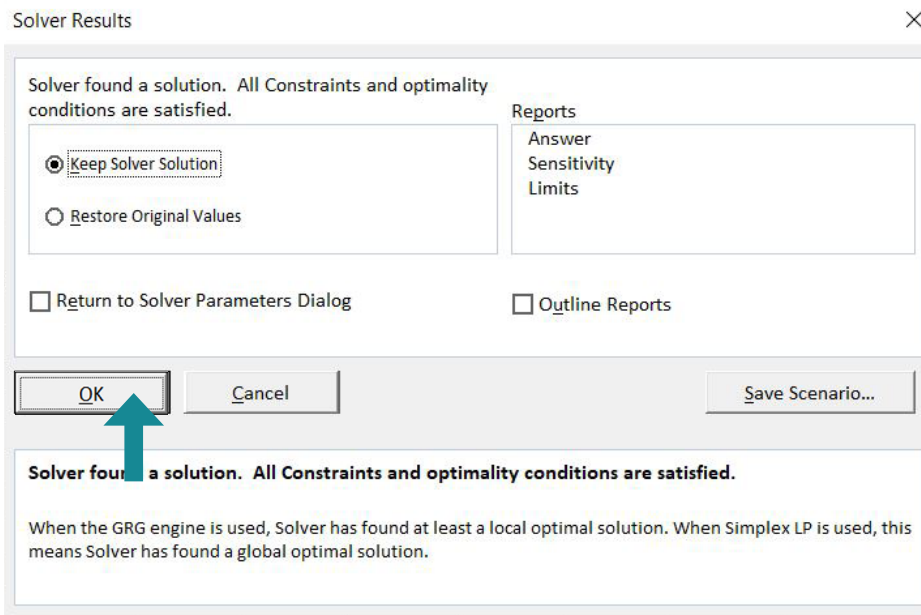
Run Solver

Note: Solver is only needed for Option 1.

4. Click



5. Click



6. Repeat for rows 81-91, where a priority population is specified.

Appendix D

REFERENCES

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