

PrEP-it workshop

LUSAKA, ZAMBIA
AUGUST 2022



The background of the slide is a teal-colored geometric pattern composed of numerous overlapping triangles of varying shades, creating a low-poly or mosaic effect.

Key concepts for PrEP target setting

Why do we set targets?

So we can
plan our
program

To apply for
funding

We want to
ensure our
program will
have the
desired
impact on HIV

We need to
know how
many human
resources we
will need

We need to be
able to
measure our
progress
towards a
goal

We need to
know what it
will cost

We need to
know how
much
commodities
to procure

What is a PrEP target?

- Number of people who have initiated PrEP?
- Number of people “on PrEP?” (When? For how long?)
- ?????

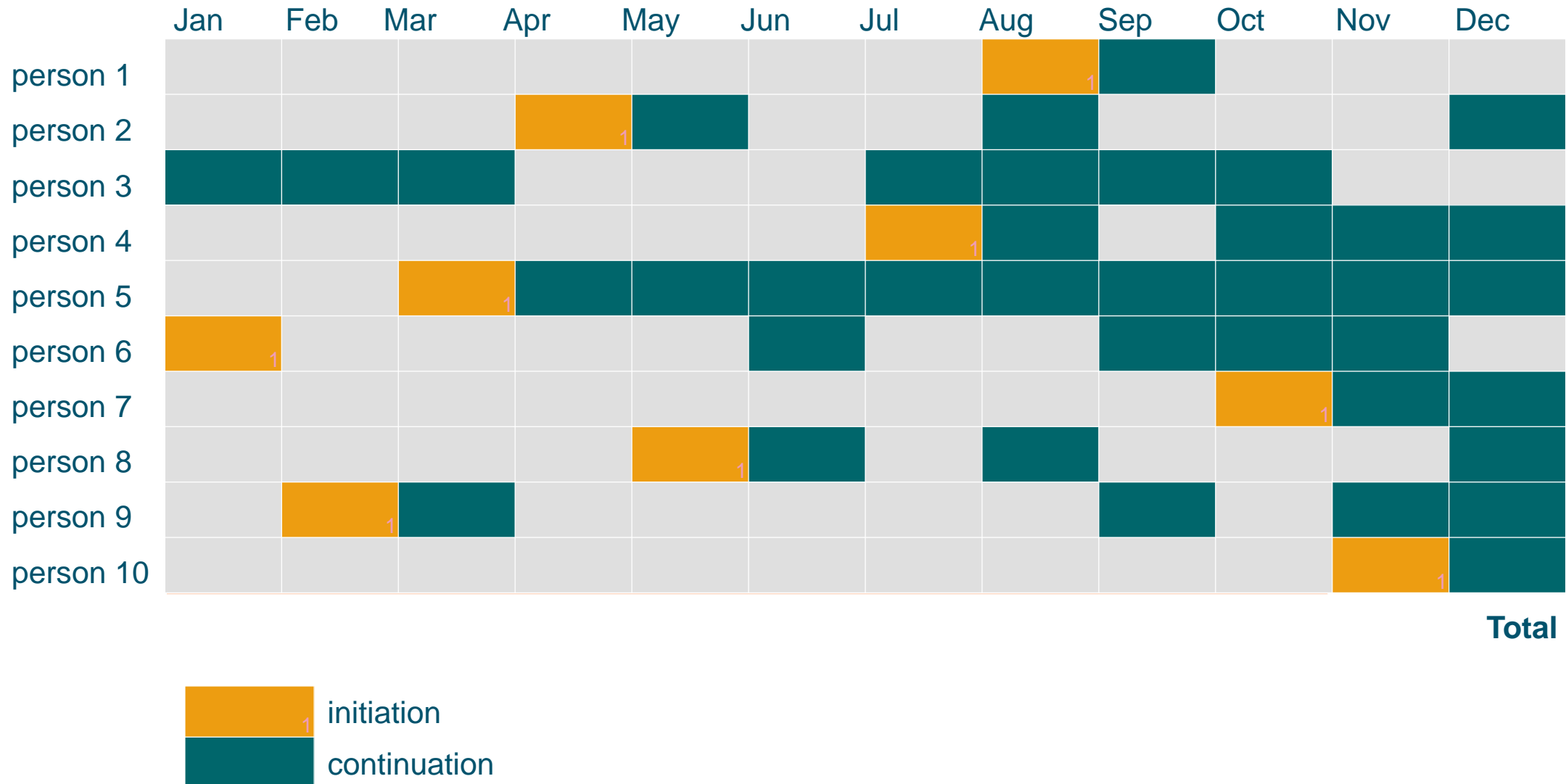
Target-setting for ART and male circumcision (VMMC)



Defining the size of the population in need

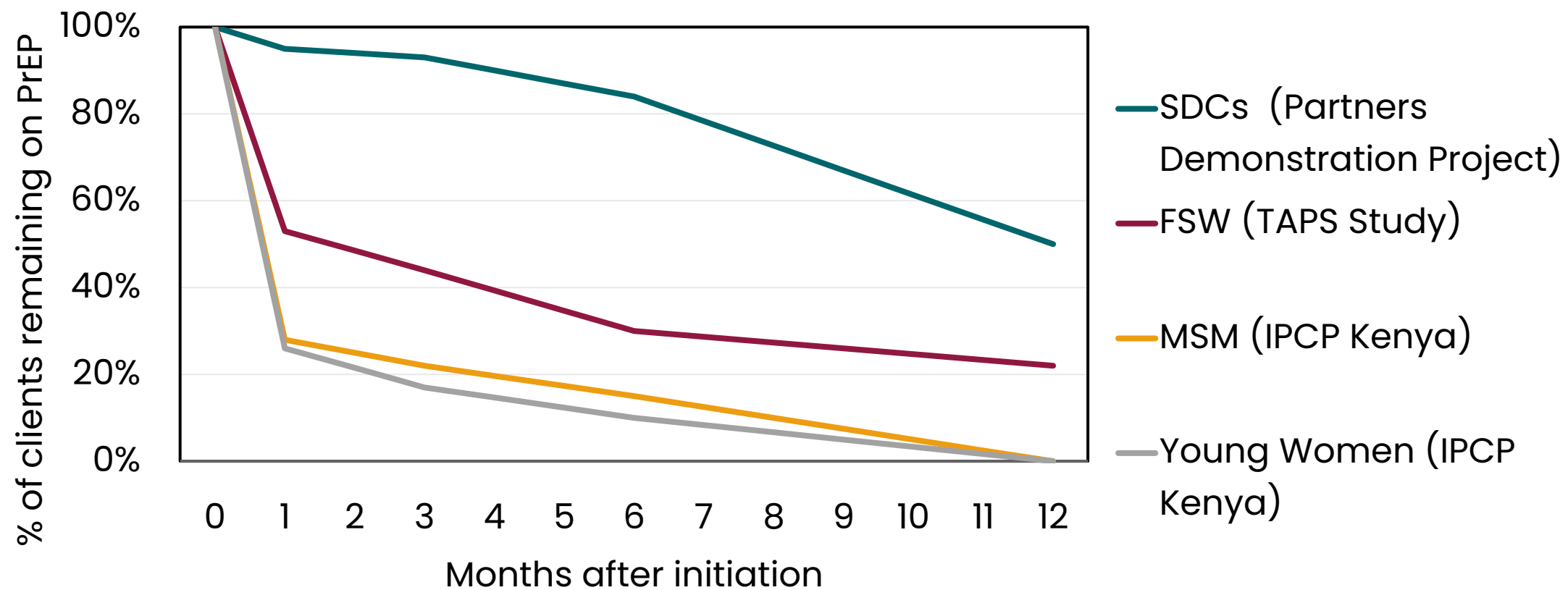
- ART – everyone with HIV
- VMMC – all uncircumcised adult males in priority countries [within specified age group]
- PrEP – all “at substantial risk” of HIV...?

PrEP use is dynamic and can be discontinuous



Continuation rates

Continuation curves: % of clients remaining on PrEP



Conceptualizing targets for PrEP

- Global AIDS Targets: expressed as “person-years” of PrEP
- PEPFAR: targets for PrEP_NEW and PrEP_CT (formerly PrEP_CURR)
- Ministry of Health: how to define targets for an implementation plan?



Targets for program planners

- Number of new PrEP users
- Coverage of each priority population (over time or at a given point in time)
- Total amount of product use throughout the planning period (“person-years” of PrEP)

Suggested steps for national target setting

1. Describe the purpose of the target-setting exercise
2. Engage key stakeholders
E.g., representatives from government ministries, donors (e.g., PEPFAR), multilaterals (e.g., WHO, UNAIDS), implementers, advocates, and potential or current PrEP users
3. Create or use an established task force/working group
4. Conduct formative work
Assemble and review prior plans, situational analyses, and/or implementation data and reports that will inform implementation planning

Suggested steps for national target setting, cont.

5. Determine if the costs of the targets are to be estimated
If so, consider engaging a consultant or a working group member with expertise in costing to gather and interpret the cost data
6. Secure the financial and human resources needed to develop the implementation plan/targets
7. Develop a work plan for the exercise, including timeline and roles/responsibilities

Conducting the target-setting process

1. Capacity building in use of the tool for key team-members in-country
2. Making key decisions on inputs and data sources
3. Gathering data
4. Inputting data and assumptions into the tool (easiest part of the process!)
5. Creating scenarios
6. Consulting with key stakeholders on results of scenarios
7. Adjusting inputs as required
8. Finalization and dissemination



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Introduction to PrEP-it

The participants folder contains:

- The workshop agenda and presentation slides. You can also follow along with the slides in your binder and take notes as we move through the tool.
- Resources folder with guides for tracking your inputs, setting targets, and other PrEP-it functions.
 - Many of these are downloadable from the PrEP-it Resources page, as well (shown on next slide)
- UNAIDS and WHO presentation slides and resources.
- Data templates and JSON files that we will ask you to access throughout the workshop.

What is PrEP-it?

- PrEP-it (PrEP Implementation planning, monitoring, and evaluation Tool) – was developed in 2019 and funded by USAID through the HP+, OPTIONS, and EATAP-II projects
 - www.PrEPitWeb.org
- PrEP-it is a decision-making and analysis tool with six interrelated modules:

ARV
forecasting

Target setting

Cost
forecasting

Estimating
impact

Tracking the
cascade of
PrEP delivery

Geographic
prioritization
for AGYW

Some core PrEP functions

- Tool can be applied at the national, sub-national, donor, implementer or site level
- Target-setting by population group
 - Based on population coverage or direct entry of initiations
 - Annual and monthly initiation targets, accounting for continuation and scale up
 - Disaggregate by age, sex, and subnational location
- Cost forecasting and analysis
 - Costs by visit type – account for different continuation rates and visit schedules by population
 - Cost per HIV infection averted
- PrEP product need forecasting
- Identify localities for the prioritization of PrEP to AGYW

PrEP-it modules

Configuration – describe the location and key features of PrEP program, including past program data

Costs – unit costs based on monthly and visit costs

Impact – specify the number of HIV infections averted per person year on PrEP

Targets – determine the number of new and continuing PrEP users over the target setting period

Disaggregate/aggregate –disaggregate national targets to subnational levels; aggregate multiple sessions

AGYW – identify sublocations for AGYW PrEP prioritization

Commodities forecasting – forecast the number of commodities needed and associated commodity costs

Country applications

Target-setting

- Eswatini
- Kenya
- Malawi
- Mozambique
- Nigeria
- Zimbabwe

PrEP ARV forecasting

- Ghana
- Philippines
- Vietnam



Sections of PrEP-it covered in workshop

MONDAY

- Getting started
- Configuration

TUESDAY

- Costs
- Impact
- Targets

WEDNESDAY

- Aggregating/disaggregating
- AGYW target setting
- Commodities forecasting

THURSDAY

- Putting it all together
- Future collaboration platform
- Team collaboration time

Welcome to PrEP-it

PrEP Implementation planning, monitoring and evaluation Tool

A platform to assist with PrEP program planning, monitoring, and evaluation



PrEP-it

Access the full, standard version of PrEP-it.

Start



Aggregate

Aggregate targets or initiation cascade data from smaller to larger geographic areas.

Begin

Click the **Start** button to get started

Resources provides links to quick guides, videos, input trackers, and other resources

? Indicates a Help function found throughout the tool, click on **?** on each page for instructions

Getting started

- This feature allows you to tell PrEP-it what you want to get out of the tool and then focuses the tool on only those functions you need
- First, select your country from the dropdown list
- Answer the four questions according to how you want to use the tool
 - Note the side panel that will indicate what pages you will visit based on your answers
 - The answers to these questions also configure the template
- The buttons at the bottom allow you to download/upload a session to save your work

PrEP-it

Choose mode

> Getting started

Configuration

Costs

Adolescent girls and young women (AGYW)

Impact

Targets

Results dashboard

Disaggregate targets

Commodities forecasting

Download session

Upload session

Answering the 4 questions for the workshop

1. In the future, PrEP-it will allow one to analyze their past program data around PrEP initiation. This is not required for target-setting. For now, select ***“No”***.
2. For setting new targets, select “set targets based on coverage”. If you have data on past PrEP initiations, select ***“Yes”***.
3. PrEP-it can identify hotspots where most sexually active AGYW are in need of PrEP. We will address this module later in the workshop. Select ***“Everywhere”*** for now.
4. Select the features you would like to use in PrEP-it. Today, keep all boxes checked.

Generating and uploading data template

- PrEP—it allows for the disaggregation of PrEP targets by subnational geography. If you want to enter two levels, put the name of the larger level as “*Level 1*” and the smaller level as “*Level 2*.”
- Next, click on the **Generate data template** button. This will create an Excel workbook and save it to your computer. The template is detailed and allows advanced users to collect and organize data externally, if desired.

Specify up to two subnational levels.

Level 1

Level 2

Province

District

Generate data template

Upload data template

Completing data template

- The only part of the data template that is required today is the “Subnational Areas” tab, where one specifies the population over age 15 for each subnational area for disaggregating targets.
- Other tabs on the data template can be used to collect data for key inputs in PrEP-it and also show the default data and references for many key inputs
 - Continuation rates
 - Target assumptions (population size, HIV prevalence, % elevated risk for HIV)
 - Costs
- Once completed, click on the ***Upload data template*** button.

The background of the slide is a complex, low-poly geometric pattern in various shades of teal and blue. The pattern consists of numerous triangles and polygons of different sizes, creating a textured, crystalline effect. The colors range from dark, muted blues to lighter, more vibrant teals.

Configuration

Configuration

- These initial five steps define the PrEP program and allow PrEP-it to customize the inputs and generate the relevant outputs
- Move through these steps from top to bottom, starting with priority populations
- If you click on the **Next** buttons, it will take you through the steps sequentially

Priority populations

Methods

Continuation

Visit schedules

Program data

Priority populations

- Start by selecting which of the default populations are relevant to your program. **Uncheck** the box of any that are **NOT** relevant
- If there are additional populations not on the list, click the button to add more priority populations

× Priority populations

Select the default priority populations you would like to use. Click "Manage custom priority populations" to add, edit, and delete custom priority populations. Click "Apply" when done.

- ☒ Serodifferent couples
- ☒ Adolescent girls/young women 15-24
- ☒ Men who have sex with men
- ☒ Female sex workers
- ☐ People who inject drugs

Manage custom priority populations



Custom priority populations

Edit priority populations directly in the table below. Use the buttons to add, delete, or rearrange them.

Priority population
Truck drivers
Miners

Add

Delete



- Label new populations in cell
- Click on add button to make space for additional populations; can delete any population by clicking on the population and then the delete button
- Can use up to 15 priority populations
- Click on X in upper left to return main priority population page and "Next" to proceed

Methods

Select the default methods you would like to use. Click "Manage custom methods" to add, edit, and delete custom methods.

☒ Pill

☒ Ring

☐ CAB-LA

Manage custom methods



- Check the box next to the methods of PrEP delivery for your target-setting exercise
- If there are additional methods not on the list, click the button to add more methods
- Up to 10 total methods can be included

Configuration

Eligibility

Method	Unit of commodity	Number of months of coverage per unit	Unit cost (USD)
Pill	bottle	1	5.60
Ring	ring	1	12.00

- Specify the number of months of coverage per unit of commodity and the unit cost for each commodity
- Move to eligibility and uncheck boxes if a priority population is not eligible for a specific method (see truck drivers and miners in example)

Place a check next to each population that is eligible to use a method.

Priority population	Pill	Ring
Serodifferent couples	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Adolescent girls/young women 15-24	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Men who have sex with men	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Female sex workers	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Truck drivers	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Miners	<input checked="" type="checkbox"/>	<input type="checkbox"/>



Continuation


- Continuation is generally defined as returning to providers “on time” within a defined time frame
- In PrEP-it, continuation is captured as *what proportion of PrEP clients are continuing to take PrEP at 1, 3, 6, and 12 months after initiation?*
- These numbers generate a “continuation curve” that is used to calculate PrEP users over time
- The continuation curve is a key input in PrEP-it that factors into calculations on how much product is needed each month, how much coverage can be reached for a given population, and estimated program costs and impacts

Continuation data entry

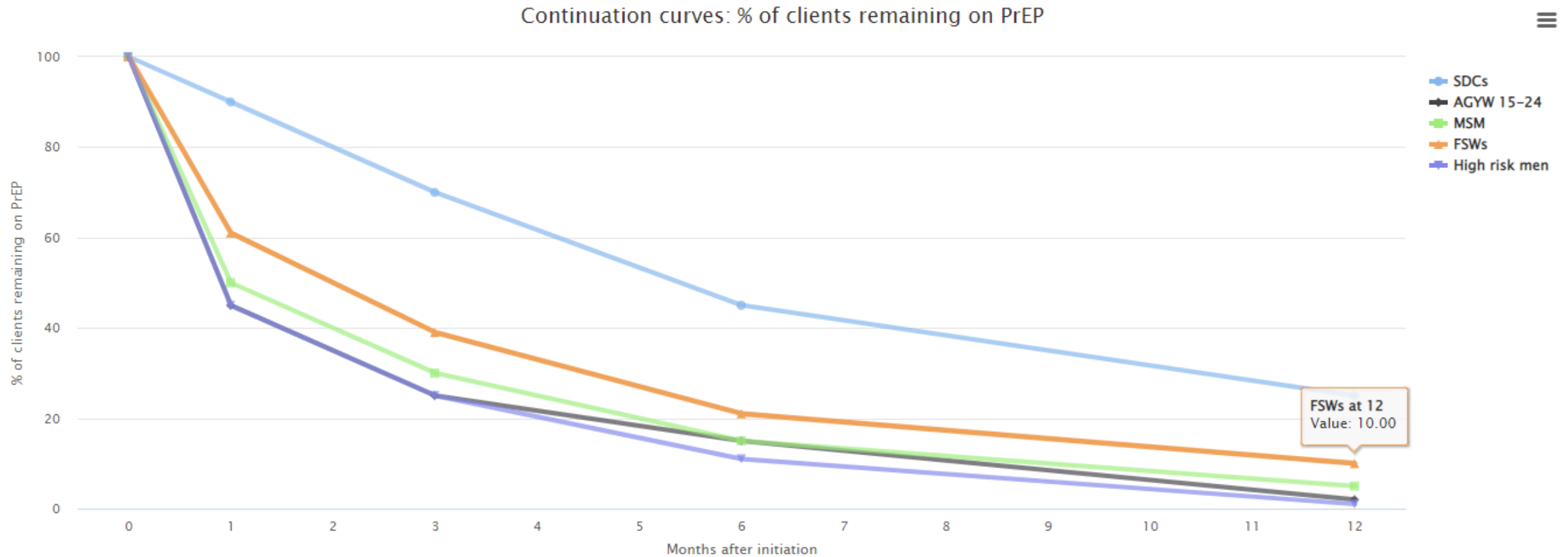
- Continuation data can be difficult to obtain and therefore defaults are provided based on empirical studies
- These defaults should be edited to better reflect the realities of your program
- Additional continuation curves can be added, if necessary
- Do not need 1 curve per population

Continuation curves	After one month (%)	After three months (%)	After six months (%)	After 12 months (%)
SDCs	90.0	70.0	45.0	25.0
AGYW 15-24	45.0	25.0	15.0	2
MSM	50.0	30.0	15.0	5
FSWs	61.0	39.0	21.0	10
High risk men	45	25	11	1

Add curve



Example continuation curves



Note: One does not need a separate curve for each population.

Apply curves to populations

Assign a continuation curve to each priority population.

Priority population	Continuation curve
Serodifferent couples	SDCs ▼
Adolescent girls/young women 15-24	AGYW 15-24 ▼
Men who have sex with men	MSM ▼
Female sex workers	FSWs ▼
Truck drivers	High risk men ▼
Miners	High risk men ▼

- Use dropdown lists to select most relevant continuation curve for each priority population

Visit schedules

Months after initiation	Schedule 1	Schedule 2	Schedule 3	Schedule 4
0	Initiation visit	Initiation visit	Initiation visit	Initiation visit
1	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
3	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
5	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
7	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
8	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
9	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
10	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
11	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

- Click on the boxes to indicate when clients visit providers for PrEP
- Can edit defaults for the first four schedules and add more schedules if needed, up to 15 total
- Note that different schedules may be needed for different methods

Assign schedule

Priority population	Pill	Ring
Serodifferent couples	Schedule 1 ▼	Schedule 1 ▼
Adolescent girls/young women 15-24	Schedule 4 ▼	Schedule 4 ▼
Men who have sex with men	Schedule 1 ▼	
Female sex workers	Schedule 1 ▼	Schedule 1 ▼
Truck drivers	Schedule 1 ▼	
Miners	Schedule 1 ▼	

- Use dropdown list to select the appropriate visit schedule for each priority population and method

Set date range for program data

- Data on prior initiations help PrEP-it track the number of continuation PrEP visits into the target-setting period
- Start by setting the date range for at least one year PRIOR to the target-setting period using the dropdown lists; with a gap of no more than 4 months
- Once the dates are set, click on the maroon **Set date range** button and it will turn gray, indicating the range is set

Program data period

After changing the date range below, click "Set date range" for changes to take effect.



Set date range October ▼ 2021 ▼ **to** September ▼ 2022 ▼

Download program data template

- In the future, PrEP—it will allow for more analysis of PrEP program data to track the continuum of PrEP initiation
- For now, the main data of interest are monthly PrEP initiations, which is set as a default metric

☒ # initiated PrEP

- If data are available on reinitiations (clients restarting PrEP after a break), these are also useful for target setting purposes. Unclick the box next to “*# reinitiated PrEP*” if data are not available.

☒ # reinitiated PrEP

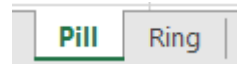
- Click on **Download template** button to save workbook on your computer

Download template

Complete program data table

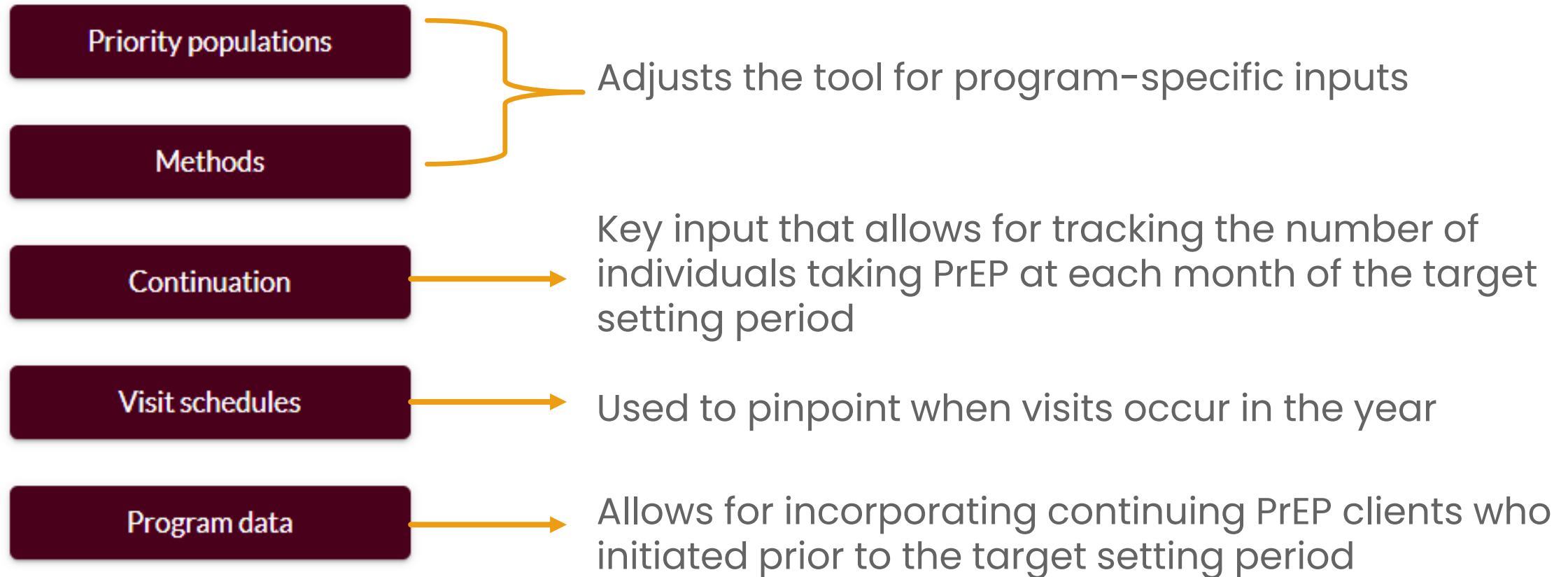
- For each month of the program data period, enter the number of initiations and reinitiations (if available) for each priority population.

Initiations template	from OCTOBER 2021 to SEPTEMBER 2022					
OCTOBER 2021	Serodiffer	Adolescer	Men who	Female se	Truck driv	Miners
initiated PrEP	58	104	73	66	30	27
reinitiated PrEP	3	22	28	17	4	0
NOVEMBER 2021	Serodiffer	Adolescer	Men who	Female se	Truck driv	Miners
initiated PrEP	69	115	84	77	41	38
reinitiated PrEP	7	16	19	14	7	5
DECEMBER 2021	Serodiffer	Adolescer	Men who	Female se	Truck driv	Miners
initiated PrEP	80	126	95	88	52	49
reinitiated PrEP	9	13	15	12	9	8



- If you select multiple methods, there will be a separate tab to complete for each method
- Once completed, use the **Upload template** button to upload data and you will get a notice that the upload is complete and a summary of prior initiations by method.

Configuration



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Costs

Costing in PrEP-it

- Understanding PrEP costs is useful for budgeting, planning and examining cost-effectiveness of PrEP.
- PrEP-it organizes costs by visit type and utilizes continuation rates in combination with visits to calculate costs.
- The module provides an estimate of cost per person initiated (taking continuation rates into account), which is lower than the cost for a person to stay on PrEP for an entire year.
- Default data are provided based on analysis of prior PrEP costing studies. Default costs are adjusted for each country based on country-specific labor costs; these can be overwritten with program-specific cost data, when available

Commodity costs

- In Configuration, you were asked to select the method(s) for PrEP delivery and specify the unit cost
- Defaults provided based on:
 - Pills – PEPFAR Global Health Supply Chain catalogue
 - Ring – manufacturer
 - CAB-LA – no available default

Method	Unit of commodity	Number of months of coverage per unit	Unit cost (USD)
Pill	bottle	1	3.95
Ring	ring	1	12.00
CAB-LA	injection	2	0.00

Enter costs for each priority population

- **Monthly** – commodities and adherence support
- **Per visit** – initiation and continuation visits
- **Lump sum** – annual above-site costs, e.g., training, demand creation (*only entered under one population if not population-specific*)

Cost category	Serodifferent couples	Adolescent girls/young women 15-24
Costs per person-month	3.95	4.95
Pill	3.95	3.95
Adherence support	0.00	1.00
Costs per visit		
Initiation visit	7.40	4.84
Personnel	5.69	3.38
Initiation visit labs	1.00	1.00
Other recurrent (other commodities, overhead, training)	0.72	0.47
Capital (equipment, building, vehicles, other)	0.00	0.00
Continuation visit	5.57	3.27
Personnel	4.03	1.95
Continuation visit labs	1.00	1.00
Other recurrent (other commodities, overhead, training)	0.54	0.32
Capital (equipment, building, vehicles, other)	0.00	0.00
Annual above-site lump-sum costs (training, demand creation, above-site, guidelines, other)	0.00	0.00

Unit cost defaults

- Country-specific default values are found in the reference drawer in the upper right corner, with defaults for SDCs, key populations and AGYW
- Defaults are based on an analysis of six PrEP costing studies conducted in 6 countries, where capital and non-commodity recurrent costs are estimated as a percent of other total visit costs
- When setting up cost inputs, you can zero out line items you do not want to include in the cost estimates (e.g., capital costs)

Customizing the cost inputs

- Can zero out cost categories not included in your estimates
- Add in any lump sum costs or leave blank

Example: zero out Personnel and Capital costs if not included in PrEP budget

Cost category	Serodifferent couples	Men who have sex with men	Female sex workers
Costs per person-month	5.60	5.60	5.60
Pill	5.60	5.60	5.60
Adherence support	0.00	0.00	0.00
Costs per visit			
Initiation visit	7.70	4.87	4.87
Personnel	6.86	4.30	4.30
Initiation visit labs	0.00	0.00	0.00
Other recurrent (other commodities, overhead, training)	0.84	0.57	0.57
Capital (equipment, building, vehicles, other)	0.00	0.00	0.00
Continuation visit	5.49	3.11	3.11
Personnel	4.86	2.71	2.71
Continuation visit labs	0.00	0.00	0.00
Other recurrent (other commodities, overhead, training)	0.63	0.40	0.40
Capital (equipment, building, vehicles, other)	0.00	0.00	0.00
Annual above-site lump-sum costs (training, demand creation, above-site, guidelines, other)	0.00	0.00	0.00

Which costs to include?

■ For budget forecasts:

- Zero out costs that are not included in the PrEP budget for the organization doing the analysis
- Add in above site-level costs as a once per year total cost

■ For AGYW tool and other cost-effectiveness analyses:

- Include all costs regardless of who is paying and when
- Include above site-level costs
- For AGYW tool specifically; ART costs must include all service delivery costs and above site-level costs as well

Results

- Once you have completed your inputs, the cost results will show you the annual unit costs and average monthly costs for each priority population

Annual unit costs (USD)

	Serodifferent couples	Adolescent girls/young women 15-24	Men who have sex with men	Female sex workers
Cost for a person to stay on Pill for a year	82.65	80.58	70.51	70.51
Cost per person initiated, accounting for continuation	33.15	31.28	27.75	27.75

Average monthly cost (USD)

	Serodifferent couples	Adolescent girls/young women 15-24	Men who have sex with men	Female sex workers
Average monthly cost per person initiated	8.85	8.35	7.41	7.41

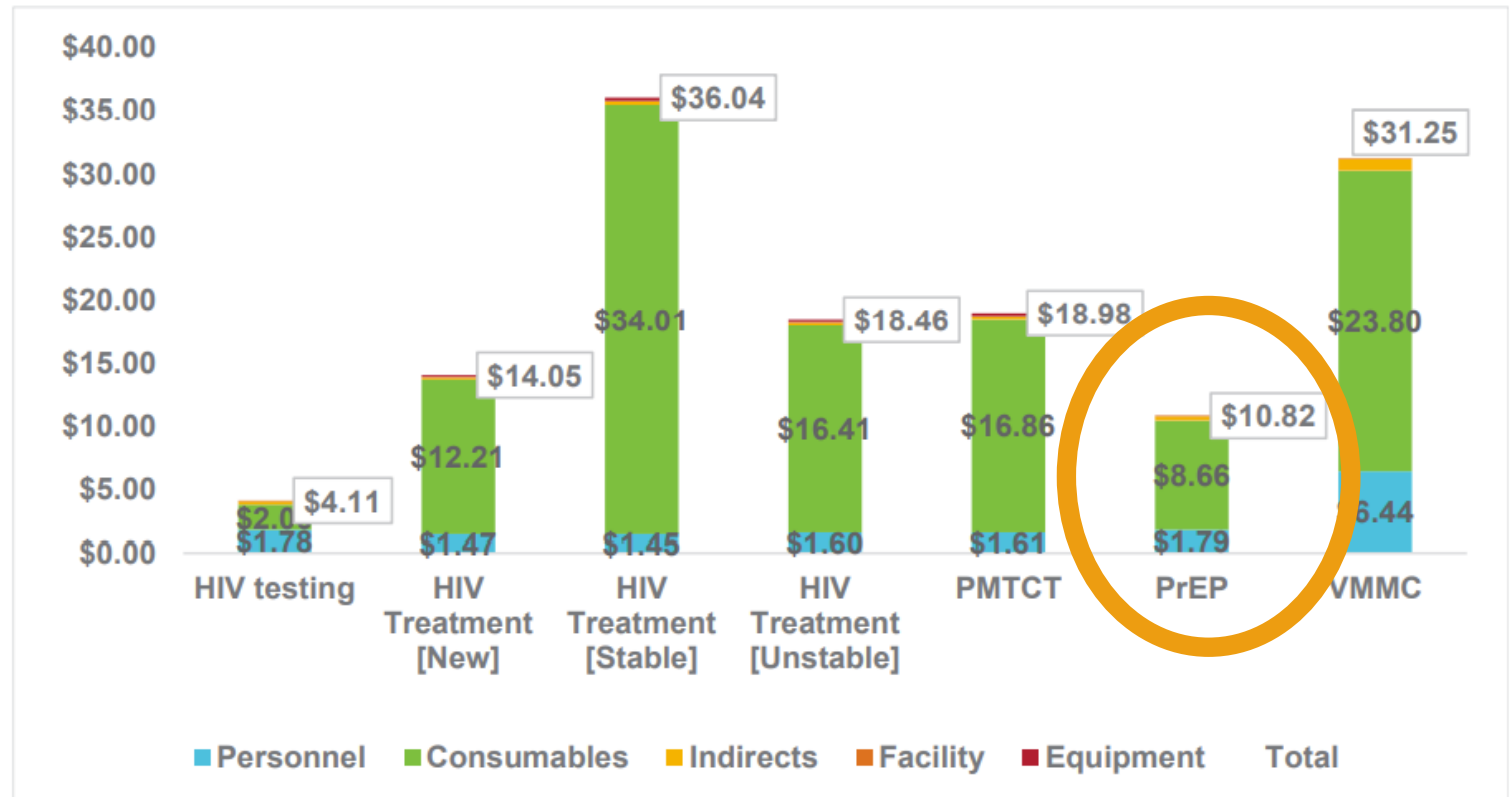
Example: Uganda cost data per visit

The Uganda ABC/M report shows costs per visit for various HIV services, including PrEP

PrEP costs per visit

- \$10.82 total
- \$1.79 personnel
- \$8.66 consumables
 - Including ARVs
- \$0.37 other

Report also states that costs for PrEP ARVs is \$103 per client per year, which equals \$8.58 per month



Limitations of Uganda ABC/M report for PrEP-it

- No data on above-site expenditures, non-service delivery costs, or specific lab costs.
- Data collection occurred during COVID-19 pandemic, resulting in few PrEP patients and small sample size for costing study.
- Visit cost estimate (\$10.82) does not distinguish between priority populations or initiation and continuation visits or for different priority populations but does give a range of values (\$9.14 – \$16.73) based on sensitivity analysis.
 - How might you address the initiation vs. continuation visit costs in the tool?
 - When would you consider different costs for different populations?

Replace defaults with data

- First, return to Configuration and Methods to enter the monthly ARV costs and review the visit schedules
- Edit defaults based on data provided

Example: replaced pill costs, personnel, and other recurrent with data from ABC/M report

Cost category	Serodifferent couples	Men who have sex with men	Female sex workers
Costs per person-month	8.58	8.58	8.58
Pill	8.58	8.58	8.58
Adherence support	0.00	0.00	0.00
Costs per visit			
Initiation visit	2.22	2.22	2.22
Personnel	1.79	1.79	1.79
Initiation visit labs	0.00	0.00	0.00
Other recurrent (other commodities, overhead training)	0.43	0.43	0.43
Capital (equipment, building, vehicles, other)	0.00	0.00	0.00
Continuation visit	2.22	2.22	2.21
Personnel	1.79	1.79	1.78
Continuation visit labs	0.00	0.00	0.00
Other recurrent (other commodities, overhead training)	0.43	0.43	0.43
Capital (equipment, building, vehicles, other)	0.00	0.00	0.00
Annual above-site lump-sum costs (training, demand creation, above-site, guidelines, other)	0.00	0.00	0.00

Review results for Uganda

- Note that even though all three populations have the same cost per a person to stay on PrEP for a year, they have different costs per person initiated due to the different underlying continuation rates

Annual unit costs (USD)

	Serodifferent couples	Men who have sex with men	Female sex workers
Cost for a person to stay on Pill for a year	116.28	116.28	116.23
Cost per person initiated, accounting for continuation	67.61	33.50	38.03

Discussion

- What data sources for PrEP costing are available in your country?
- Do you think PrEP visit costs differ by priority populations? Do you have data about how they vary by population?

The background is a complex, abstract pattern of overlapping triangles in various shades of teal and blue-green. The triangles vary in size and orientation, creating a dynamic, low-poly aesthetic. The overall effect is a textured, crystalline surface.

Impact

Calculating impact of PrEP

- PrEP-it calculates the number of HIV infections averted based on the set targets and “impact factors” – the number of HIV infections averted per person-year on PrEP
- The default impact factors were set using the Goals model under two scenarios that provide bookends for minimum and maximum PrEP impact
 - **Constant coverage**, where ART and VMMC held constant at 2019 levels; higher HIV incidence yields greater impact of PrEP on HIV prevention
 - **95-95-95**, ART coverage increases to 81% in 2020 and then to 90% by 2030 and VMMC coverage scaled up to 80% by 2030; lower HIV incidence yields less impact of PrEP on HIV prevention
- Impact factors based on method effectiveness (efficacy X adherence)

Minimal inputs needed for impact

- Select scenario and method from dropdown lists
- Can adjust effectiveness level
- Select appropriate impact factor for custom priority populations; standard populations are automatically selected

Priority population	Select impact factor derived for:	Impact factors: 95-95-95
Serodifferent couples	SDCs ▼	0.0790
Adolescent girls/young women 15-24	AGYW 15-24 ▼	0.0015
Men who have sex with men	MSM ▼	0.0052
Female sex workers	FSWs ▼	0.0154
Truck drivers	High-risk heterosexual men ▼	0.0020
Breastfeeding women	BFW ▼	0.0011

Adjusting impact factors

- One optional feature is to adjust the impact factors if PrEP clients in your program are at higher risk for HIV than the entirety of the named population
- Example – AGYW program that provides PrEP to AGYW who are at twice the risk for HIV compared with the entire AGYW population could adjust impact factor from a 1 to a 2

Priority population	Impact factor	Adjustment factor	Adjusted infections averted per PY on PrEP	Adjusted PY on PrEP per infection averted
Serodifferent couples	0.0790	1.0	0.0790	13
Adolescent girls/young women 15-24	0.0043	1.0	0.0068	148

Priority population	Impact factor	Adjustment factor	Adjusted infections averted per PY on PrEP	Adjusted PY on PrEP per infection averted
Serodifferent couples	0.0790	1.0	0.0790	13
Adolescent girls/young women 15-24	0.0043	2.0	0.0135	74

Complementary tools and guidance

PrEP-it steps

Choose mode

Getting started

Configuration

Costs

Adolescent girls and young women
(AGYW)

Impact

Targets

Results dashboard

Disaggregate targets

Commodities forecasting

WHO Guidelines

Guidance relevant to how your program should be structured with regards to priority populations, methods, visit schedules, and cost components at each visit (e.g., labs)

UNAIDS Targeting Tool

Determine the size of some key populations and the percent indicated for PrEP in the populations section

The background of the slide is a complex, low-poly geometric pattern in various shades of teal and blue-green. The pattern consists of numerous triangles and polygons of different sizes and orientations, creating a textured, crystalline effect. The colors range from a deep, dark teal to a lighter, more vibrant blue-green.

Targets

Target setting in PrEP-it

- When setting targets, PrEP-it accounts for several factors of a PrEP program, including:
 - The number of potential PrEP users in each priority population
 - PrEP continuation rates for each population
 - Scale-up trends
 - Desired coverage levels and financial constraints
- Start by setting the date range over which targets will be set – click on button so it turns grey

Target-setting period

After changing the date range below, click "Set date range" for changes to take effect.

  October ▼ 2022 ▼ to September ▼ 2023 ▼

Population data

- For each priority population, 4 data points needed to calculate number of potential users
 - Estimated population size
 - % of total population size living in geographic areas where PrEP will be available
 - HIV prevalence
 - % indicated for PrEP – or % at elevated risk for HIV

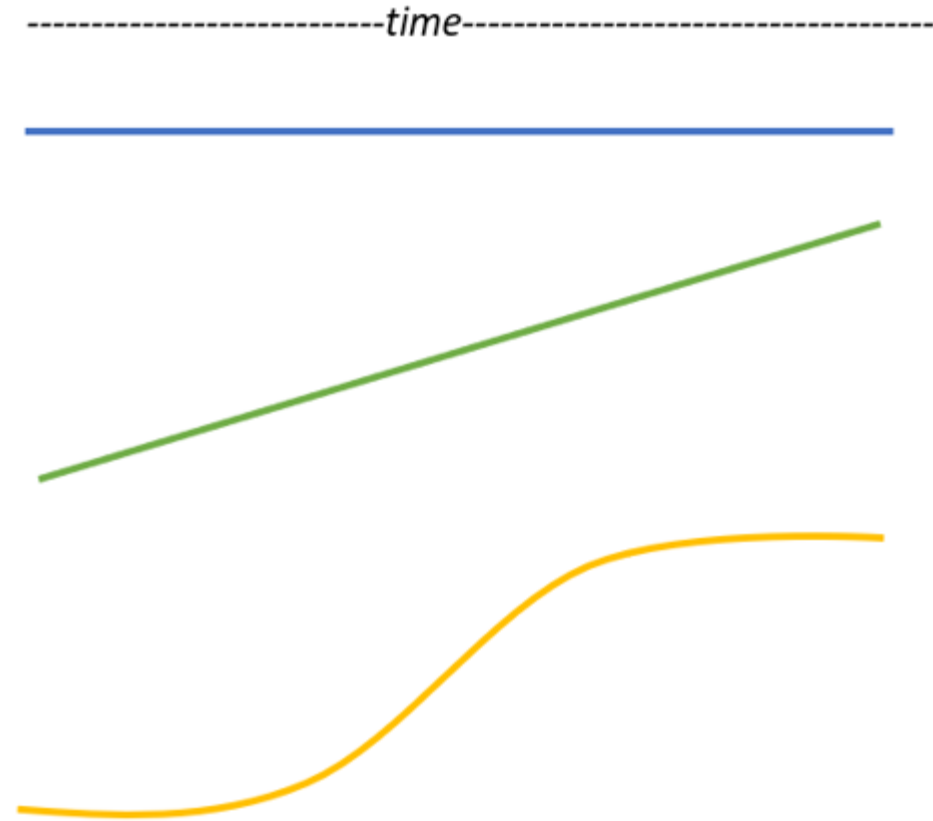
Priority population	Population size	% in geographic areas prioritized for PrEP	HIV prevalence (%)	% indicated for PrEP	Number of potential users
Serodifferent couples	282,332	100	0	65	183,516
Men who have sex with men	54,215	100	13	70	33,055
Female sex workers	36,100	100	50	75	13,565

- Editable defaults are available, with references shown in button in upper right

Default priority populations

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



Specify scale-up patterns

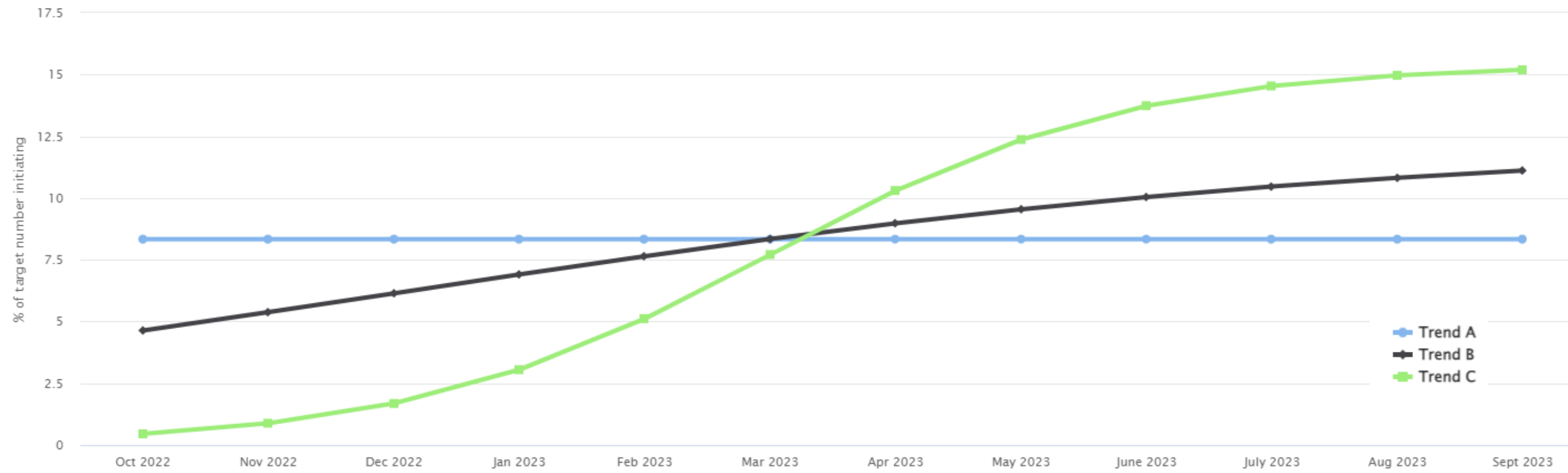
- Three adjustable default patterns are given and can add more scale-up patterns, if needed, by clicking on the “**Scale up trends**” button
- Use dropdown list to select scale up pattern
- For s-shaped curves – can adjust the shape of the curve until it visually matches your expectations for the program
 - Set the midpoint – the month of the target setting period when program is scaling up most rapidly
 - Specify the “speed” between 0-1 with higher values giving a steeper increase over time

Scale-up trend	Scale-up type	Midpoint of s-shaped curve	Initial speed of scale-up (s-shaped only)
Trend A	Constant ▼		
Trend B	S-shaped ▼	3.0	0.25
Trend C	S-shaped ▼	6.0	0.70

Assign a curve to each priority population

- Can use the same curve for multiple populations

Priority population	Scale-up trend
Serodifferent couples	Trend A ▼
Men who have sex with men	Trend B ▼
Female sex workers	Trend C ▼



Setting targets by coverage

Select a target-setting option.

Coverage

- Use dropdown list to select “Coverage” option
- Enter the percent of the eligible PrEP recipients in each priority population that you want to be actively taking PrEP at the end of the target setting period
- This percentage entered should be realistic given that PrEP clients typically discontinue PrEP within a year; 100% or near 100% is generally not feasible given usual continuation rates
- Keep in mind if you are using multiple PrEP methods, the percent coverage should sum to the desired overall coverage level

Enter the % coverage by method for each priority population.

Priority population	Pill	Ring	Total
Serodifferent couples	20.0	10.0	30.0
Men who have sex with men	30.0		30.0
Female sex workers	20.0	10.0	30.0

Review results

- If using more than one method, use dropdown list to select method-specific or combined results
- Results shows overall targets and associated costs and impact if you have completed those modules
- Can use the **Set date range** to see targets for results in a subset of the time period (e.g., for a one-year period within an overall 3-year projection)

Method

All methods combined ▼

Target indicator	Total	Serodifferent couples	Men who have sex with men	Female sex workers
PrEP_NEW	88,646	55,055	24,505	9,086
PrEP_CT	30,138	24,018	4,105	2,015
Currently on PrEP	45,000	31,014	9,916	4,069

Adding financial constraints to targets

- If you have completed the cost section with all relevant inputs, then you can also put in desired coverage levels but specify financial constraints

- Select “Coverage with constraints” option

Coverage with constraints ▼

- Enter financial constraints

	Pill	Ring	Total
Total cost (USD)	2,000,000	500,000	2,500,000

- Enter desired coverage and review what level of coverage can actually be achieved given the financial constraints before clicking **Calculate targets**

Priority population	Proposed coverage (%)			Actual coverage to be achieved (%)		
	Pill	Ring	Total	Pill	Ring	Total
Serodifferent couples	20.0	10.0	30.0	19.8	3.8	23.6
Men who have sex with men	30.0		30.0	29.7		29.7
Female sex workers	20.0	10.0	30.0	19.8	3.8	23.6

Manually enter targets

- This feature assumes you have already set targets elsewhere using a different process but would like to use other features of the tool, such as the costs, impacts, commodities, or disaggregation functions

- Select the “Manual option”

Manual

- Enter the numbers
- of initiations for each population

Priority population	Pill	Ring	Total
Serodifferent couples	5,000	1,000	6,000
Men who have sex with men	2,000		2,000
Female sex workers	1,000	2,000	3,000

- Click **Next** to review results

Target indicator	Total	Serodifferent couples	Men who have sex with men	Female sex workers
PrEP_NEW	11,000	6,000	2,000	3,000
PrEP_CT	3,618	2,618	335	665
Currently on PrEP	5,533	3,380	809	1,344

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Adolescent girls & young women

Purpose of module

- WHO recommends PrEP for populations “at substantial risk.” This was previously defined as populations with incidence 3% or greater, but household surveys do not show any national or regional incidence in AGYW above 3%.
- However, clinical trials show there are many small geographic populations above this threshold
- For AGYW in SSA, risk often has more to do with the setting in which they live, rather than individuals’ specific behaviors
- This module identifies small geographic areas or “hotspots” for PrEP prioritization, without requiring incidence data or complex modeling

Approach informed by two assumptions



1. Can predict HIV incidence of AGYW 15-24 in SSA based on snapshot of HIV prevalence



2. Can incorporate downstream HIV infections averted with a single factor across settings

Review and adjust parameters

- **PrEP efficacy** – the percent reduction in HIV incidence when PrEP is used perfectly.

PrEP efficacy (%)	90
Effective use (%)	75
Annual discount rate (%)	3 ▼

- **Effective use**– the average % of time that clients use PrEP correctly when they have it in hand.
- **Annual discount rate**– represents how much current costs and benefits are valued compared with future costs and benefits. This may be set nationally based on interest rates and/or annual inflation; 3% and 5% are commonly used.

Criterion for PrEP provision

☒ Total cost savings

- **Total cost savings** – will select catchment areas with any expected cost savings from ART provision by preventing HIV infections among AGYW compared with the total cost of providing PrEP to AGYW.
 - More stringent – typically results in fewer hotspots prioritized for PrEP provision of AGYW

☐ PrEP cost per infection averted

Cost per IA threshold

10000 USD

- **PrEP cost per infection averted** – will allow users to set a threshold for the cost per infection averted and select catchment areas beneath that threshold.
 - If this criterion is selected, specify the cost per infection averted threshold.

Generate AGYW template

- If you want to use the PrEP-it Cost module for all geographic areas, select “Calculated value from Costs for oral PrEP.”

☒ Calculated value from Costs for oral PrEP ☐ Enter by area in the template

- If you want to use a different PrEP cost for the AGYW analysis, or you want the cost to vary by geographic area, select “Enter by area in the template.”

☐ Calculated value from Costs for oral PrEP ☒ Enter by area in the template

- Similarly, choose way of entering cost per person-year on ART

- If single value selected, enter value

- Click on 

Cost per person-year on ART (USD)
180.00

Enter template values

- List AGYW catchment areas to be considered, the number of AGYW in each catchment area, and the HIV prevalence of the AGYW being served.
- Optional – enter estimate of HIV prevalence among AGYW ages 10–14 to increase accuracy of cost-effectiveness estimates.
- Depending on what options you selected, other inputs include cost per person-year year on PrEP and cost per person-year on ART
- Once template is complete, save to computer and upload to PrEP-it using

Upload area template

- Then, click **Next** to see which areas are cost-effective for providing PrEP, based on the entered criteria

AGYW results

- Results indicate the catchment areas that are cost effective for providing PrEP to AGYW and the PrEP cost per infection averted.
- Summarizes the total number of AGYW in the selected catchment areas and the HIV prevalence in the selected areas.

Number of AGYW in areas below threshold	2,405,559
Prevalence among AGYW in areas below threshold (%)	8.4

District	Catchment areas	PrEP cost per infection averted (USD)	Is PrEP cost effective for AGYW?
Alto Molócuè	Alto Molócuè	8,894	
Ancuabe	Ancuabe	4,095	Yes
Angoche	Angoche	6,946	Yes
Angónia	Angónia	32,587	
Balama	Balama	6,824	Yes
Báruè	Báruè	5,214	Yes
Beira	Beira	3,284	Yes
Bilene	Bilene	2,374	Yes
Boane	Boane	2,788	Yes
Búzi	Búzi	4,015	Yes
Cahora-Bassa	Cahora-Bassa	7,926	
Caia	Caia	6,442	Yes
Changara	Changara	8,193	

Link to other modules in the tool

- The **Costs** module can be used to calculate costs per person year on PrEP as an input to the AGYW module
- The results link to **Targets** for the population size and HIV prevalence in selected areas.

Priority population	Population size	% in geographic areas prioritized for PrEP	HIV prevalence (%)	% indicated for PrEP	Number of potential users
Serodifferent couples	413,860	100	0	45	186,237
Adolescent girls/young women 15-24	2,405,559	100	8	100	2,204,657

- Connects to **Impact** module by linking the impact factor for AGYW in the selected areas.

Priority population	Select impact factor derived for:	Impact factors: 95-95-95
Serodifferent couples	SDCs	0.0790
Adolescent girls/young women 15-24	AGYW 15-24	0.0018

The background of the slide is a complex, abstract pattern of overlapping triangles in various shades of teal and dark green, creating a low-poly or mosaic-like effect.

Disaggregate & aggregate

To disaggregate or aggregate?

These features are optional.

DISAGGREGATE - When you set your targets at the national level and want to see your targets at the subnational level

- *Example – Mozambique set targets at the national level and disaggregated to the district level*

AGGREGATE – When you set your targets at the subnational level and want to aggregate to the national level

- *Example – Kenya set targets at the county level and then aggregated to the national level*

For disaggregating, return to *Getting started*

- Ensure that you have clicked on “Disaggregate your targets geographically” and then specify the subnational level(s). Can specify 1 or 2 levels.

☒ **Disaggregate** your targets geographically

Specify up to two subnational levels. 

Level 1

Region

Level 2

- On data template, complete “Subnational areas” tab with adult population ages 15+ for each area to which you would like to disaggregate targets.

Region	Population 15+
Centrale	490,612
Kara	611,360
Maritime	2,064,458
Plateaux	1,091,931
Savanes	657,640

Specify disaggregation parameters

- If desired, set date range for outputs as a subset of the target-setting period by using the dropdown lists and clicking on the **Set date range** button.
- Use the click boxes and dropdown lists to select what populations you want applied for each priority population.

Priority population	Females			Males		
	Include?	Start age	End age	Include?	Start age	End age
Serodifferent couples	<input checked="" type="checkbox"/>	15 ▼	65+ ▼	<input checked="" type="checkbox"/>	15 ▼	65+ ▼
Men who have sex with men	<input type="checkbox"/>			<input checked="" type="checkbox"/>	15 ▼	65+ ▼
Female sex workers	<input checked="" type="checkbox"/>	15 ▼	49 ▼	<input type="checkbox"/>		

- Click **Next** to review populations data entered from template and then **Next** again to review results.

Review disaggregation results

- Can change date range for display on this page if needed
- If you need targets in the COP datapack format, click on **Download targets output for PEPFAR** button
- Use the dropdown list to choose to view PrEP_NEW or PrEP_CT

Display

PrEP_NEW ▼

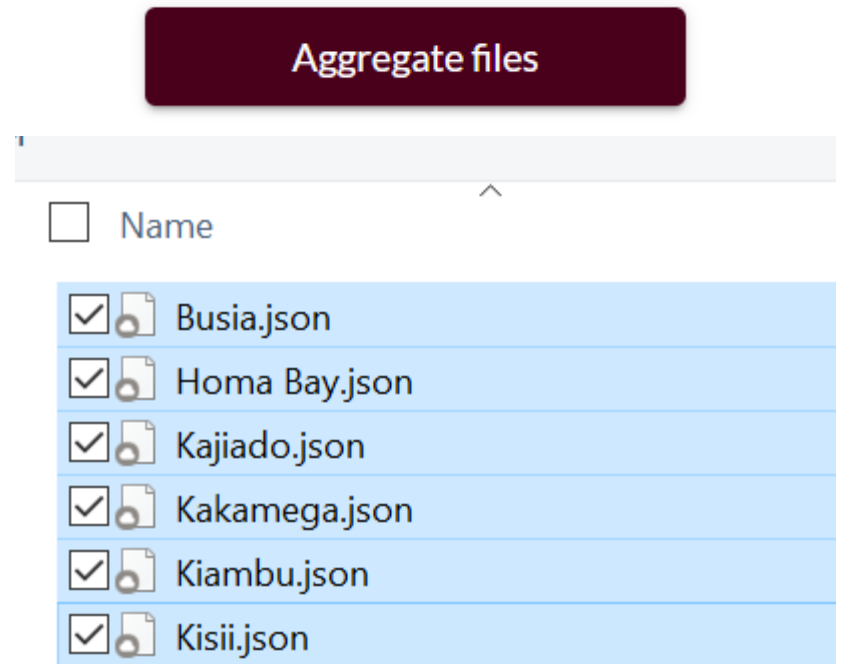
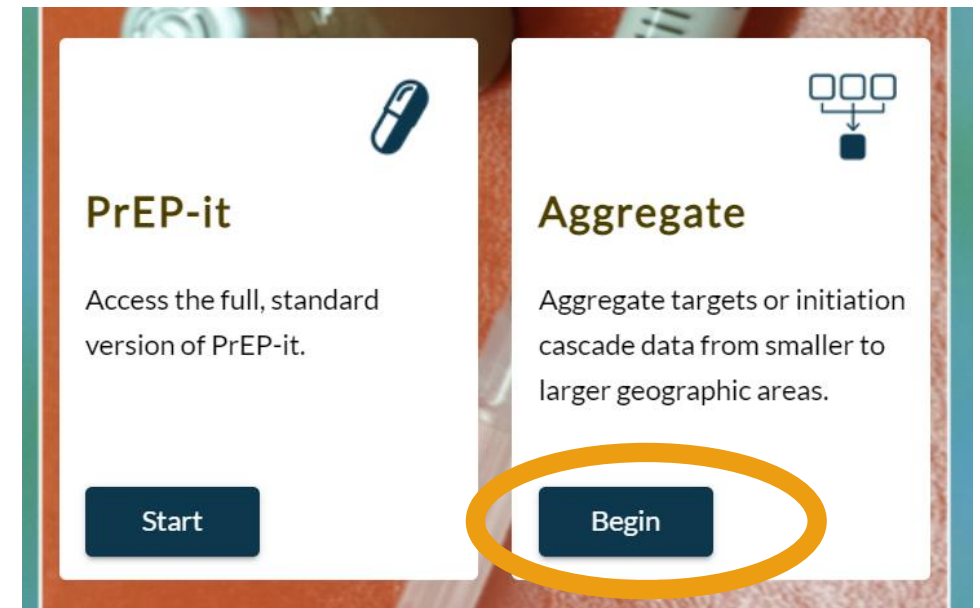


Targets disaggregated by district, by priority population

Region	Total	Serodifferent couples	Men who have sex with men	Female sex workers
Centrale	2,062	585	987	490
Kara	2,569	729	1,230	610
Maritime	8,675	2,461	4,154	2,060
Plateaux	4,588	1,302	2,197	1,090
Savanes	2,763	784	1,323	656

Aggregate multiple sessions

1. Click on the **Begin** button under “Aggregate”
2. Click on the **Aggregate files** button
3. Select the json files that you want to aggregate and click on the “open”
4. Use the dropdown menu to select method and review the aggregated results
 - Costs, Targets, Impacts, Subnational targets, and Commodities forecasting



The background of the slide is a complex, abstract pattern of overlapping triangles in various shades of teal and dark green, creating a low-poly or mosaic effect.

Commodities forecasting

Examining commodities

- This module tracks the need for commodities and commodity costs each month based on the method costs, continuation rates, visit schedules, program data, and set targets.
- Can adjust the time frame using the ***Set date range*** button
- Select the method to display from the dropdown list

Method
Pill ▼
- Enter the number of commodities needed at initiation and continuation visits, per the visit schedule

Number of bottle(s) distributed per initiation visit	1
Number of bottle(s) distributed per continuation visit	3

Review results

- Results show number of visits, number of commodities needed, and commodity costs by month
- If needed, can right click and “Copy all” to paste output in a separate file

Month	Number of initiation visits	Number of continuation visits	Number of bottles required	Bottle costs (USD)
October 2022	55	0	55	306
November 2022	56	50	206	1,156
December 2022	59	51	212	1,186
January 2023	61	95	347	1,944
February 2023	65	98	357	2,002
March 2023	68	101	370	2,071
April 2023	72	132	468	2,620
May 2023	77	136	486	2,720
June 2023	81	141	506	2,832
July 2023	86	166	585	3,275
August 2023	90	172	608	3,404
September 2023	95	179	632	3,538
Total	865	1,321	4,832	27,054

Undo

Redo

Copy all

Decrement decimal

Increment decimal

Duplicate across rows

Duplicate down columns

Interpolate

Normalize

Potential uses for this module

- Help with supply chain management by forecasting when commodities will be distributed each month
- Share with funders on the needed volume and costs of PrEP commodities
- For countries considering starting PrEP programs, demonstrate that the commodity needs are feasible
- Other potential uses?



Questions for discussion

- How has your country done forecasting for PrEP in the past?
- How does that compare with PrEP-it?

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Putting it all together

Reviewing the covered modules in PrEP-it

Configuration – describe the location and key features of PrEP program, including past program data

Costs – unit costs based on monthly and visit costs

Impact – specify the number of HIV infections averted per person year on PrEP

Targets – determine the number of new and continuing PrEP users over the target setting period

Disaggregate/aggregate –disaggregate national targets to subnational levels; aggregate multiple sessions

AGYW – identify sublocations for AGYW PrEP prioritization

Commodities forecasting – forecast the number of commodities needed and associated commodity costs

Complementary tools and guidance

PrEP-it steps

Choose mode

Getting started

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Costs

Adolescent girls and young women
(AGYW)

Impact

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Guidance relevant to how your program should be structured with regards to priority populations, methods, visit schedules, and cost components at each visit (e.g., labs)

UNAIDS Targeting Tool

Determine the size of some key populations and the percent indicated for PrEP in the populations section

Results dashboard

- Houses the results for costs, AGYW, and targets, which are also found on the individual modules

Results dashboard

Costs

Adolescent girls/young women

Targets

Method

Pill

Use dropdown menu to select method when using PrEP-it for multiple methods

Annual unit costs

Continuation
rates

Yearly visit
schedule

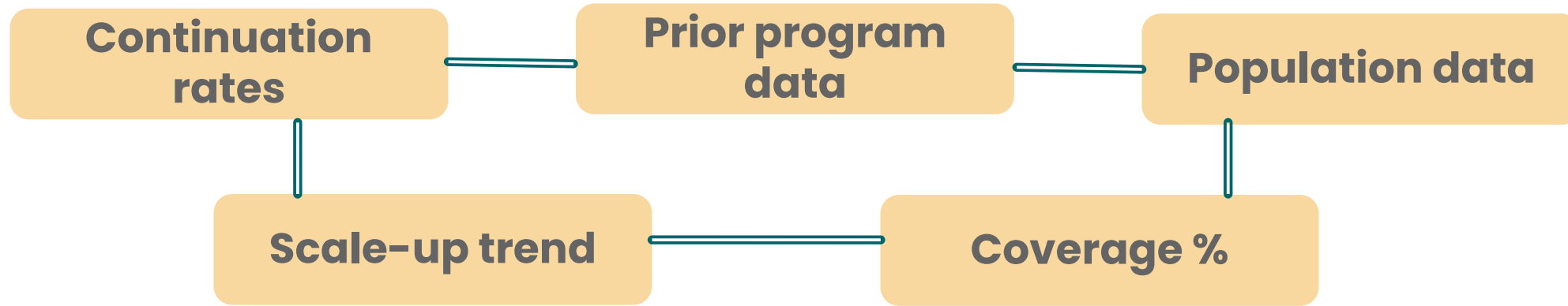
Costs per month
and per visit

Annual unit costs (USD)

	Serodifferent couples	Adolescent girls/young women 15-24	Men who have sex with men	Female sex workers
Cost for a person to stay on Pill for a year	82.65	80.58	70.51	70.51
Cost per person initiated, accounting for continuation	33.15	31.28	27.75	27.75

- Note that the annual unit cost per person is substantially lower when accounting for continuation.

Targets based on coverage



These components come together to estimate total PrEP_NEW, PrEP_CT, and Currently on PrEP

Additionally, monthly initiations and the number of individuals currently on PrEP at each month are shown in a graph.

Targets: Initiations and currently on PrEP, by month

— Pill – PrEP initiations — Pill – Currently on PrEP

To download monthly targets, click and select “Download CSV”



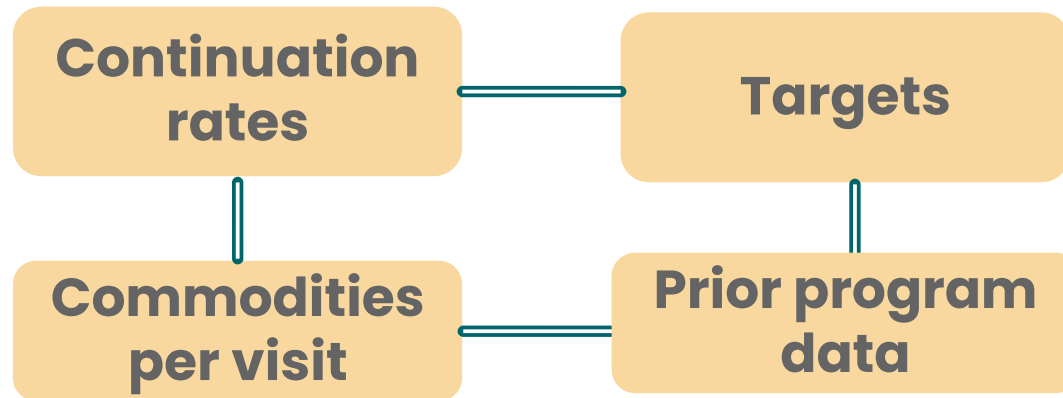
Cost-effectiveness estimates



- Link together to generate the total costs, total infections averted, and the cost per infection averted by priority population
- This feature can be used to examine how changes in programming change the cost effectiveness results

	Total initiations	Total costs (\$)	Total infections averted	Cost per infection averted (\$)
Serodifferent couples	59,349	3,271,118	2,379	1,375
Adolescent girls/young women 15-24	180,812	3,374,013	202	16,671
Men who have sex with men	7,419	433,416	20	21,668
Female sex workers	7,838	392,272	112	3,492
Total	255,418	7,470,819	2,714	2,753

Commodity forecasts



- Links inputs together to generate monthly estimates of visits, commodities needed, and costs

Month	Number of initiation visits	Number of continuation visits	Number of bottles required	Bottle costs (USD)
October 2022	10,750	10,777	43,082	241,262
November 2022	11,436	12,084	47,688	267,054
December 2022	12,004	13,362	52,089	291,699
January 2023	12,462	14,592	56,238	314,932
February 2023	12,825	15,761	60,108	336,608

Check list for generating targets

- See the 1-page “target-setting checklist” word document in the dropbox folder for 15 steps to generate targets
- Note that 5 of the steps are optional in that they are not needed to generate the targets but provide useful output associated with the targets
 - Costs
 - Impact
 - AGYW
 - Disaggregate targets
 - Commodities forecasting

Step-by-step examples for PrEP-it use

Estimate the amount and cost of the commodities associated with predetermined PrEP_NEW targets

Estimate the total costs associated with predetermined PrEP_NEW targets

Estimating oral PrEP targets for a new program with a concentrated epidemic and forecasting needed commodities

Using PrEP-it to address program questions

In addition to setting targets, PrEP-it can be used to examine many questions, such as:

- How does improving continuation of PrEP for a specific priority population influence the costs, impact, population coverage, and cost-effectiveness?
- How much do changes in lab or personnel costs influence the annual and total costs for PrEP delivery?
- How do changes in unit costs change coverage when setting targets using financial constraints?
- How do the costs and impacts compare when providing PrEP to different populations? Or using different methods?
- Other programmatic questions?

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Ongoing support

PrEP-it support site via Mighty Networks

The **PrEP-it Community of Practice** is a platform for shared learning, progress, and collaboration on the use of PrEP-it

<https://prep-it-community-of-practice.mn.co/>

- Create a profile
- Explore PrEP-it topics
- Ask and answer questions
- Engage in discussions
- Access additional resources

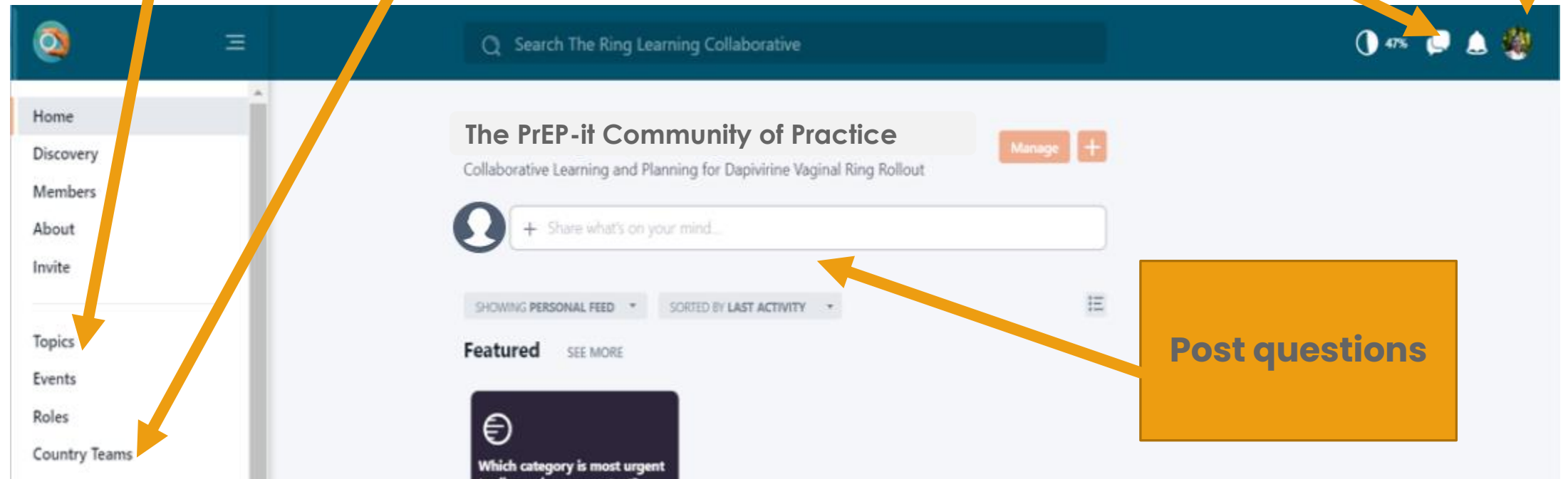
Orientation to site

Explore topics

Join country teams

Chat with other members

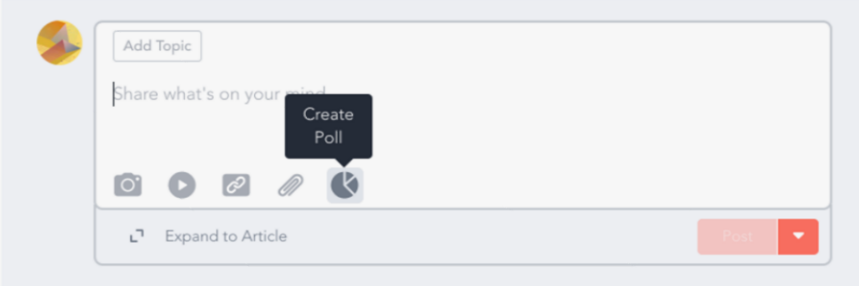
Click on the circle to edit your profile and add a photo



Post questions

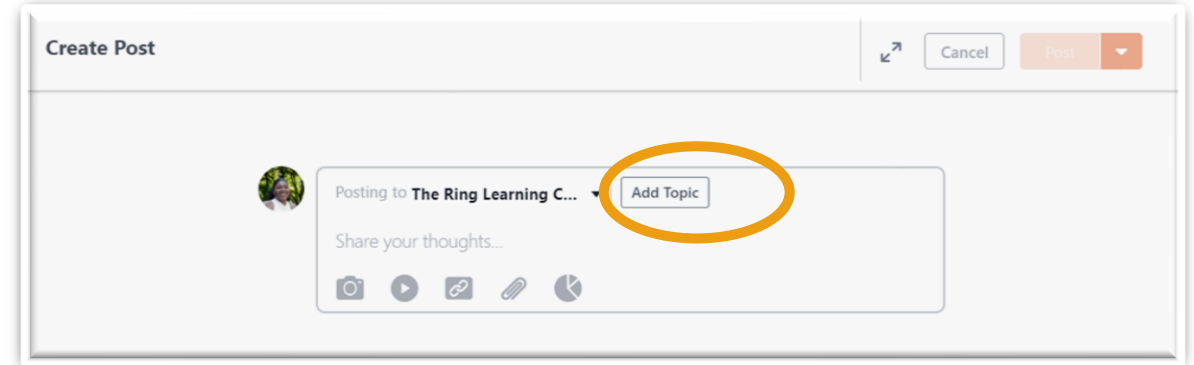
Add posts and contribute to other's posts

Add Posts, Articles, Polls, Photos, and Questions



Please feel free to post, share interesting articles, and any questions you may have on the dapivirine ring and ring rollout.

When you click into the main box on the Home screen, you'll get different options from adding a post to uploading a photo, embedding a video via a link, sharing a link or a file, or creating a poll.



Make sure to add a topic to your posts so they are easier to find.

Even Better Than Posting? Comment, Reply, and Contribute to Other People's Posts and Questions

Go ahead. Share your answer, say hey, or if you're in a hurry, click the cheer button.

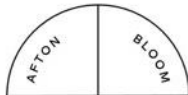
Additional PrEP-it resources

- The tool contains built-in Help functions and additional resources
- Brief intro video:
https://www.youtube.com/watch?v=ew_Yq0Rs_II
- For questions, email PrEPitHelp@AvenirHealth.org
- Supporting materials can be found at:
<https://www.prepwatch.org/resource/prep-it>

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