



cop 18 data pack

si advisor retreat | jan 8



**overview**



**data pack structure**



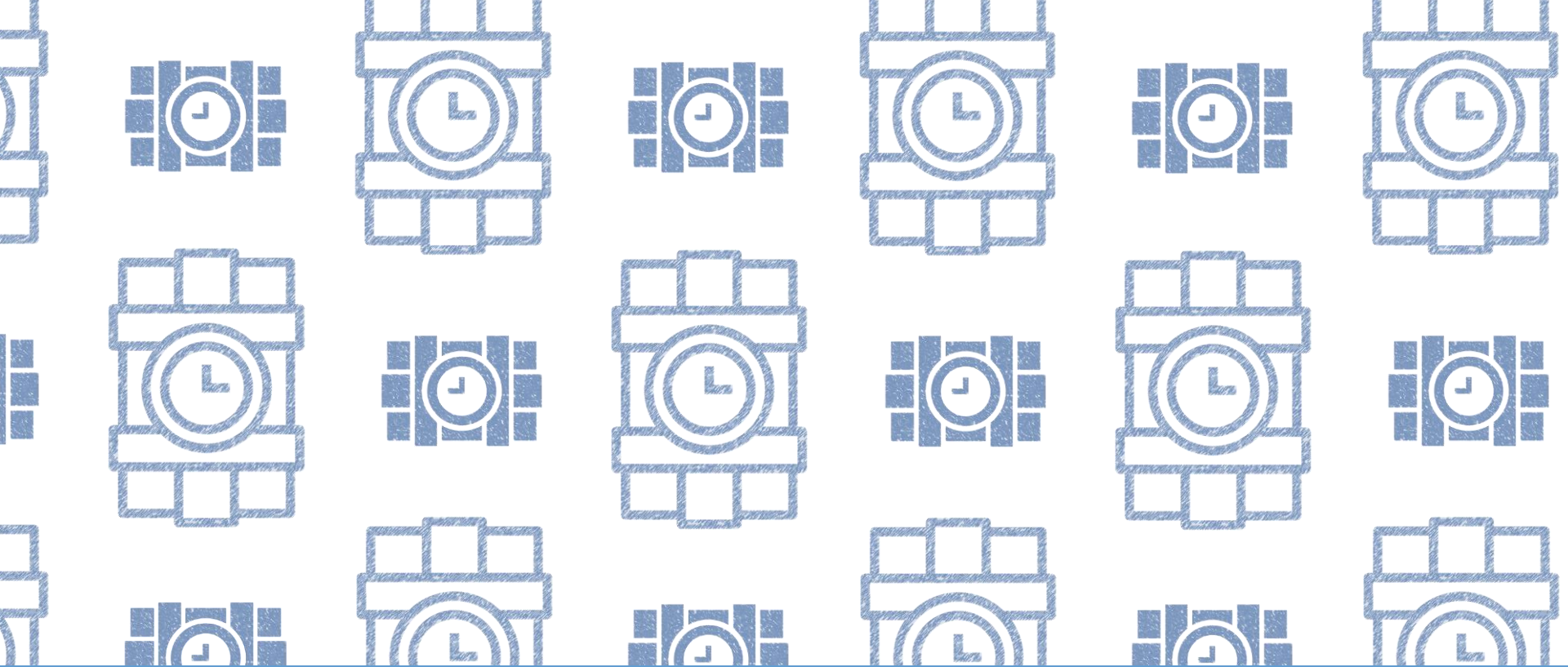
**im and disagg allocation**



**ad hoc walk through**



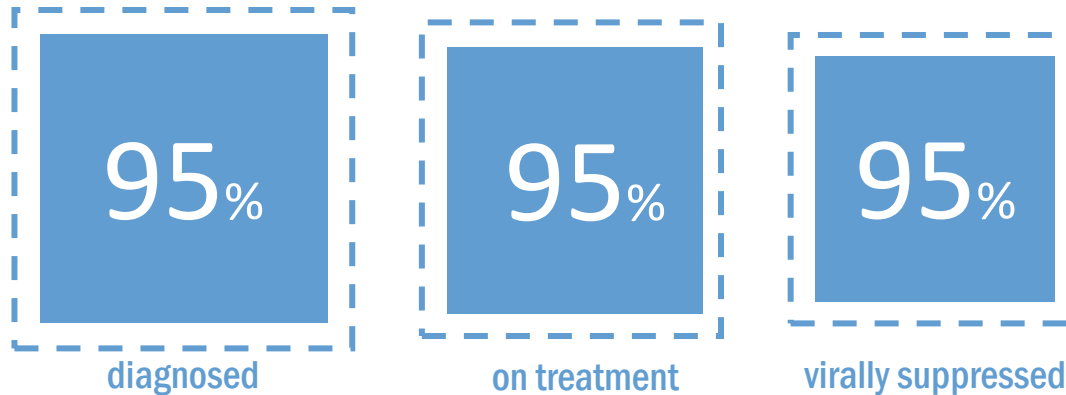
**appendix: error checking features**



overview

## what's the data pack

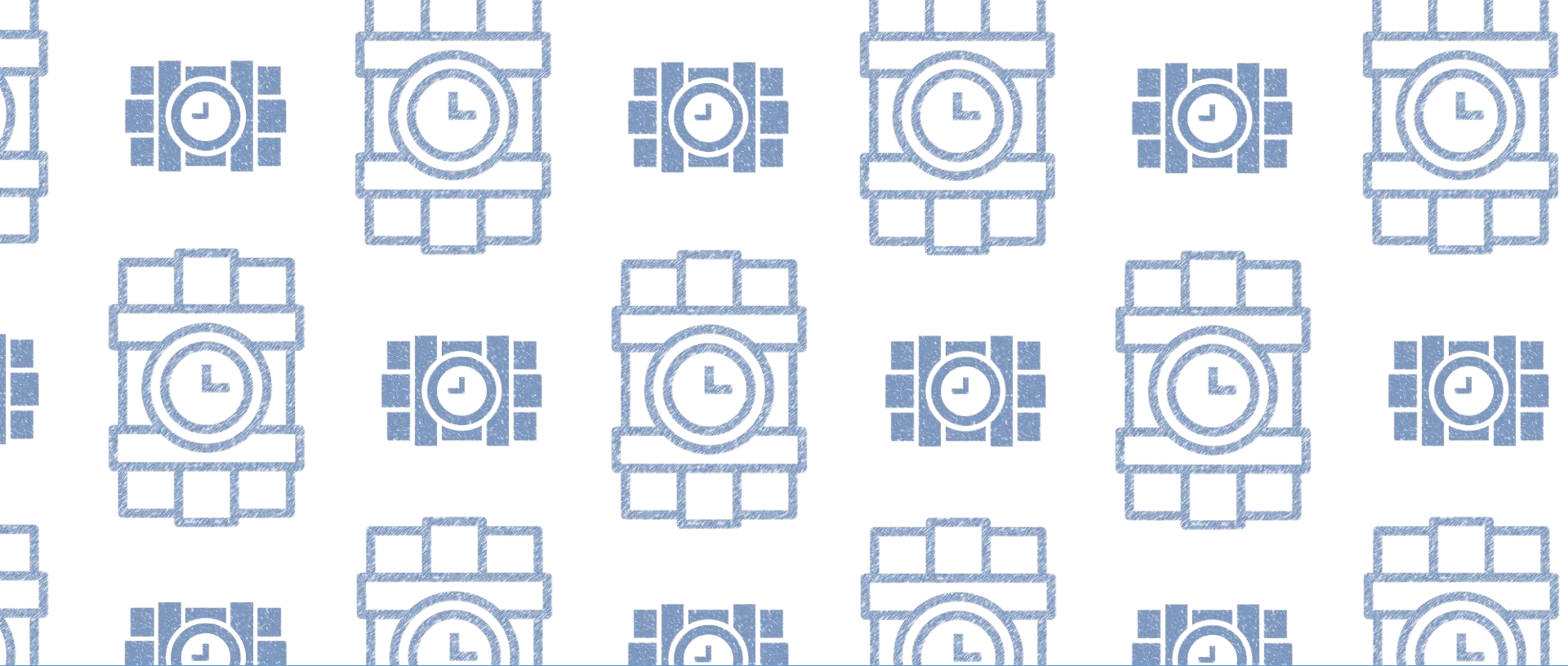
- excel-based targeting tool designed to help pepfar teams set targets in line with the 95-95-95 goals
- data packs are pre-populated with fy17 results, fy18 targets, plhiv estimates, and assumptions for a series of key indicators, mostly along the clinical cascade





Jan 10 – data pack release

TBD – disagg tool released

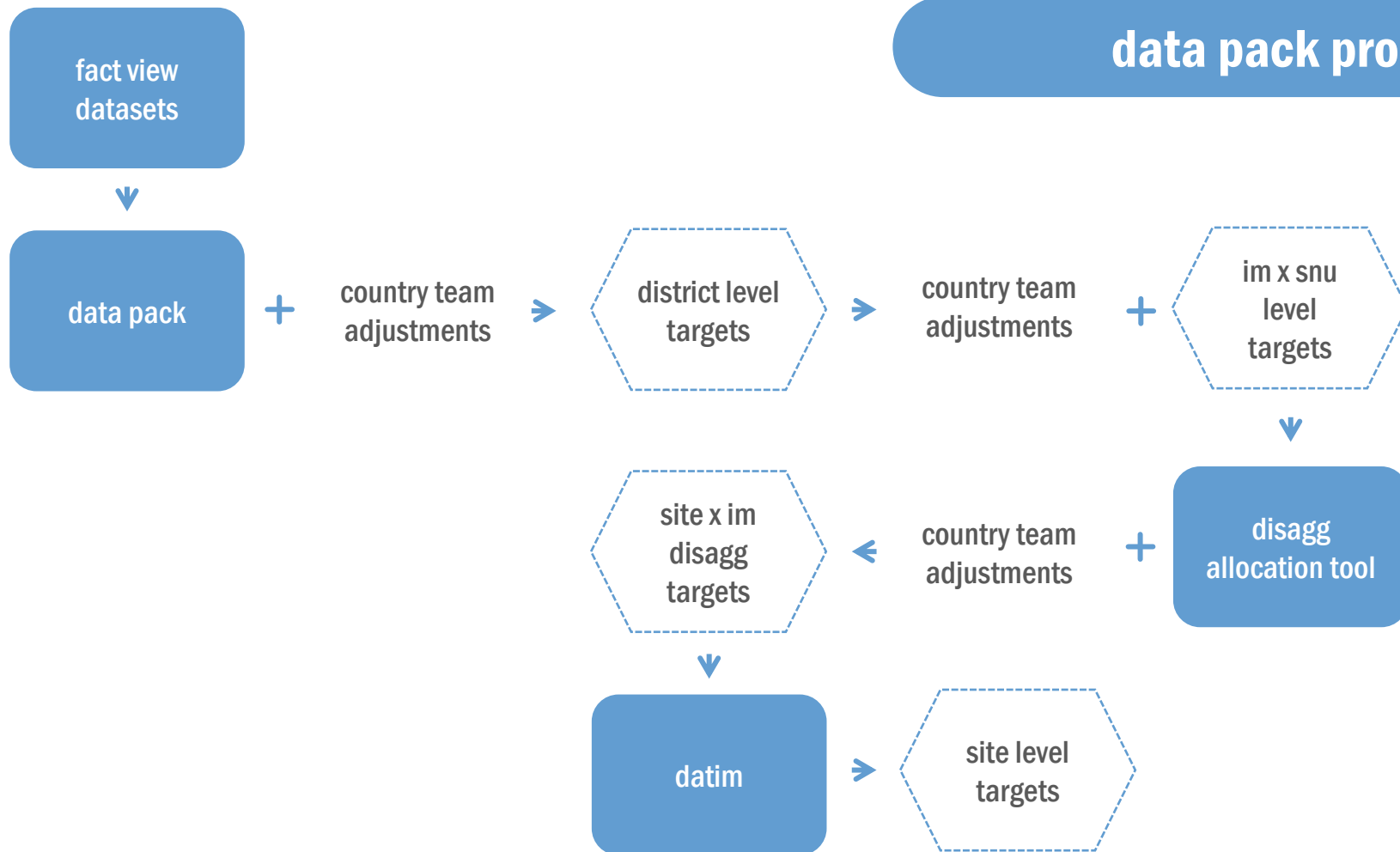


**data pack structure**

gend_gbv	ovc_hivstat	prep_new	tx_curr
hts_self	ovc_serv	prep_new	tx_new
hts_tst	pmtct_art	tb_art	tx_pvls
hts_tst_pos	pmtct_eid	tb_prev	tx_ret
kp_mat	pmtct_stat	tb_stat	vmmc_circ
kp_prev	pp_prev	tb_stat_pos	

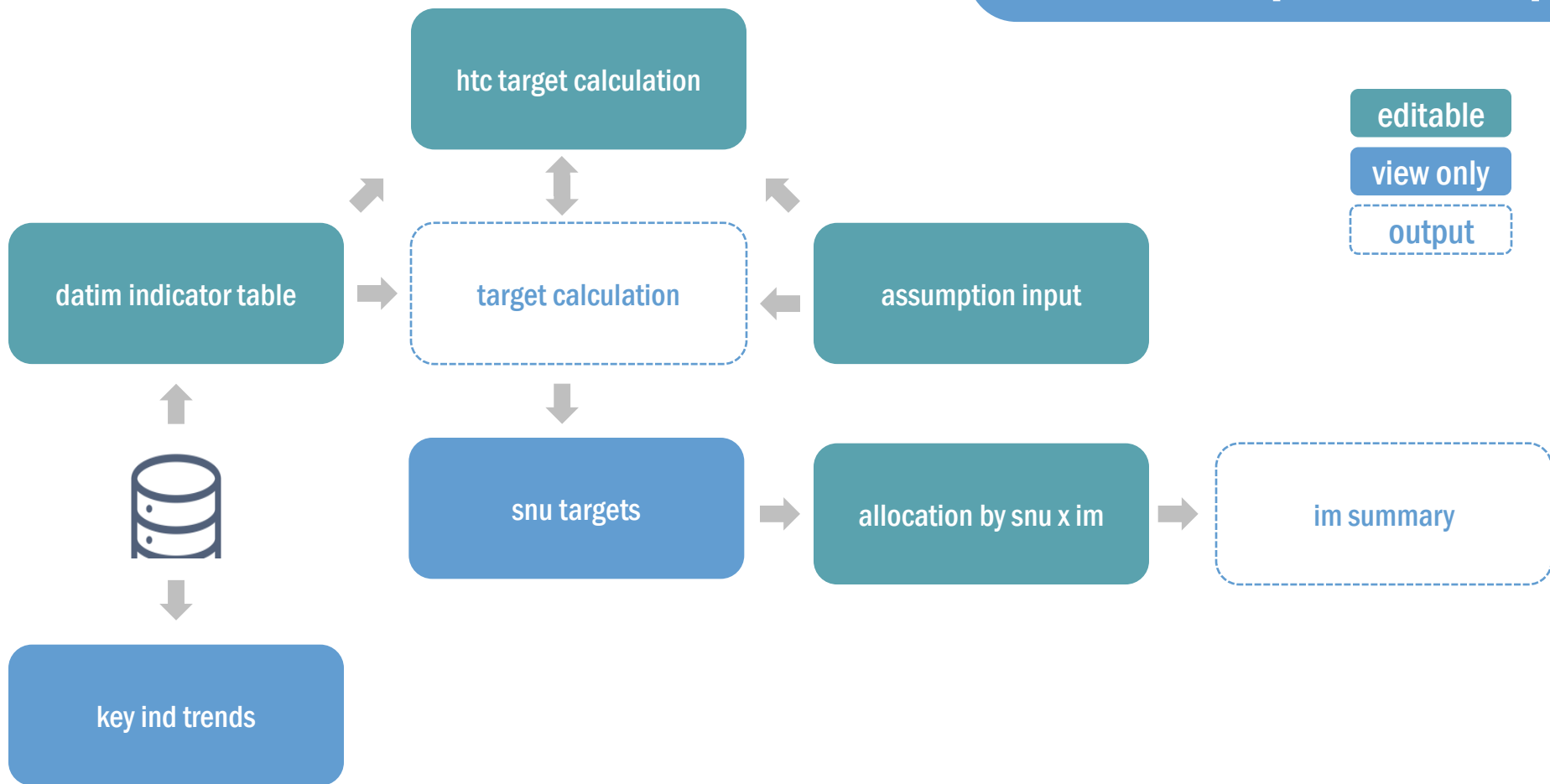
**108 total numerators and disaggregates targeted for**

## data pack process

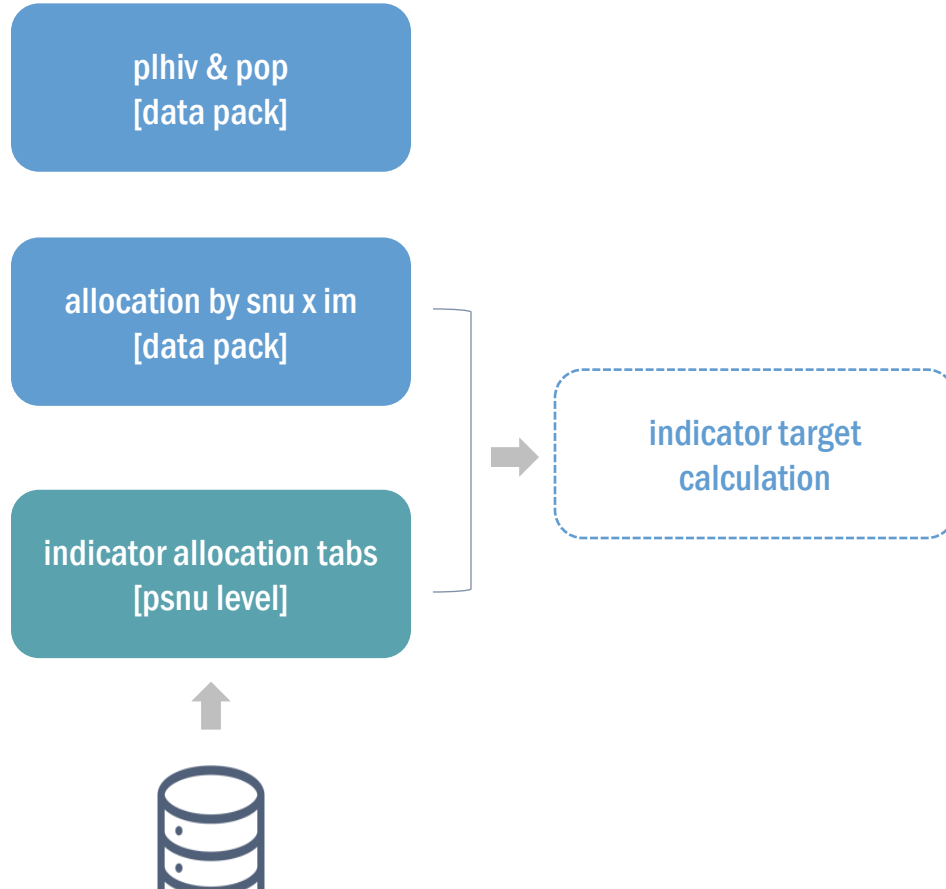




# data pack site map



# disagg tool site map



editable

view only

output

# indicator table

DATIM IND. TABLE		HTS	
Worksheet Navigation Links			
SNU1	snulist	FY17 HTS_TST	FY17 HTS_TST_POS
Priority	Total	hts_tst	hts_tst_pos
HTC	Homa Bay		
HTC: SDP	Nairobi County		

variable title

variable name

dataset created from fact view data

scripts [link]

variables [link]

# target calculation

TARGET CALCULATION		PEPFAR ART									
Worksheet Navigation Links		<div> <div>Source Legend</div> <div> c - calculation  a - Assumption Input tab  h - HTC Target Calc. tab  r - result, DATIM Ind. tab  t - target, DATIM Ind. tab </div> </div>									
		FY17 Results		FY18 Targets				FY19 target			
		FY17 TX_CURR	FY17 TX_NEW	FY18 TX_CURR Target	Anticipated achievement of FY18 TX_CURR target	FY18 Expected TX_CURR Ret	FY18 TX_NEW	TX_RET in cohort	Percent of eligible followed into cohort	FY19 TX_RET (Denom.)	
Host Ctry	Total										
ART											
PMTCT	Homa Bay	100,000	10,000	100,000	100%	100,000	10,000	100%	100%	100%	10,000
EID	Nairobi County	100,000	10,000	100,000	100%	100,000	10,000	100%	100%	100%	10,000
Peds	Kisumu	100,000	10,000	100,000	100%	100,000	10,000	100%	100%	100%	10,000
TB/HIV	Siaya	100,000	10,000	100,000	100%	100,000	10,000	100%	100%	100%	10,000
Entry Points	Migori	100,000	10,000	100,000	100%	100,000	10,000	100%	100%	100%	10,000

=INDEX(tx\_curr\_T, MATCH(snu,snulist,0))

indicator table

# allocation by snu x im

see next section for visual explanation

ALLOCATION  
BY IM

Worksheet  
Navigation  
Links

FY16 Distro

FY18 Alloc.

Dsnulist	D_priority	D_mech	D_type	D_tx_ret_D_f...	D_tx_ret_D_f...
Total				100%	2,935
Bungoma			TA		
Bungoma			DSD		
Bungoma			DSD	71%	2,087
Bungoma			TA		
Bungoma			DSD	15%	434
Bungoma			TA		
Bungoma			DSD	0%	12
Bungoma			DSD		
Bungoma			DSD	14%	402
Bungoma			DSD		

FY17 APR Distrib FY19 Target Allo






every snu will sum to  
100%

mech share of  
snu fy17 total

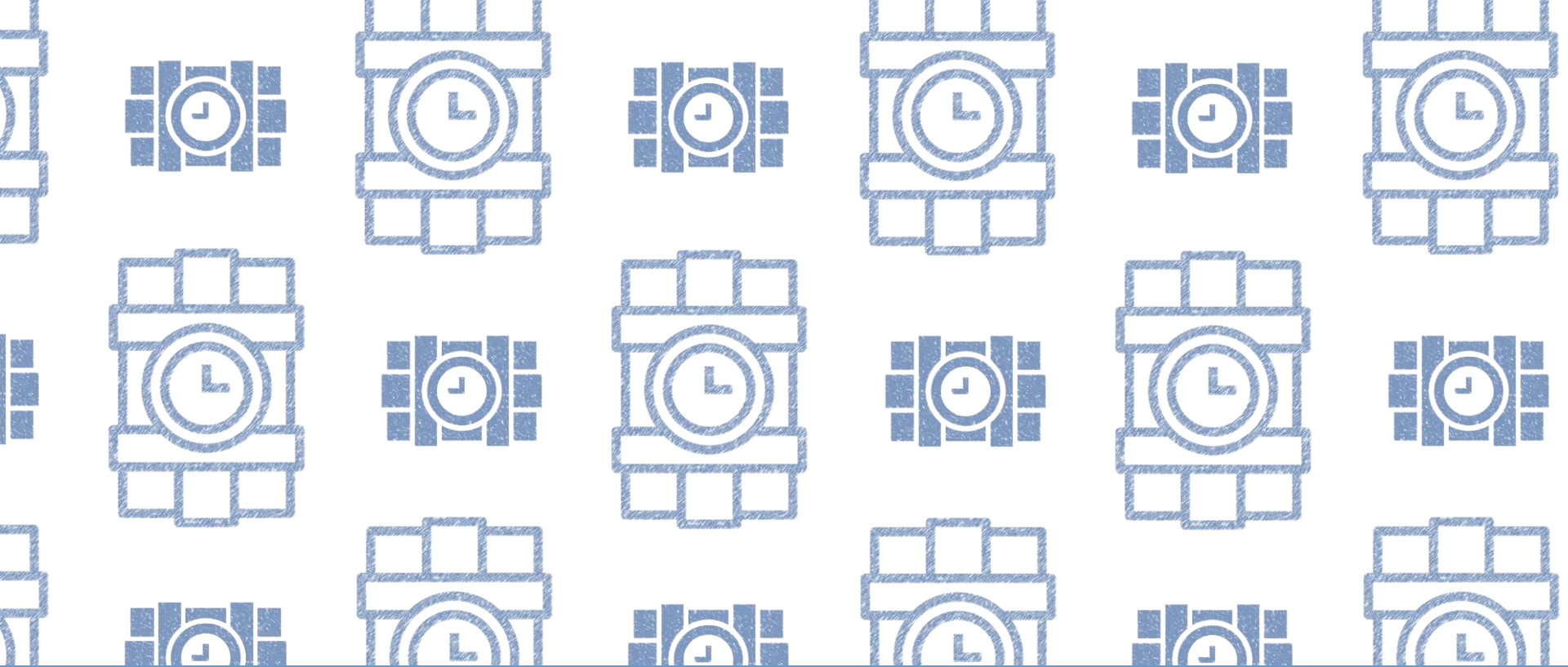
= snu fy19 target  
x im share

positives identify  
in snu

## hts calculation

	share of tests (sum to 100%)	positivity	total tests
			
			
			
			
			

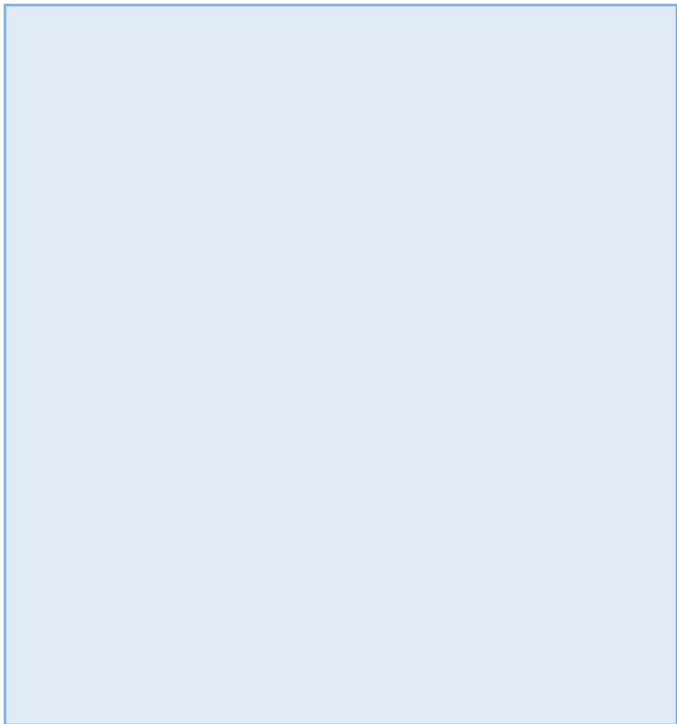
← positives identify  
x modality psnu share  
÷ positivity



im allocation

pepfarlandia

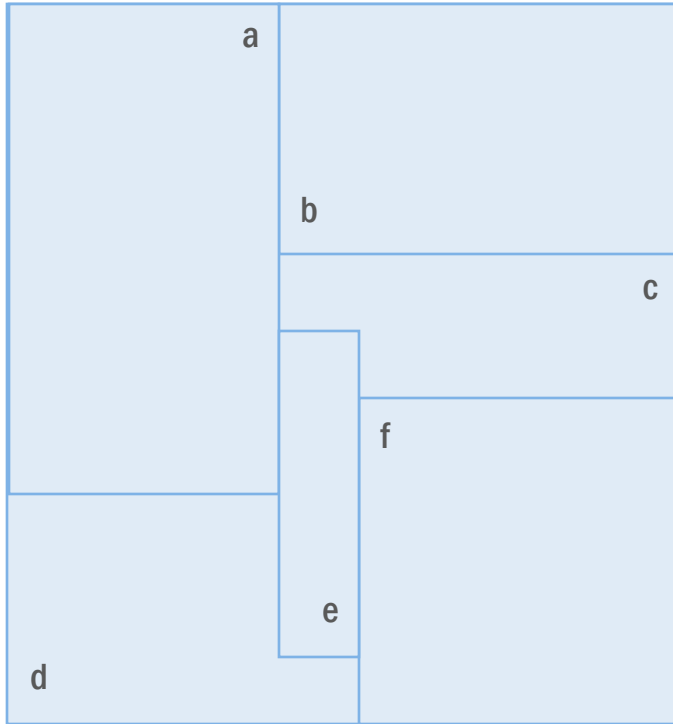
im allocation



**let's assume we're working in pepfarlandia**



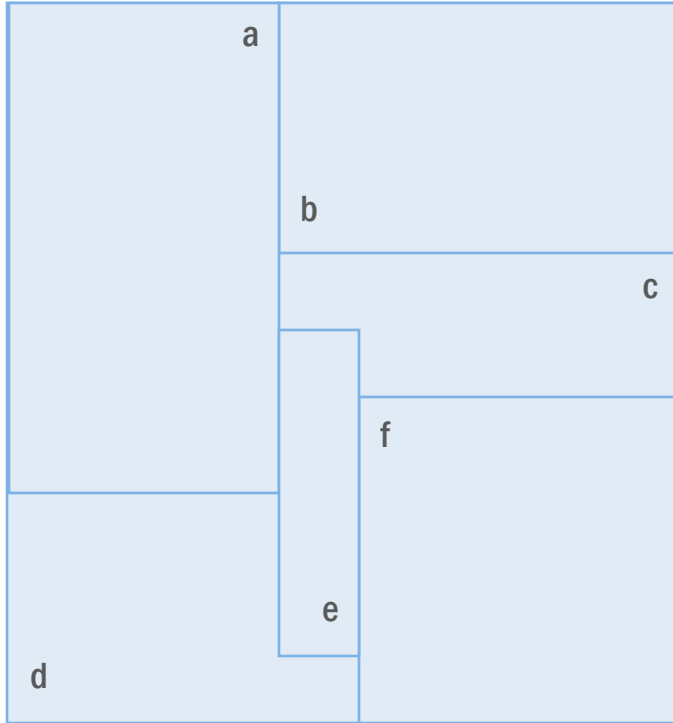
pepfarlandia



**im allocation**

**which has six districts**

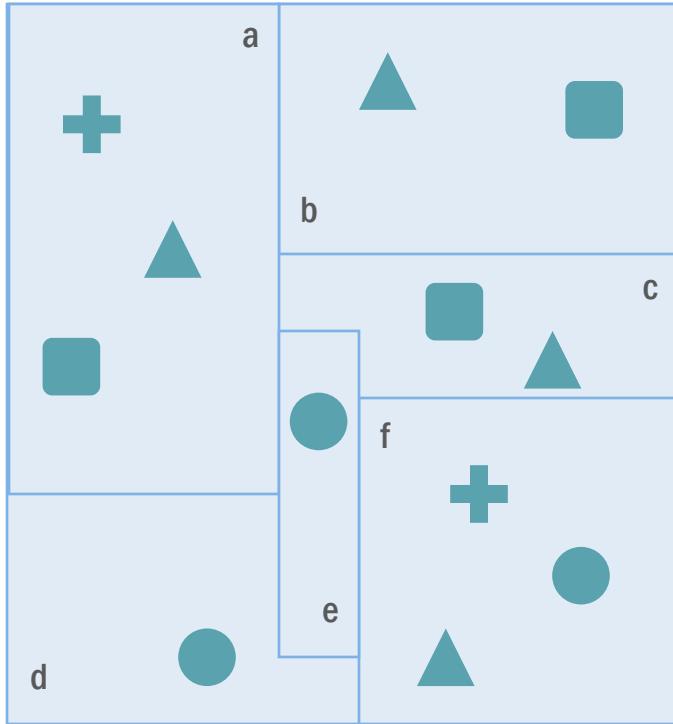
pepfarlandia



**im allocation**

**and four distinct IMs**

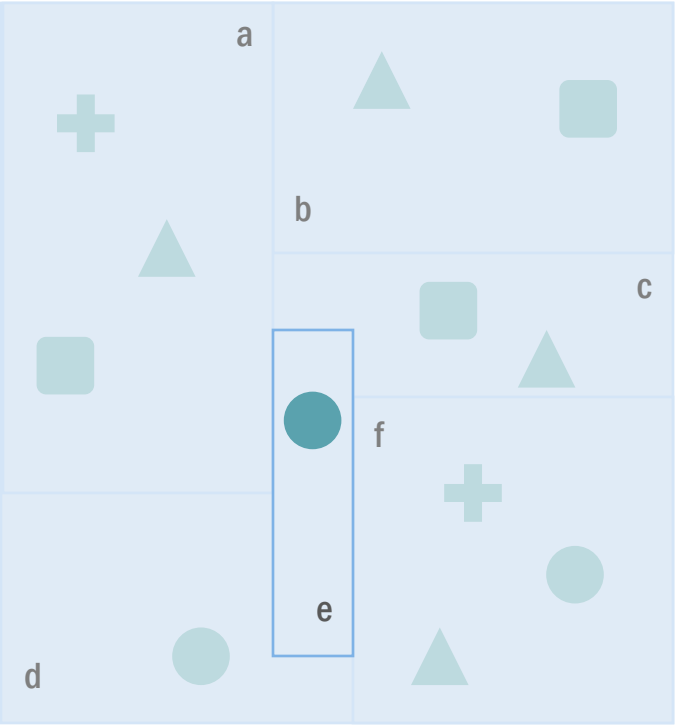
pepfarlandia



im allocation


**working across the country**

pepfarlandia



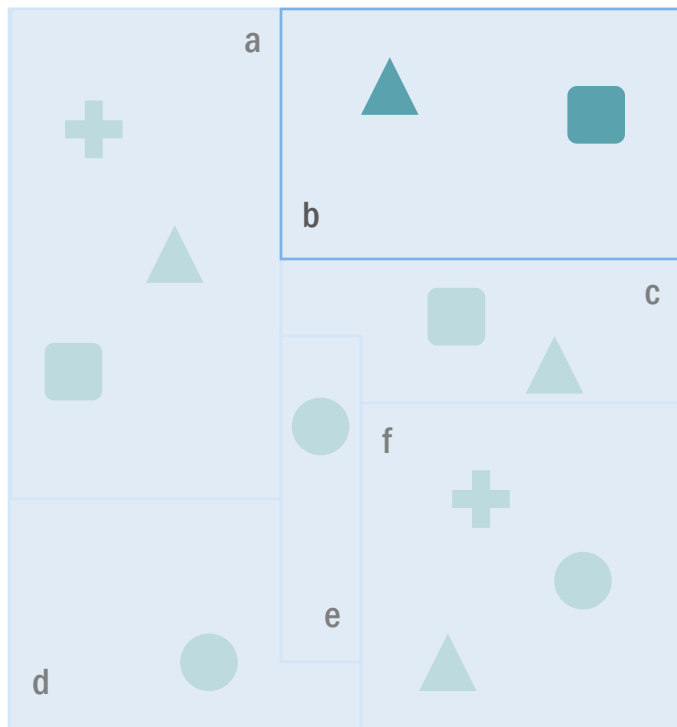
im allocation

district e

snu target	im	results distribution	im target
200 tests		100%	200 tests
		100%	200 tests



it's easy to figure things out with one mechanism in a snu

pepfarlandia



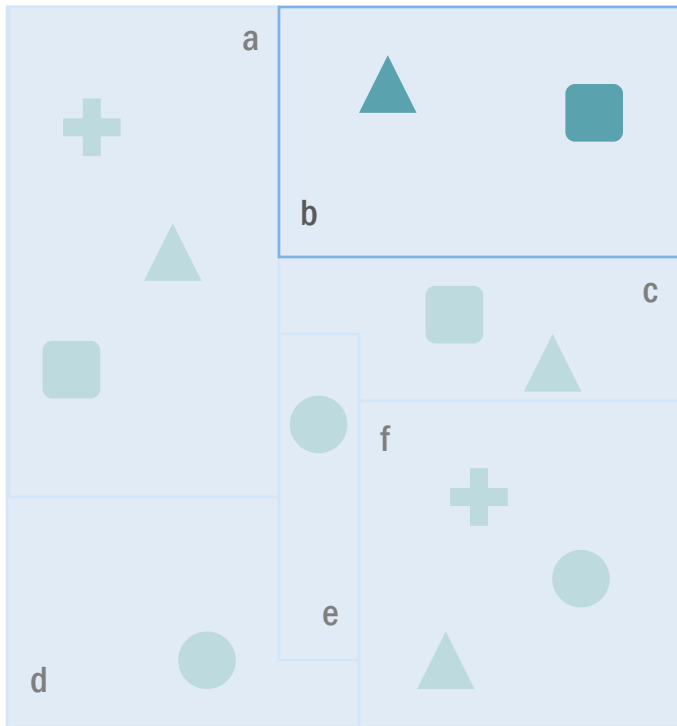
im allocation

district b

snu target	im	results distribution	im target
800 tests		70%	560 tests
		30%	240 tests
		100%	800 tests




but is more challenging with multiple mechanisms

pepfarlandia

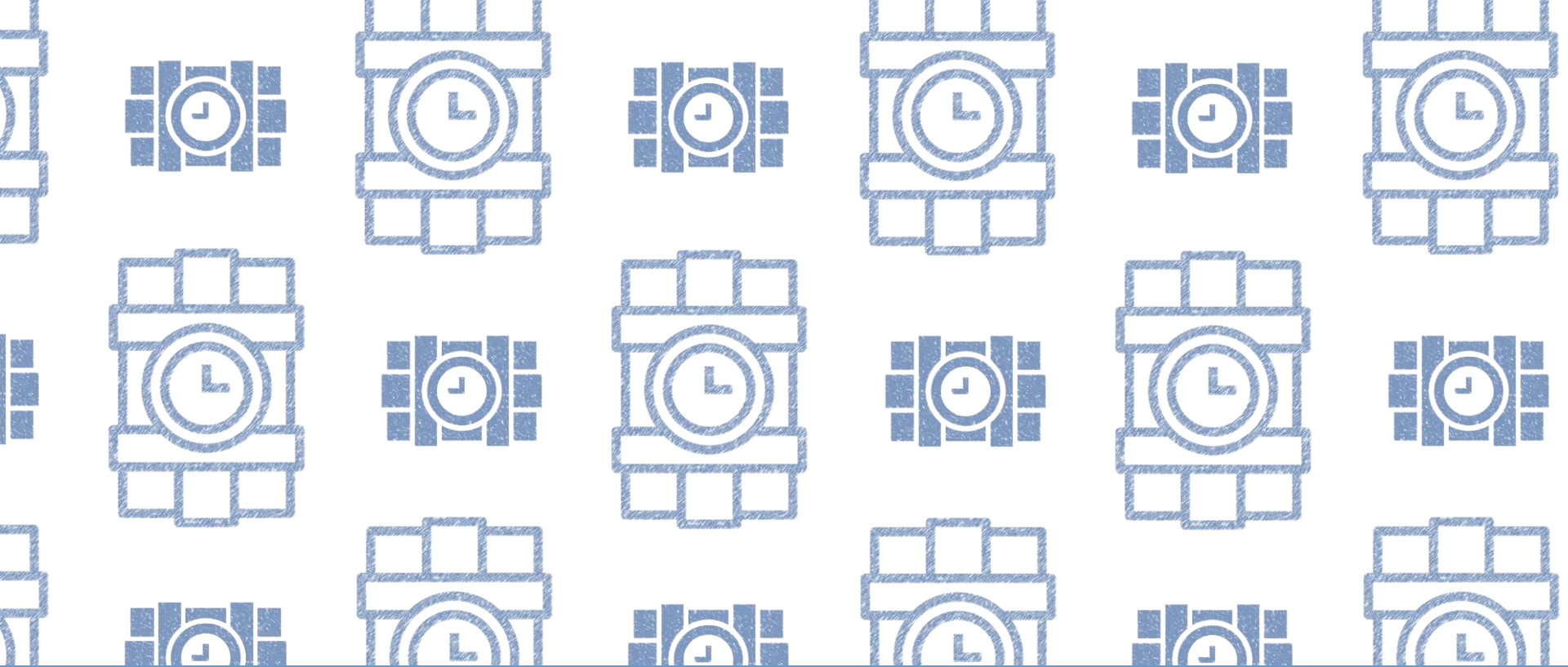


im allocation

district b

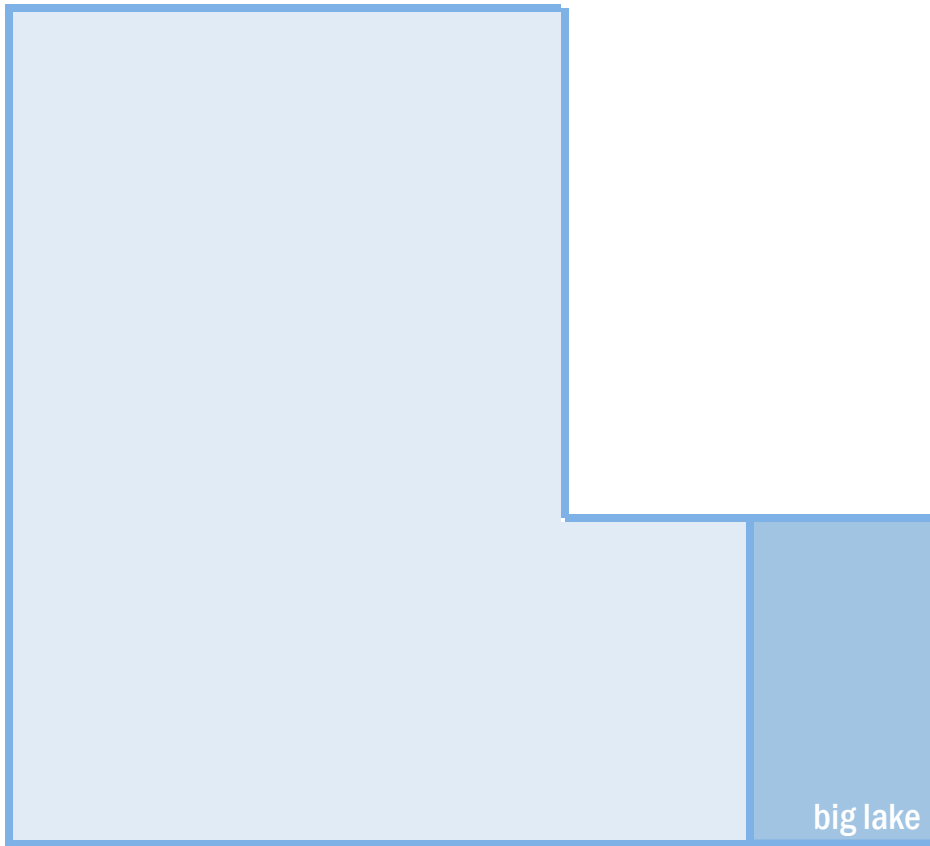
snu target	im	results distribution	im target
800 tests		70%	560 tests
		40%	320 tests
		-10%	-80 tests
		100%	800 tests

and more challenging with dedups



**disagg allocation**

pepfarlandia



pepfarlandia



pepfarlandia

west

capital

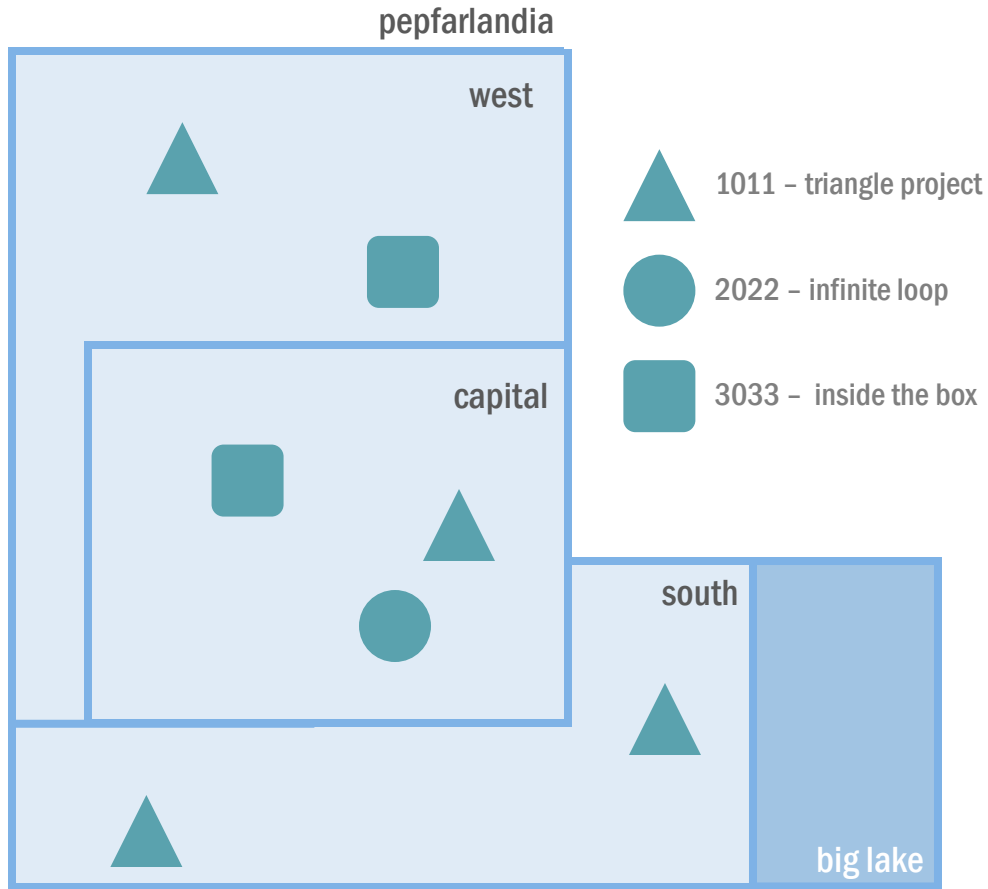
south

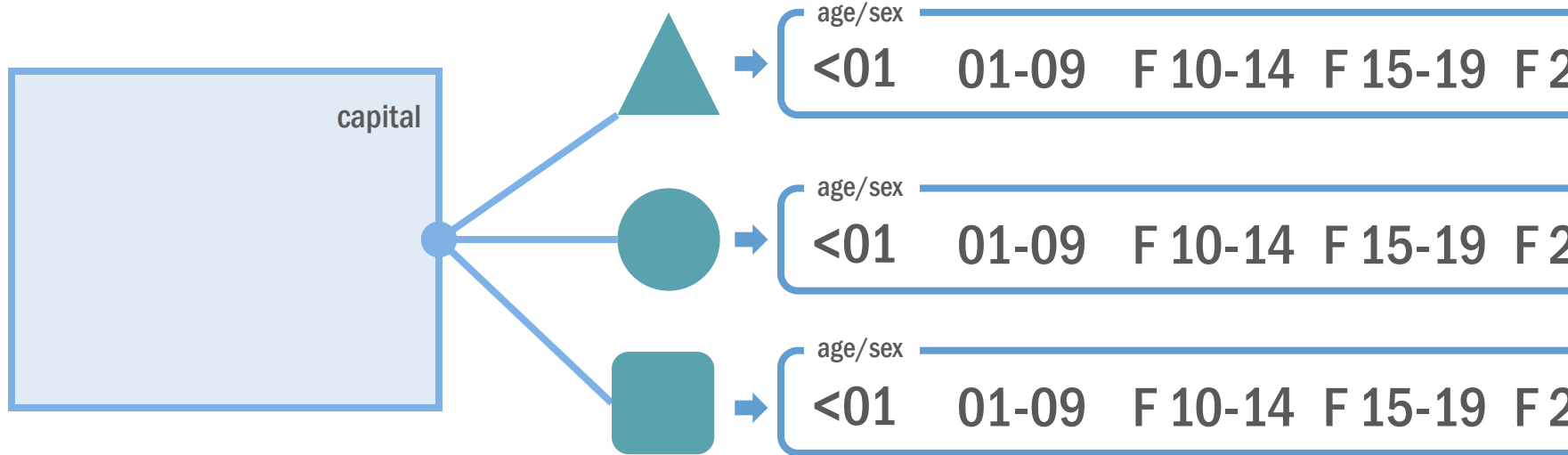
big lake

## dp targets at psnu level

	plhiv	...	fy19 tx_new	...
capital	6,000	...	1,000	...
west	3,000	...	400	...
south	4,000	...	600	...

# three partners





**pnsu x mechanism x indicator x type x disagg x categoryoptioncombo**

indicator



indicator

pnsu mechanism type

## disagg target table setup

indicator

disagg  
categoryoption

pnsu mechanism type

%

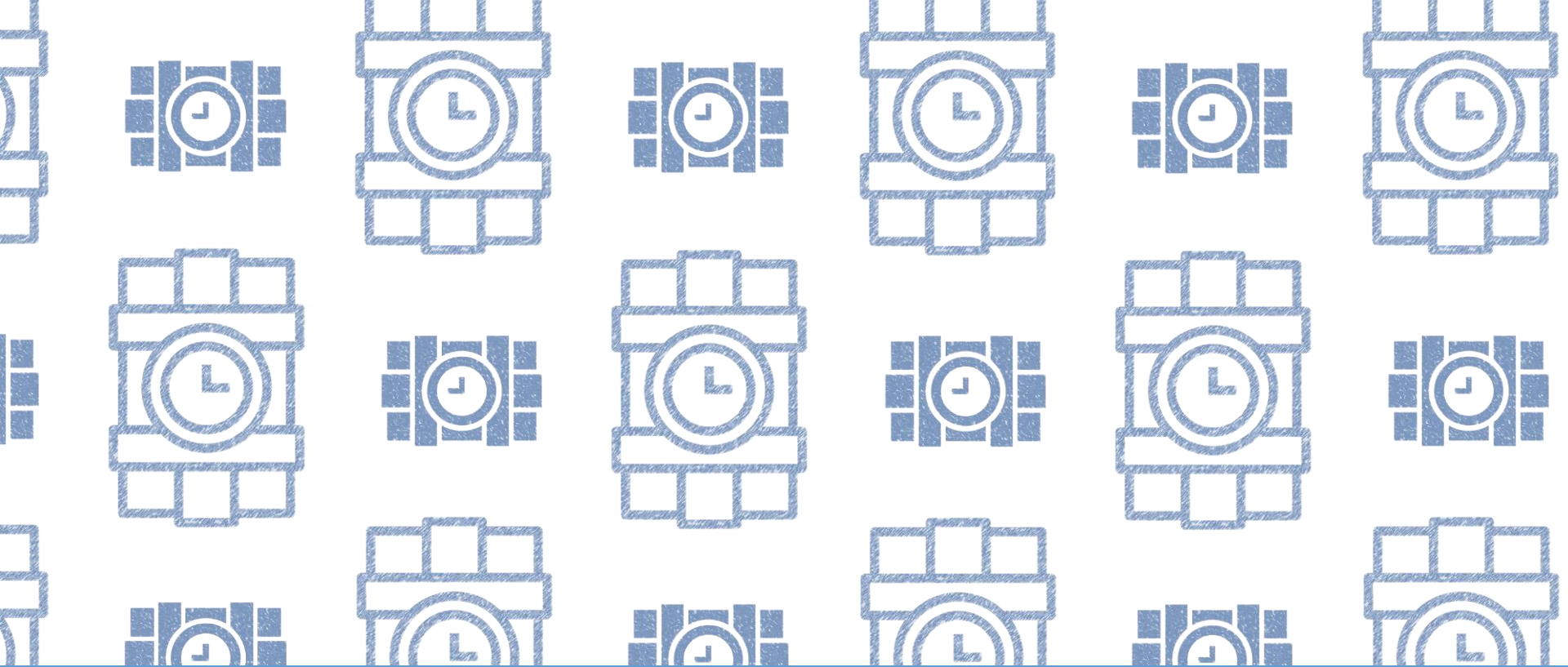
disagg target table setup

indicator			fy17 distro disagg categoryoption	fy19 target disagg categoryoption
pnsu	mechanism	type	%	#

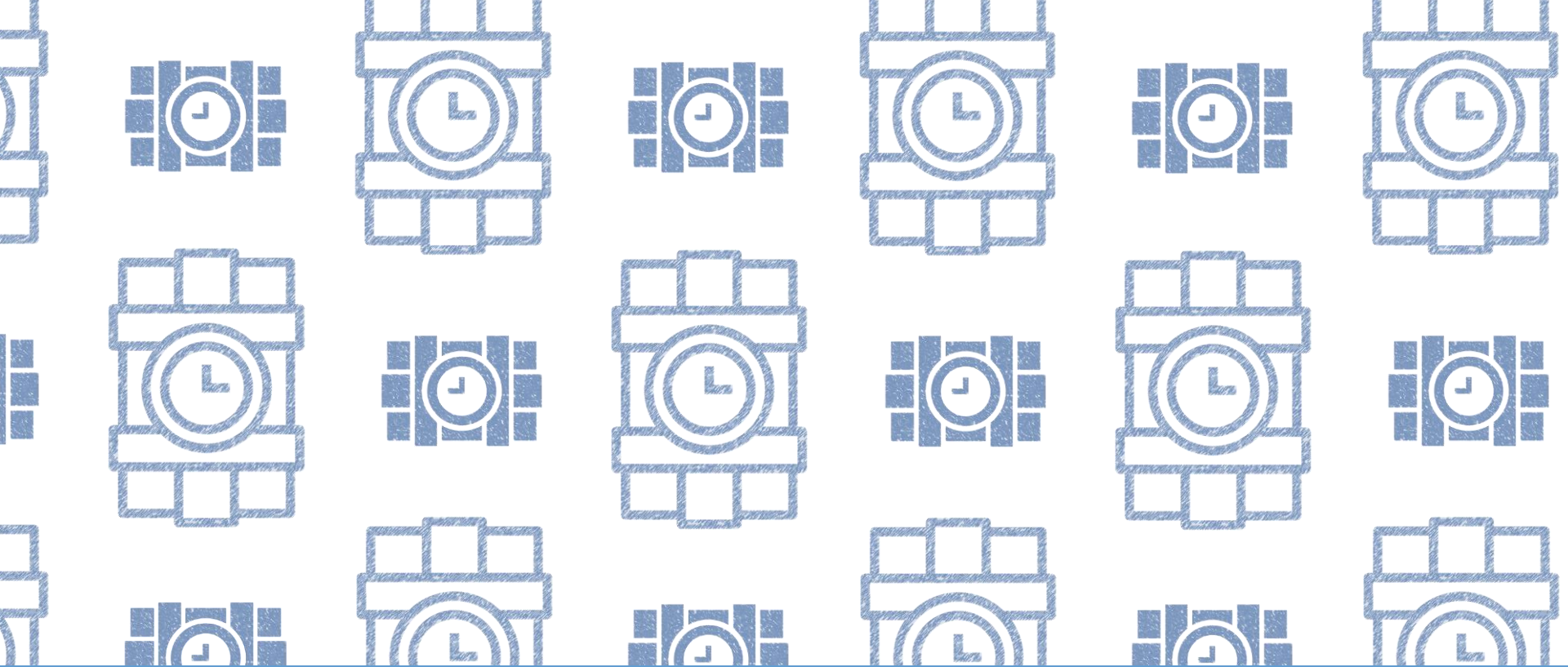


disagg target table setup

indicator			fy17 distro disagg categoryoption	fy19 dp numerator	fy19 target disagg categoryoption
pnsu	mechanism	type	%	#	= % x #

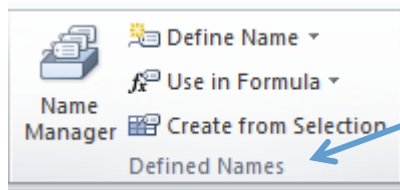
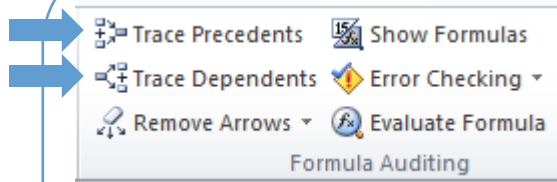


**ad hoc walk through**



## appendix: error checking features

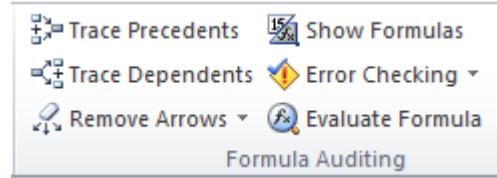
formulas



hts_tst		fx		=SUBTOTAL(109, H6:H54)	
	A	B	C	H	I
1	DATIM IND. TABLE			HTS	
2					
3					
4					
5	SNU1	Total			
6	Priority				
7	HTC	Homa Bay			
8	HTC-SDP	Naivasha County			

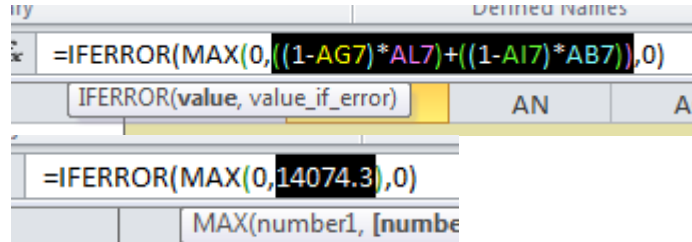
# evaluate formula

formulas



F9

key with selection



Esc

key to exit

## check data

DATIM IND. TABLE		PMTCT
Worksheet Navigation Links		FY17 PM PMTCT_ARV AI
	snulist	pmtct art pm
SNU1	Total	
Priority		
HTC	Homa Bay	
HTC: SDP	Nairobi County	
Key Pop	Kisumu	
OVC	Siaya	
PLHIV	Migori	
Pop	Kakamega	
PMTCT	Mombasa	
Priority Pop	Nakuru	
TB	Kiambu	

```
> fv %>%
+   filter(operatingunit == "Kenya", indicator == "PMTCT_ART",
+         disaggregate=="Total Numerator") %>%
+   group_by(psnu) %>%
+   summarise_at(vars(fy2017apr), funs(sum(., na.rm = TRUE)))
# A tibble: 48 x 2
      psnu fy2017apr
  <chr>      <int>
1 _Military Kenya
2 Baringo
3 Bomet
4 Bungoma
5 Busia
6 Elgeyo Marakwet
7 Embu
8 Garissa
9 Homa Bay
10 Isiolo
# ... with 38 more rows
```

see list of how  
variables were  
created [\[link\]](#)

## main formulas - max

`=IFERROR(MAX(0,((1-AG7)*AL7)+((1-AI7)*AB7)),0)`

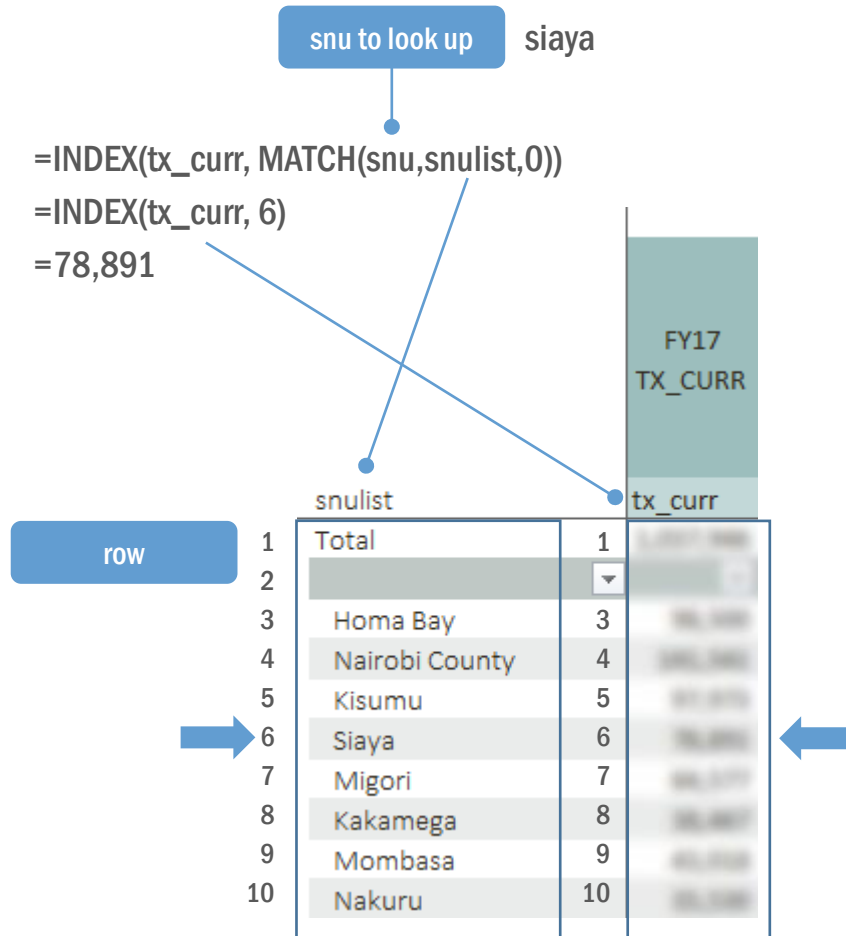
`=IFERROR(MAX(0, value ),0)`

max allows us to  
ensure values are not  
negative

`=IFERROR( value ,0)`

iferror changes #NA to  
a 0 or blank

## main formulas – index-match



index-match allows us to find a value in a table based on the row and/or column reference.

match here is finding what row matches the selected snu. index then looks up the value in the 6<sup>th</sup> row of the tx\_curr reference table





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