cop 18 data pack

si advisor retreat | jan 8

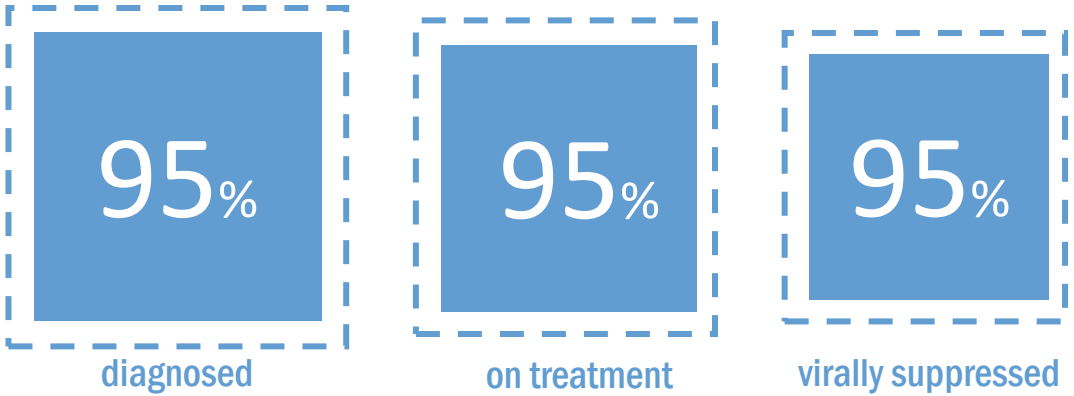
outline

- 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



timeline

Jan 10 – data pack release

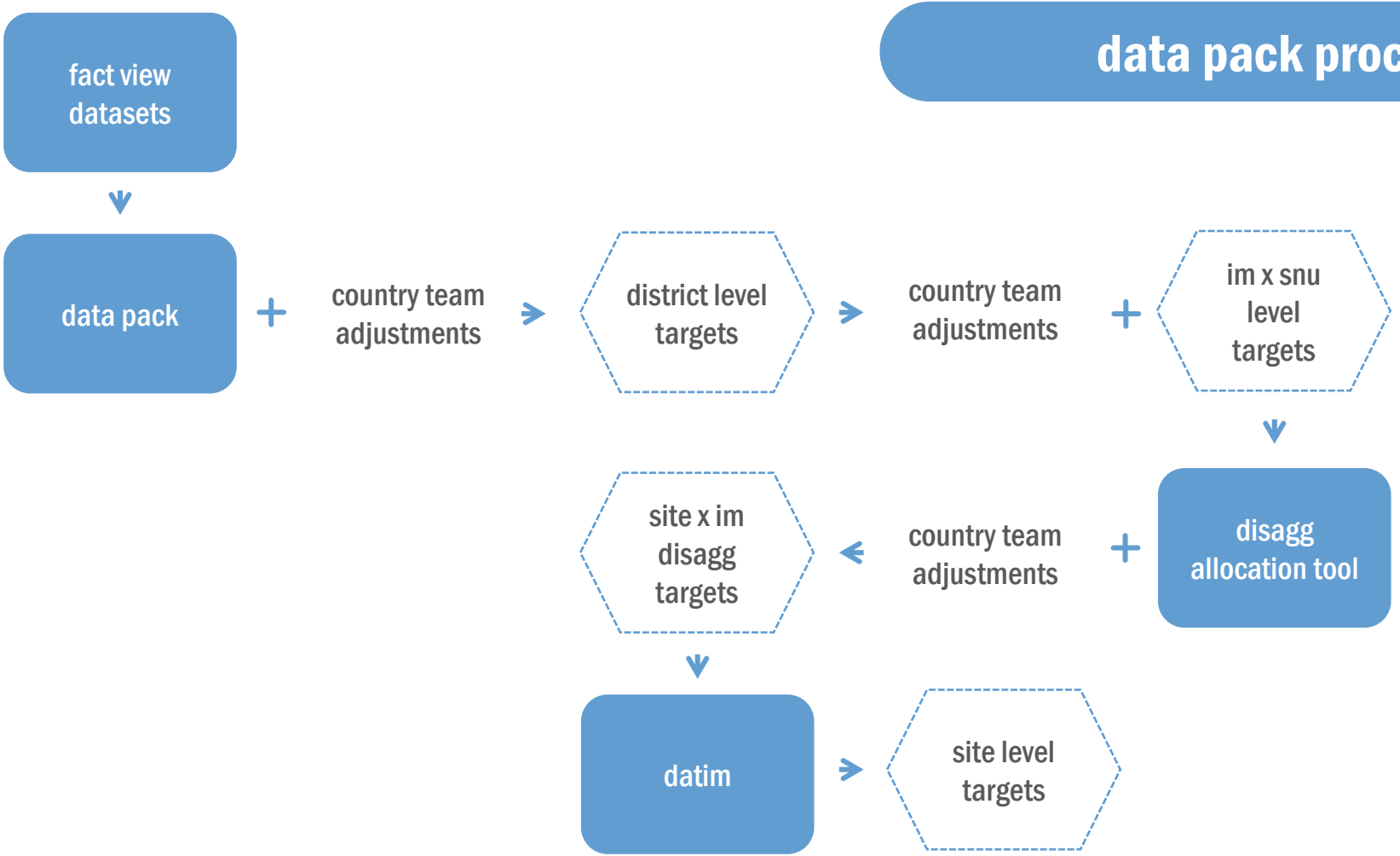
TBD – disagg tool released

data pack structure

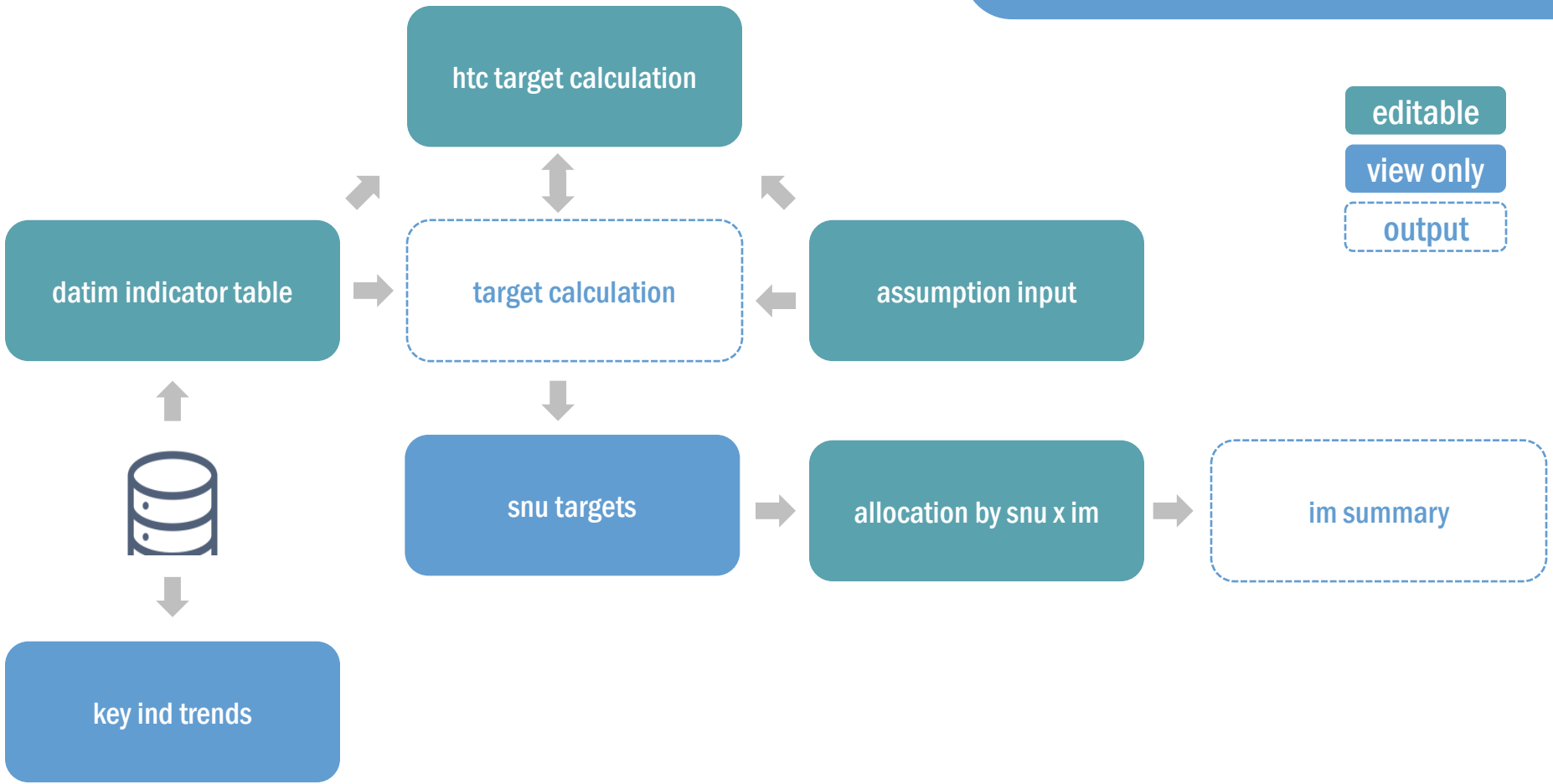
gend_gbv	ovc_hivstat	prep_new	tx_curr
hts_self	ovc_serv	prep_new	tx_new
hts_tst	pmtct_art	tb_art	tx_pvls
hts_tst_pos	pmtct_eid	tb_prev	tx_ret
kp_mat	pmtct_stat	tb_stat	vmmc_circ
kp_prev	pp_prev	tb_stat_pos	

108 total numerators and disaggregates targeted for

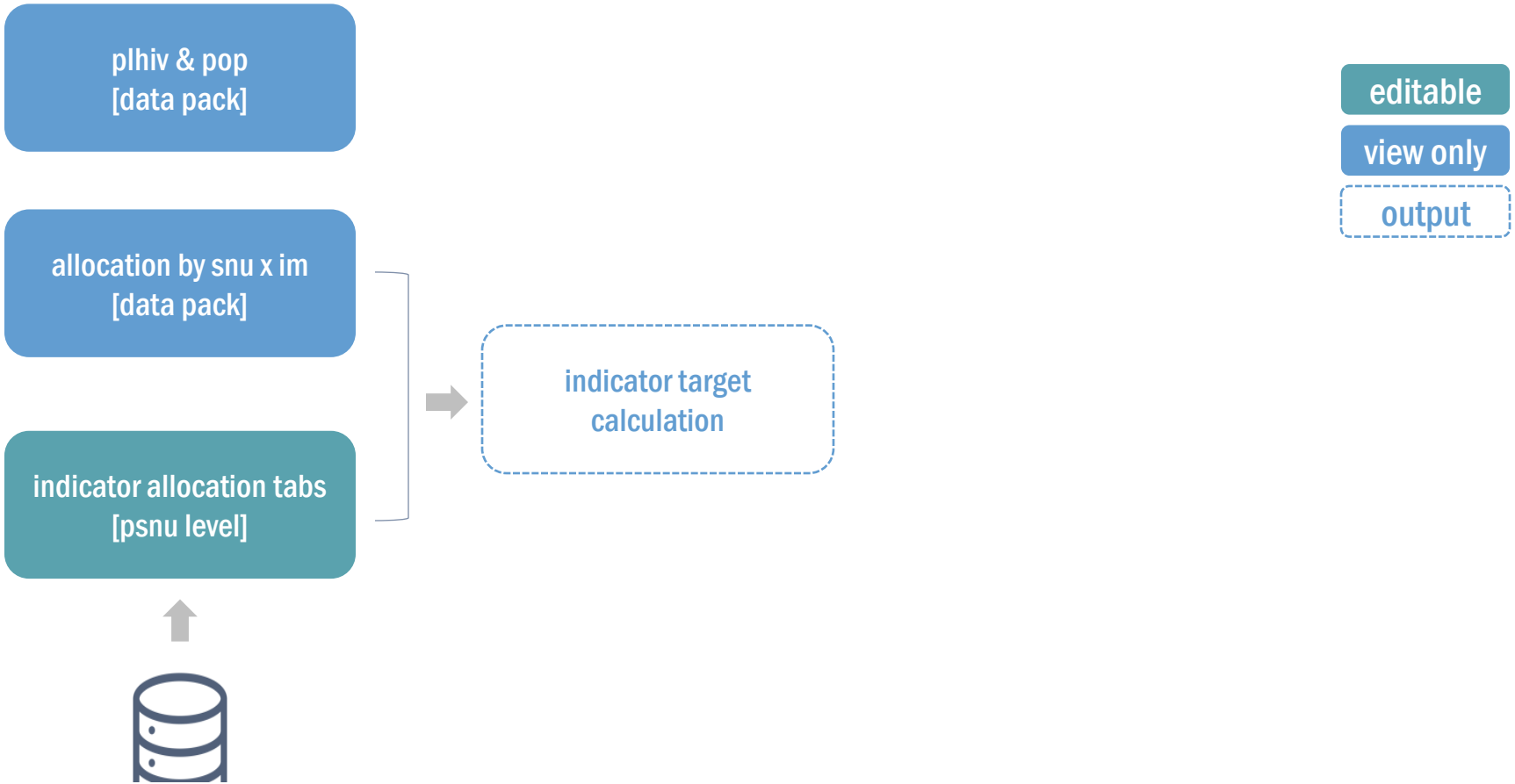
data pack process



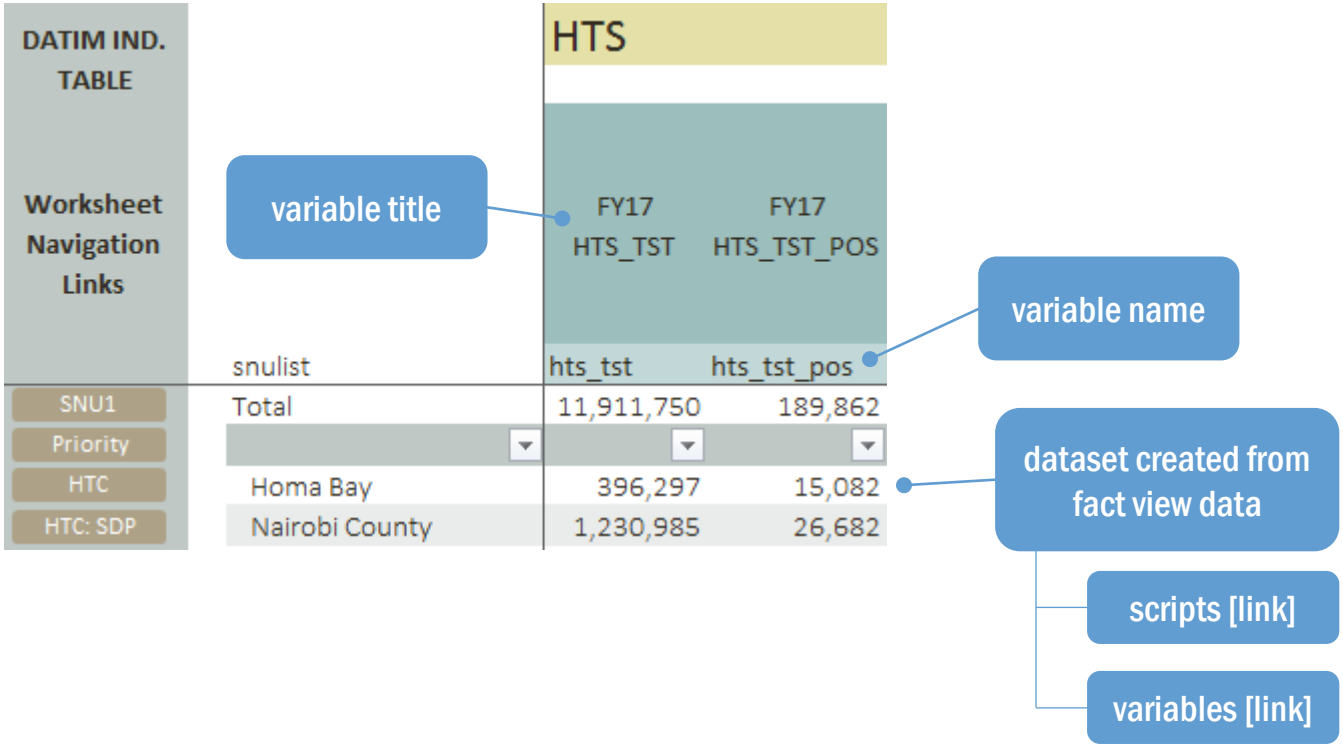
data pack site map



disagg tool site map



indicator table



target calculation

TARGET CALCULATION

Worksheet Navigation Links

Source Legend
c - calculation
a - Assumption Input tab
h - HTC Target Calc. tab
r - result, DATIM Ind. tab
t - target, DATIM Ind. tab

PEPFAR ART

		r	r	t	a	tx_curr_exp	t	c	a	tx_ret_D_fy19
		FY17 Results		**FY18 Targets**						
		FY17 TX_CURR	FY17 TX_NEW	FY18 TX_CURR Target	Anticipated achievement of FY18 TX_CURR target	FY18 Expected TX_C... Re...	FY18 TX_NEW ...V)	TX_RET in cohort	...rcent of eligible followed into cohort	**FY19 TX_RET (Denom.)**
Host Ctry	Total	1,037,946	149,580	1,314,707		1,314,707	274,004	274,004		274,004
ART										
PMTCT	Homa Bay	98,500	12,410	140,743	100%	140,743	37,969	37,969	100%	37,969
EID	Nairobi County	141,541	19,165	161,999	100%	161,999	36,916	36,916	100%	36,916
Peds	Kisumu	97,973	13,130	124,563	100%	124,563	29,337	29,337	100%	29,337
TB/HIV	Siaya	78,891	11,009	115,322	100%	115,322	36,224	36,224	100%	36,224
Entry Points	Migori	64,577	8,848	79,881	100%	79,881	12,794	12,794	100%	12,794

fy19 target

from assumptions tab

=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.

mech share of snu fy17 total

every snu will sum to 100%

= snu fy19 target x im share

				FY17 APR Distrib		FY19 Target Allo	
				TX_RET (Denom.)	...	TX_RET (Denom.)	...
Dsnulist	D_priority	D_mech	D_type	D_tx_ret_D_r	...	D_tx_ret_D_f	...
Total				100%		2,935	
Bungoma	ScaleUp Sat	0	TA				
Bungoma	ScaleUp Sat	13354	DSD				
Bungoma	ScaleUp Sat	13588	DSD	71%		2,087	
Bungoma	ScaleUp Sat	13868	TA				
Bungoma	ScaleUp Sat	14012	DSD	15%		434	
Bungoma	ScaleUp Sat	14012	TA				
Bungoma	ScaleUp Sat	16687	DSD	0%		12	
Bungoma	ScaleUp Sat	17944	DSD				
Bungoma	ScaleUp Sat	18206	DSD	14%		402	
Bungoma	ScaleUp Sat	18284	DSD				

hts calculation

positives identify in snu

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

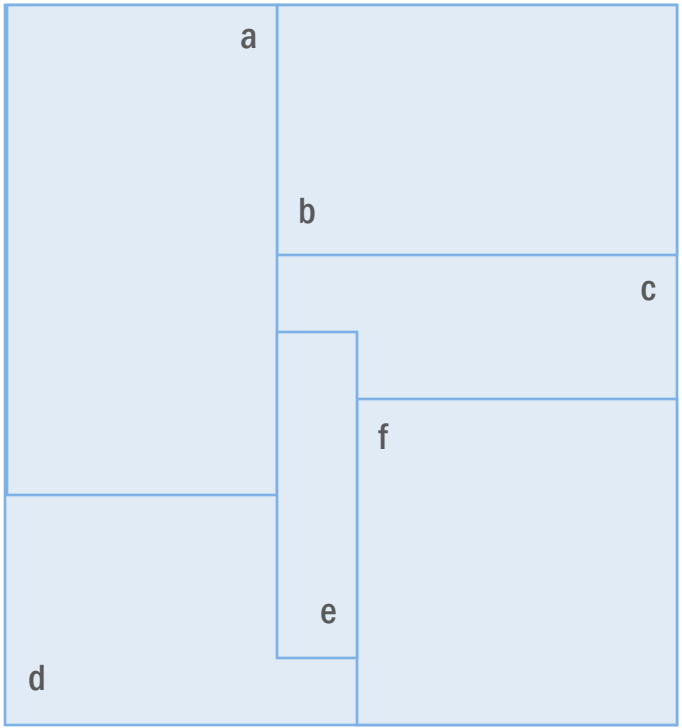
positives identify
x modality psnu share
÷ positivity

im allocation

pepfarlandia

let’s assume we’re working in pepfarlandia

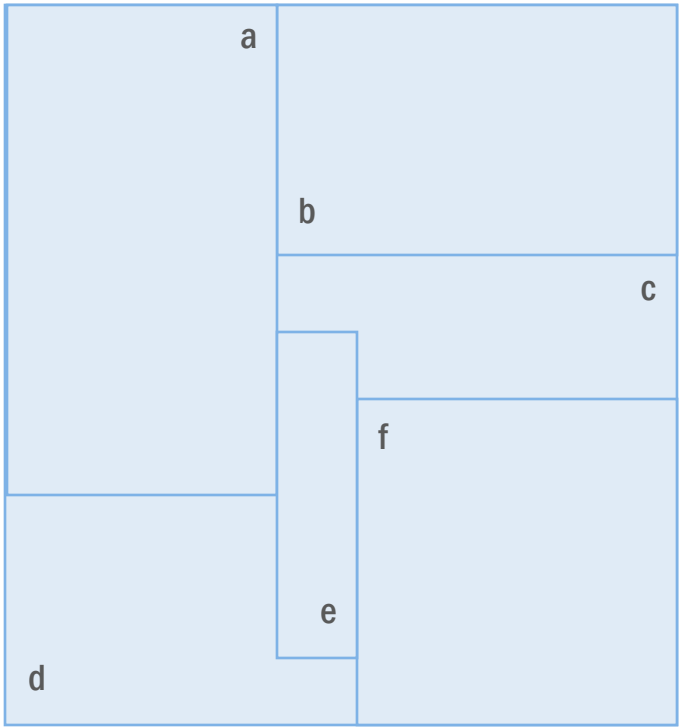
pepfarlandia



im allocation

which has six districts

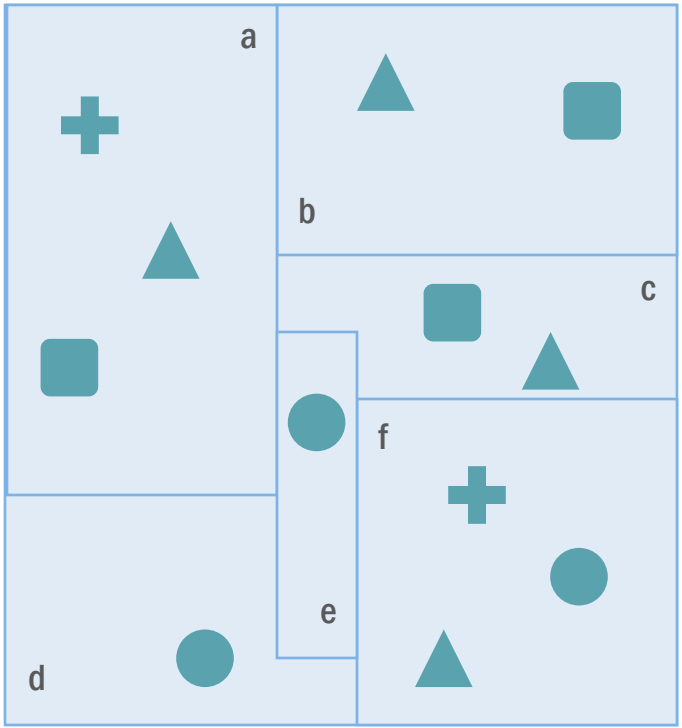
pepfarlandia



im allocation

and four distinct IMs

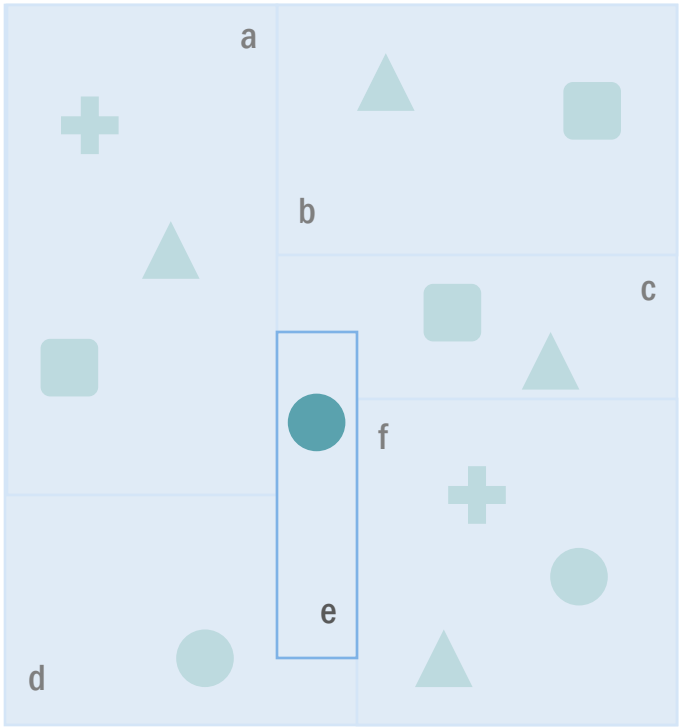
pepfarlandia



working across the country

im allocation

pepfarlandia



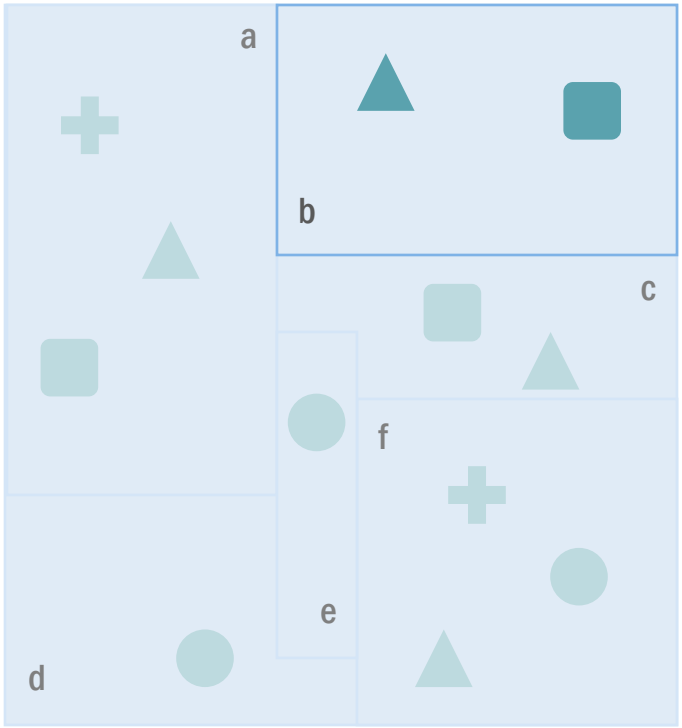
district e

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

im allocation

pepfarlandia



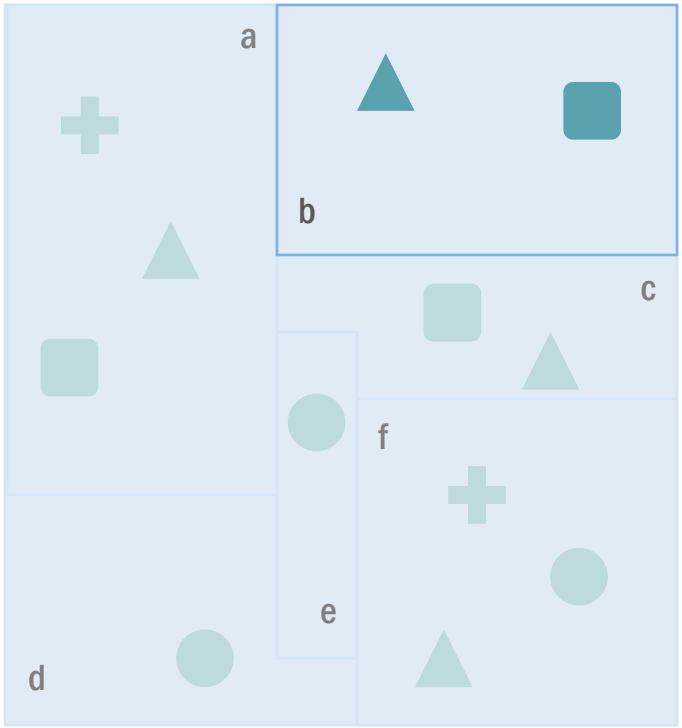
district b

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

im allocation

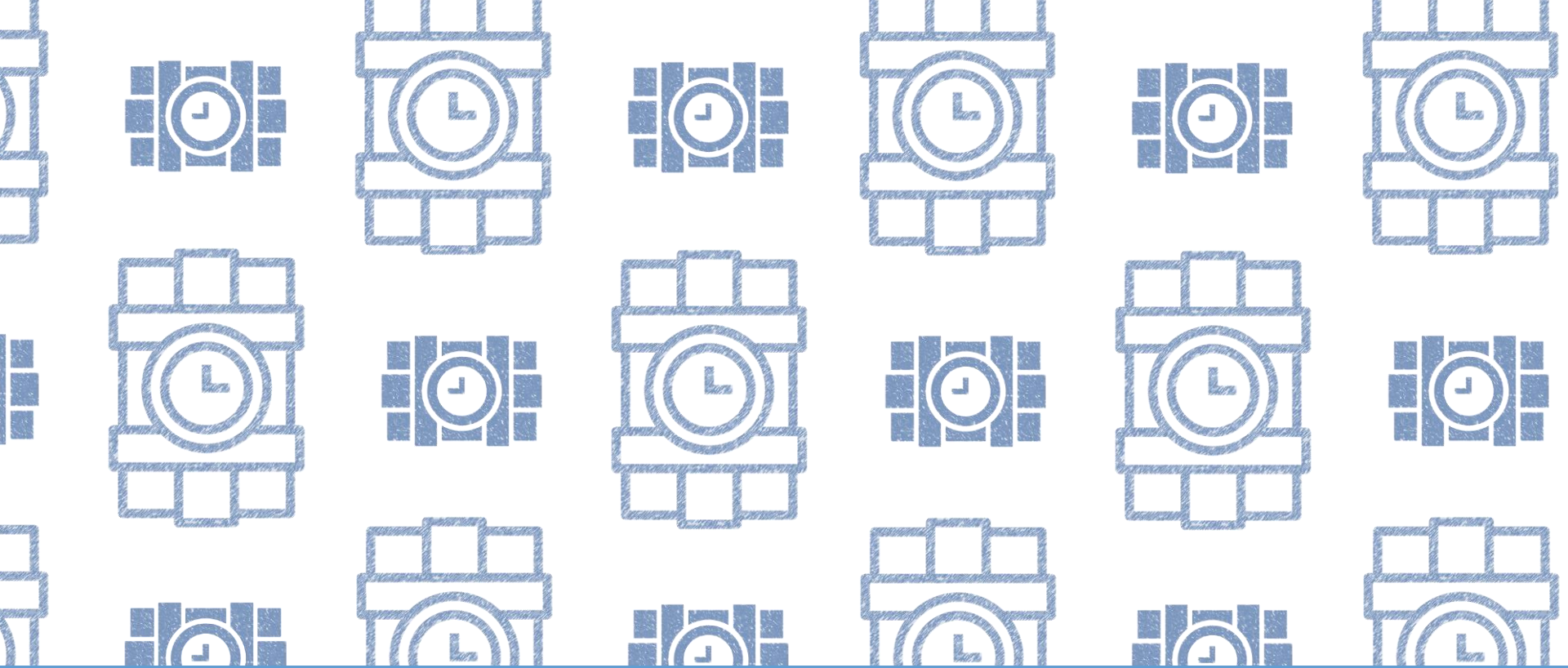
pepfarlandia



district b

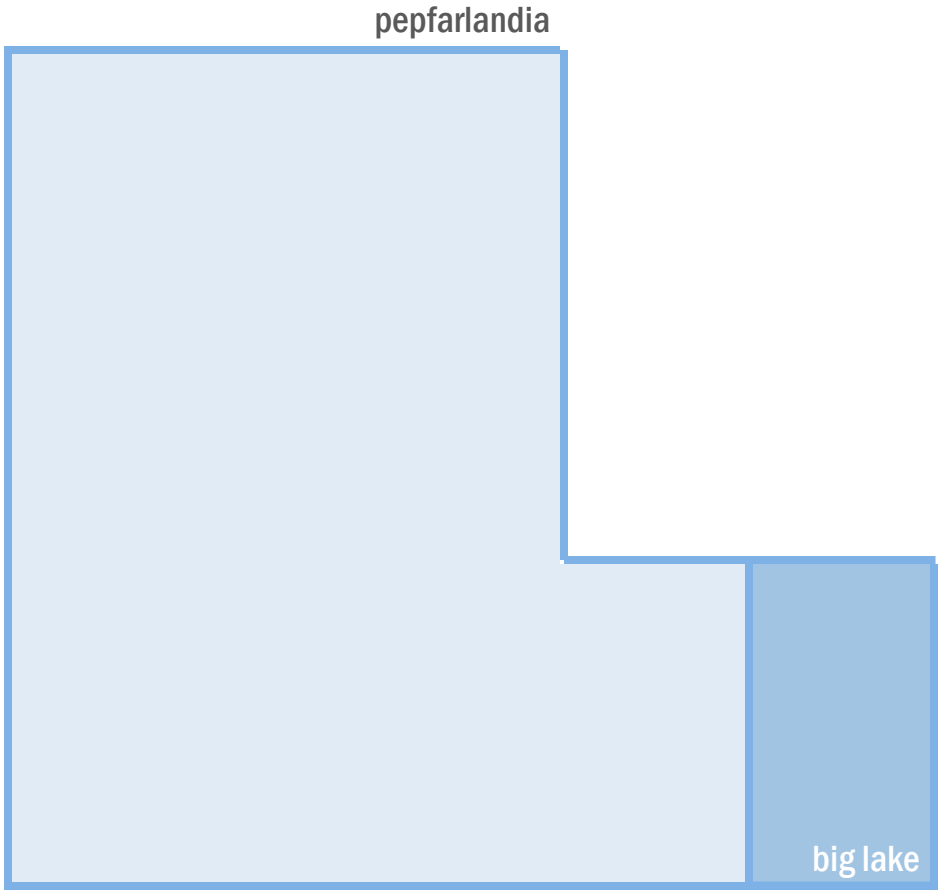
snu target	im	results distribution	im target
800 tests	▲	70%	560 tests
	■	40%	320 tests
	✖	-10%	-80 tests
		100%	800 tests

and more challenging with dedups

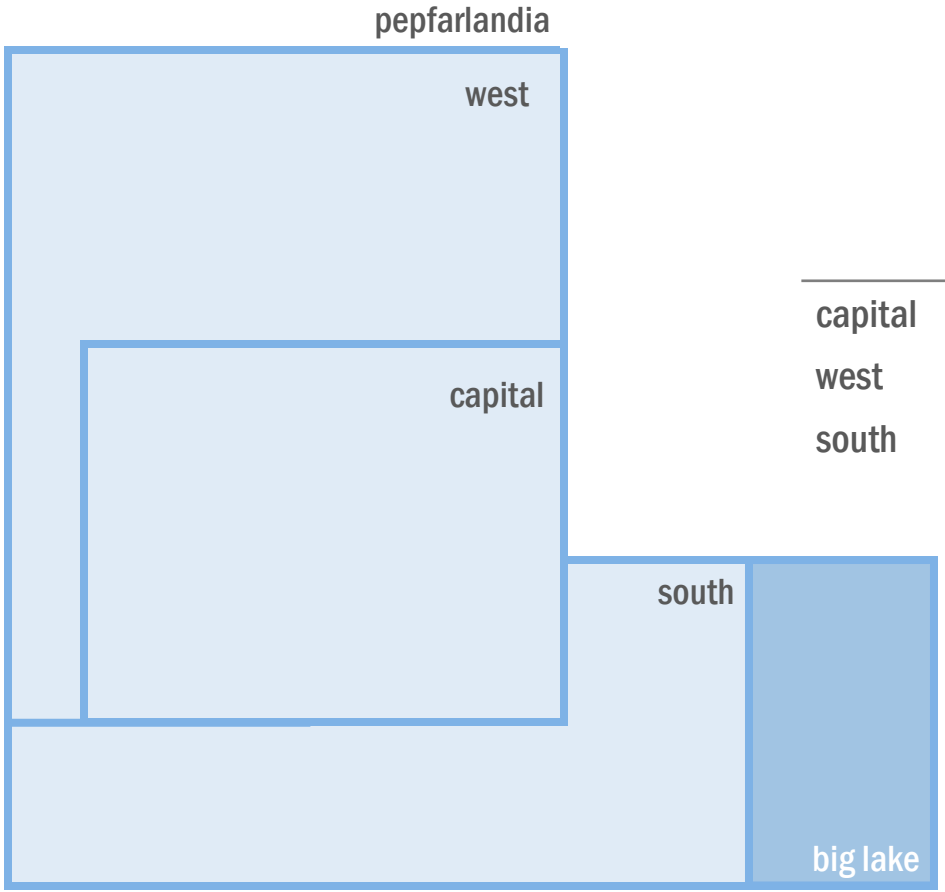


disagg allocation

pepfarlandia

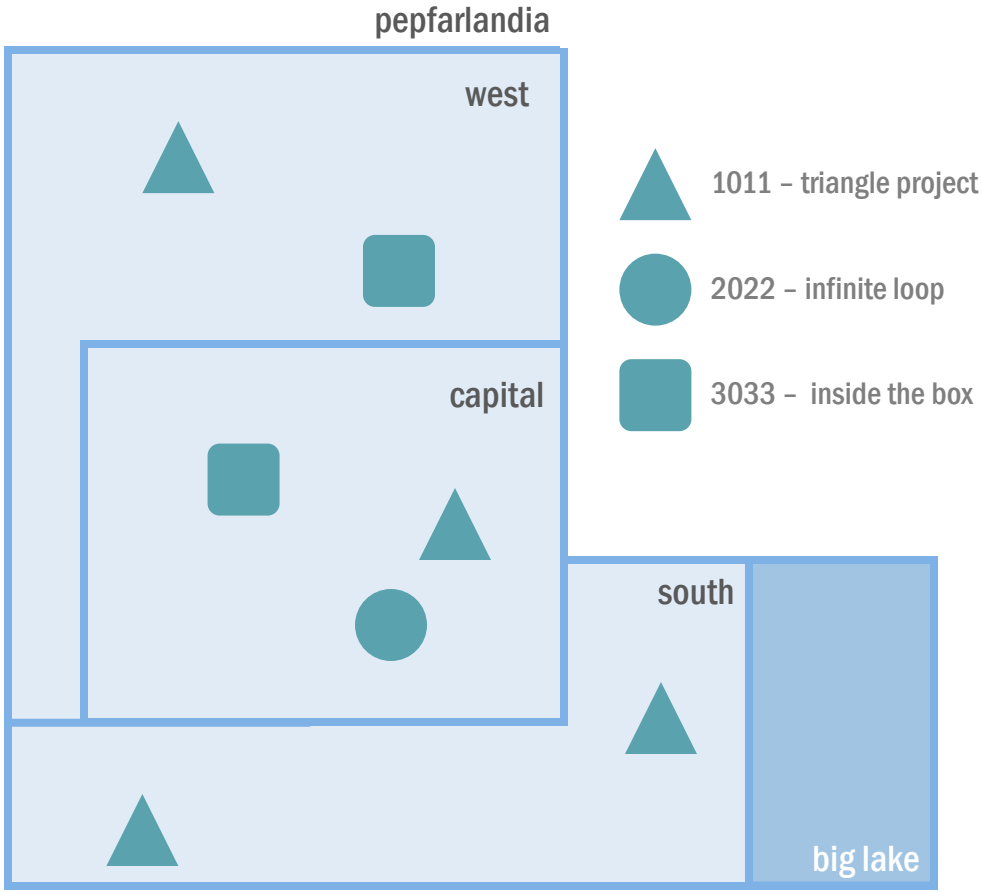


dp targets at psnu level

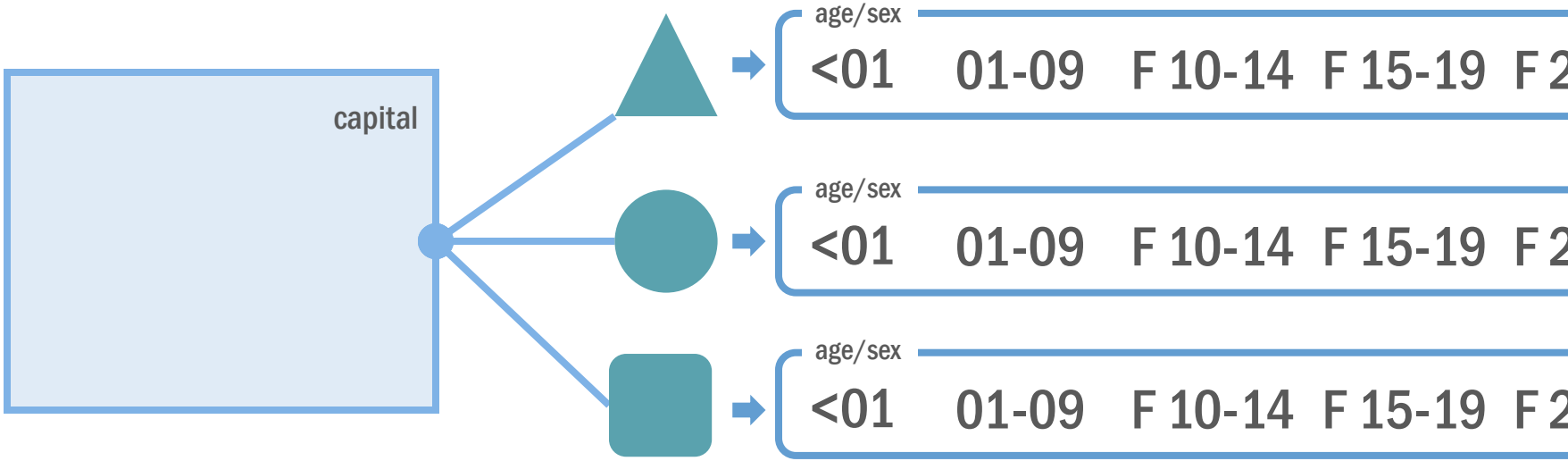


	plhiv	...	fy19 tx_new	...
capital	6,000	...	1,000	...
west	3,000	...	400	...
south	4,000	...	600	...

three partners



granularity



variables at play

pnsu x mechanism x indicator x type x disagg x categoryoptioncombo

disagg target table setup

indicator

disagg target table setup

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

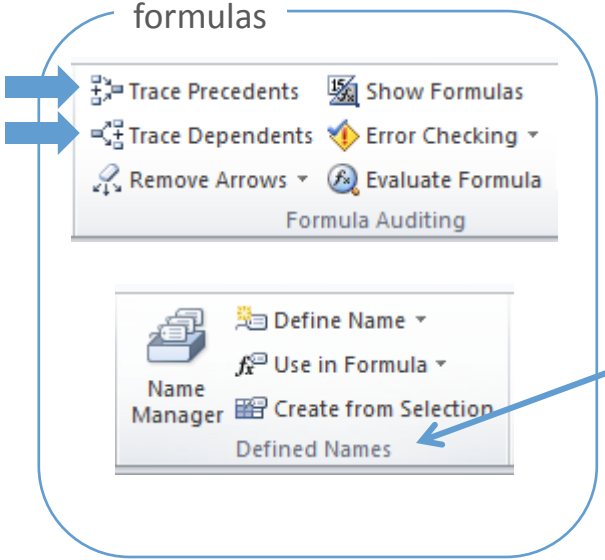
indicator	fy17 distro disagg categoryoption	fy19 dp numerator	fy19 target disagg categoryoption
pnsu mechanism type	%	#	= % x #

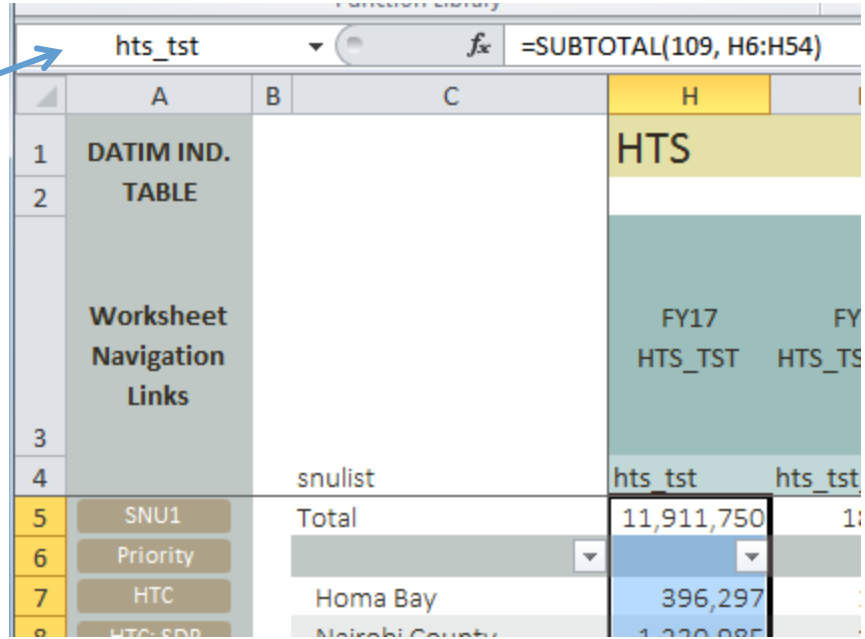
ad hoc walk through

appendix: error checking features

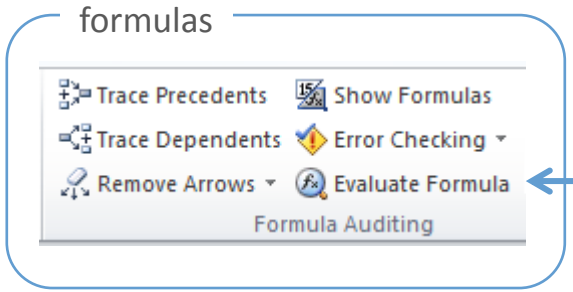
cell tracing

formulas

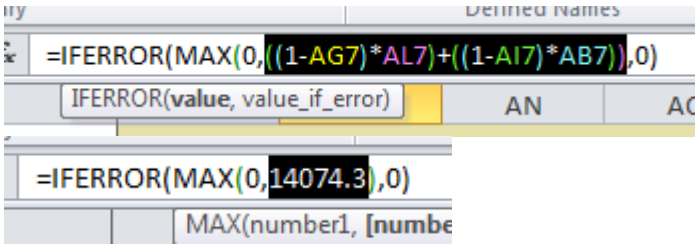




evaluate formula



F9 key with selection



Esc key to exit

check data

DATIM IND. TABLE		PMTCT	
Worksheet Navigation Links		FY17 PMTCT_ARV	PM Al
	snulist	pmtct_art	pm
SNU1	Total	47,467	
Priority			
HTC	Homa Bay	5,891	
HTC: SDP	Nairobi County	7,087	
Key Pop	Kisumu	4,906	
OVC	Siaya	4,118	
PLHIV	Migori	3,696	
Pop	Kakamega	1,851	
PMTCT	Mombasa	1,872	
Priority Pop	Nakuru	1,595	
TB	Kiambu	1,610	

```
> 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        58
 2          Baringo       165
 3            Bomet       472
 4          Bungoma      1074
 5            Busia      1206
 6 Elgeyo Marakwet       157
 7             Embu       243
 8          Garissa        33
 9        Homa Bay      5891
10           Isiolo        80
# ... 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)

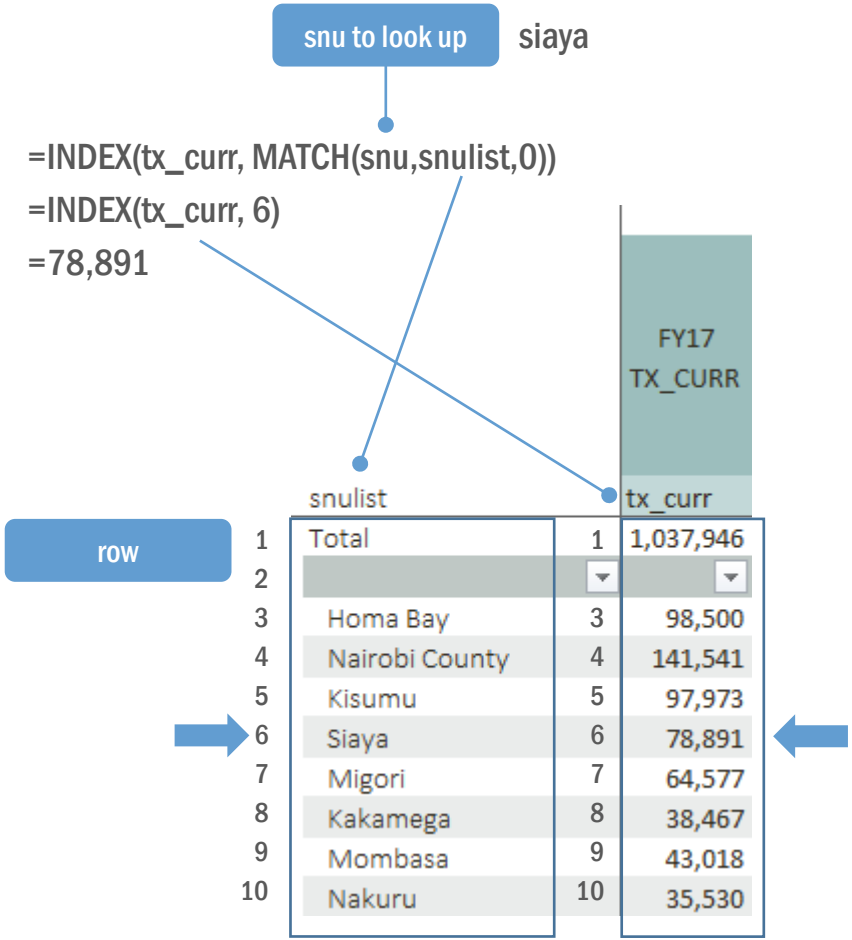
=IFERROR(MAX(0, value),0)

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 6th row of the tx_curr reference table

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