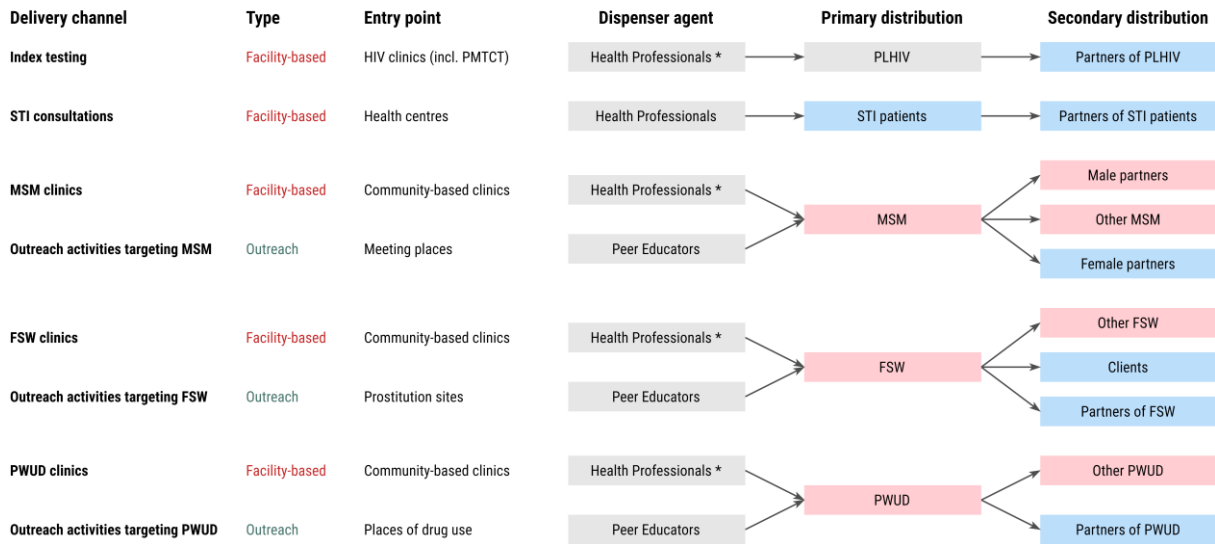


## Supplementary Material

### Appendix 1 ATLAS HIVST delivery channels

#### ATLAS delivery channels to reach **key populations** and other **vulnerable populations**



\* It could also be community health workers in some clinics.

STI: sexually transmitted infections  
 PMTCT: prevention of mother to child transmission  
 PLHIV: people living with HIV

■ Key populations

■ Vulnerable populations

MSM: men having sex with men (including male sex workers and transgender women and other non-binary individuals assigned men as birth)  
 FSW: female sex workers / PWUD: people who use drugs

**Appendix 2 Sources of cost inputs and of cost allocation data for the top-down (TD) and bottom-up (BU) costing approaches using a provider’s perspective (costs at site level in grey, costs above site level in white)**

Testing services	HIVST						HTS	
	Development		Start up		Implementation		Implementation	
	TD	BU	TD	BU	TD	BU	TD	BU
<b>Capital</b>								
Building & storage	x		x		x	x		x
Equipment	x		x		x	x		x
Vehicles	x		x		x			
Other capital costs	x		x		x			
<b>Recurrent</b>								
Training			x					
Sensitization – Coordination			x					
Sensitization – Solthis pays			x					
Personnel & Per diems Headquarters Solthis Pays	x		x		x			
Personnel & Per diems – Coordination	x		x		x			
Personnel & Per diems - Headquarters (implementing partners)					x	x		x
Personnel & Per diems – Field (HIVST distributors)					x	x		x
HIV self-testing kits/HTS session					x			x
Vehicle operation, maintenance & transport	x		x		x			x
Building operation/maintenance	x		x		x			x
Other recurrent	x		x		x			x

### Appendix 3 Allocation factors for the top-down costing analysis by input type

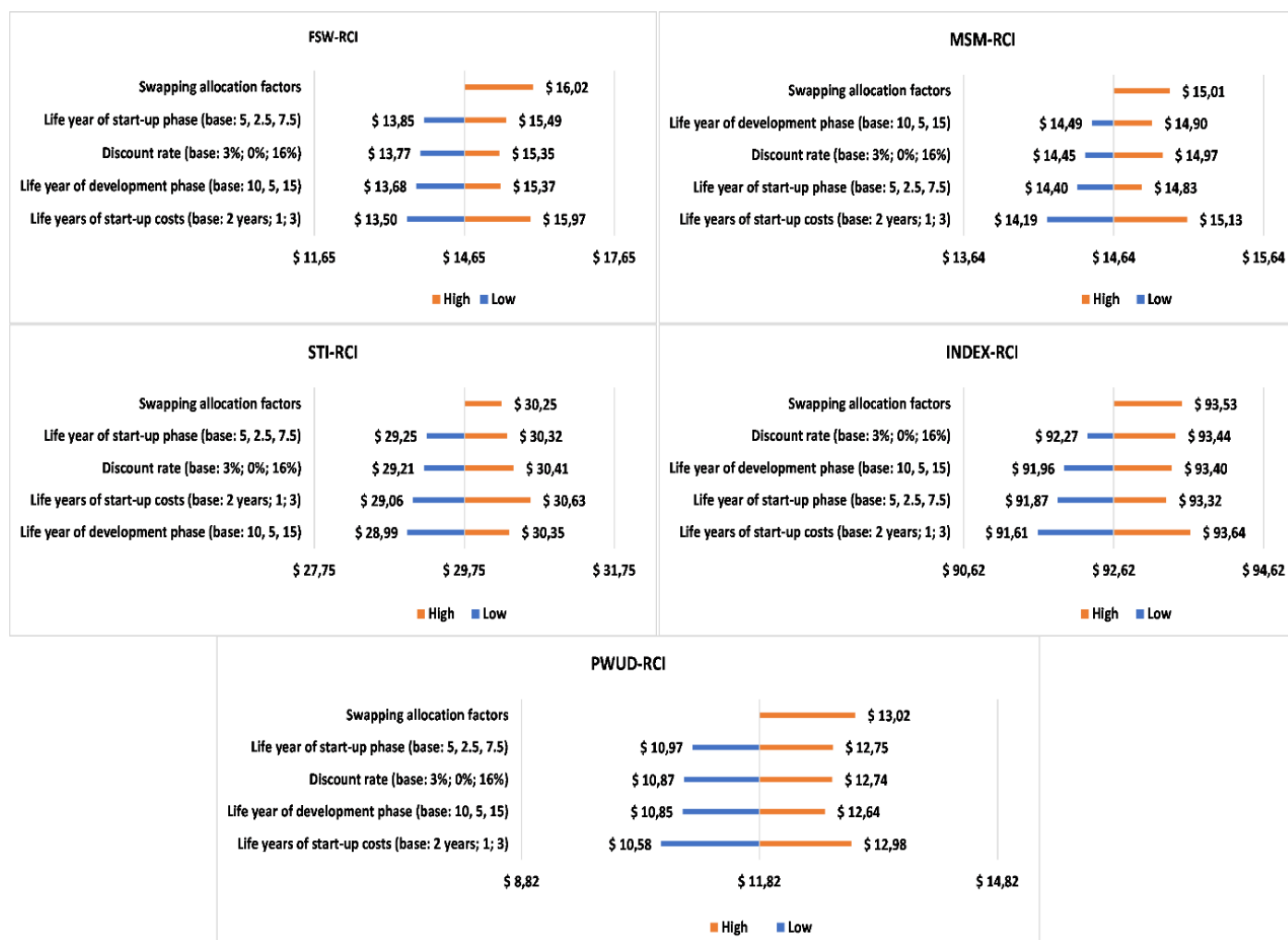
Input type	Allocation factors to site level		
	Côte d'Ivoire	Senegal	Mali
<i>Start-up costs</i>			
S1. Trainings	% trained distributors	% trained distributors	% trained distributors
S2. Sensitization	% of cohort size	% of cohort size	% of cohort size
<i>Capital costs</i>			
C1. Buildings and storage	% direct expenditure	% direct expenditure	% direct expenditure
C2. Equipment	% direct expenditure	% direct expenditure	% direct expenditure
C3. Vehicles	% HIVST kits distributed	% HIVST kits distributed	% HIVST kits distributed
C4. Other capital costs	% direct expenditure	% direct expenditure	% direct expenditure
<i>Recurrent costs</i>			
R1. Personnel & Per diems – Headquarters IPO coordination	% trained distributors	Equally shared across sites	% trained distributors
R2. Personnel & Per diems – Headquarters IPO country	% trained distributors	Equally shared across sites	% trained distributors
R3. Personnel & Per diems – Headquarters Implementing partner	% trained distributors	% HIVST distributors	% trained distributors
R4. Personnel & Per diems – Field - HIVST distributors	% trained distributors	% HIVST distributors	% trained distributors
R5. HIV self-testing kits	% HIVST kits distributed	% HIVST kits distributed	% HIVST kits distributed
R6. Vehicle operation and maintenance/transportation	% HIVST kits distributed	% HIVST kits distributed	% HIVST kits distributed
R7. Building operation and maintenance	% direct expenditure	% direct expenditure	% direct expenditure
R8. Other recurrent costs	% direct expenditure	% direct expenditure	% direct expenditure

**Appendix 4 Total, testing sessions, Average cost per HTS session, Average cost per HTS-positive identified of HTS costs, by country, by channel, and by expense item in health facilities (in 2021 US\$)**

	Côte d'Ivoire HTS				Mali HTS		Senegal HTS			
	STI	%	Index testing		STI/Index testing	%	STI	%	Index testing	%
<b>Number of sites</b>	<b>10</b>		<b>12</b>		<b>6</b>		<b>5</b>		<b>4</b>	
<b>Capital costs</b>										
Buildings and storage	64	1%	68	1%	727	1%	1168	4%	1224	2%
Equipment	7	0%	8	0%	73	0%	117	0%	122	0%
<b>Recurrent Costs</b>										
Personnel – Administration/management costs	841	11%	2 909	23%	30784	27%	5183	18%	17872	30%
Personnel – HIV testing providers	4 138	56%	5 929	48%	44675	39%	13540	47%	24457	41%
Testing supplies	2 211	30%	3 326	27%	28632	25%	6113	21%	14566	24%
Vehicle operation and maintenance	10	0%	39	0%	2480	2%	0	0%	0	0%
Building operation and maintenance	45	1%	57	0%	4816	4%	1738	6%	733	1%
Other recurrent costs	82	1%	88	1%	1086	1%	926	3%	886	1%
<b>TOTAL COSTS</b>	7 397		12 423		113273		28784		59861	
<b>HTS testing sessions (HIV diagnosis)</b>	1073 (02)		1613 (148)		18839 (2118)		3929 (42)		9385 (89)	
<b>Average cost per HTS session (min-max)</b>	8 (6-10)		8 (6-14)		8 (4-14)		8 (3-11)		7 (3-11)	
<b>Average cost per HIV diagnosis (min-max)</b>	*185 (161-209)		*87 (40-145)		72 (21-147)		705 (364-1032)		662 (301-854)	

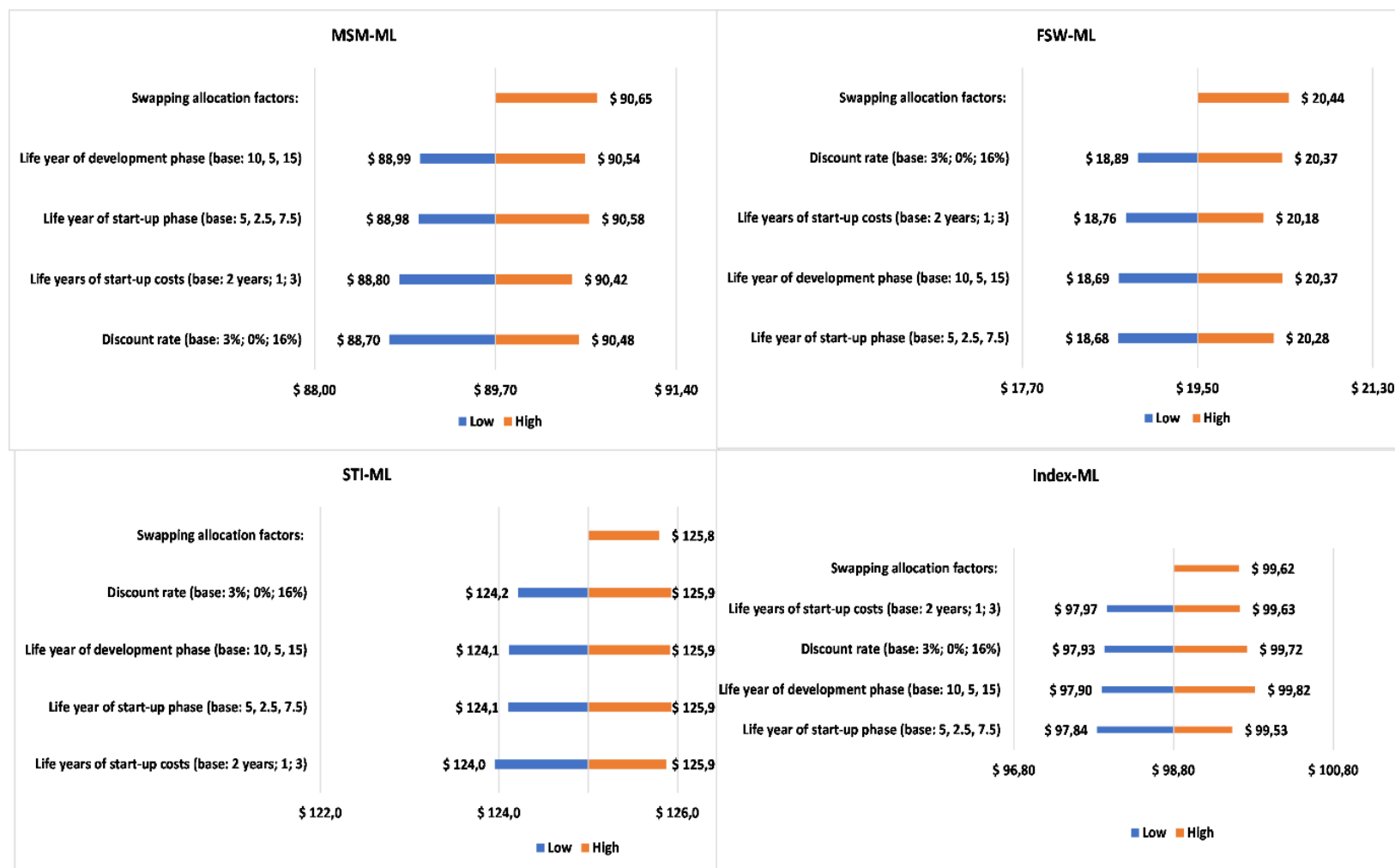
HTS: traditional HIV testing services; STI: partners of sexually transmitted infections patients; Index Testing: sexual partners of PLHIV; PLHIV people living with HIV  
 \*For the cost per HIV diagnosis in Côte d'Ivoire, some sites did not identify HIV-positive cases during the observation period through STI (8/10 sites) and Index testing (10/12 sites) channels and were excluded from the analysis

## Appendix 5a Tornado diagrams of findings from deterministic sensitivity analysis in health facilities in Côte d'Ivoire



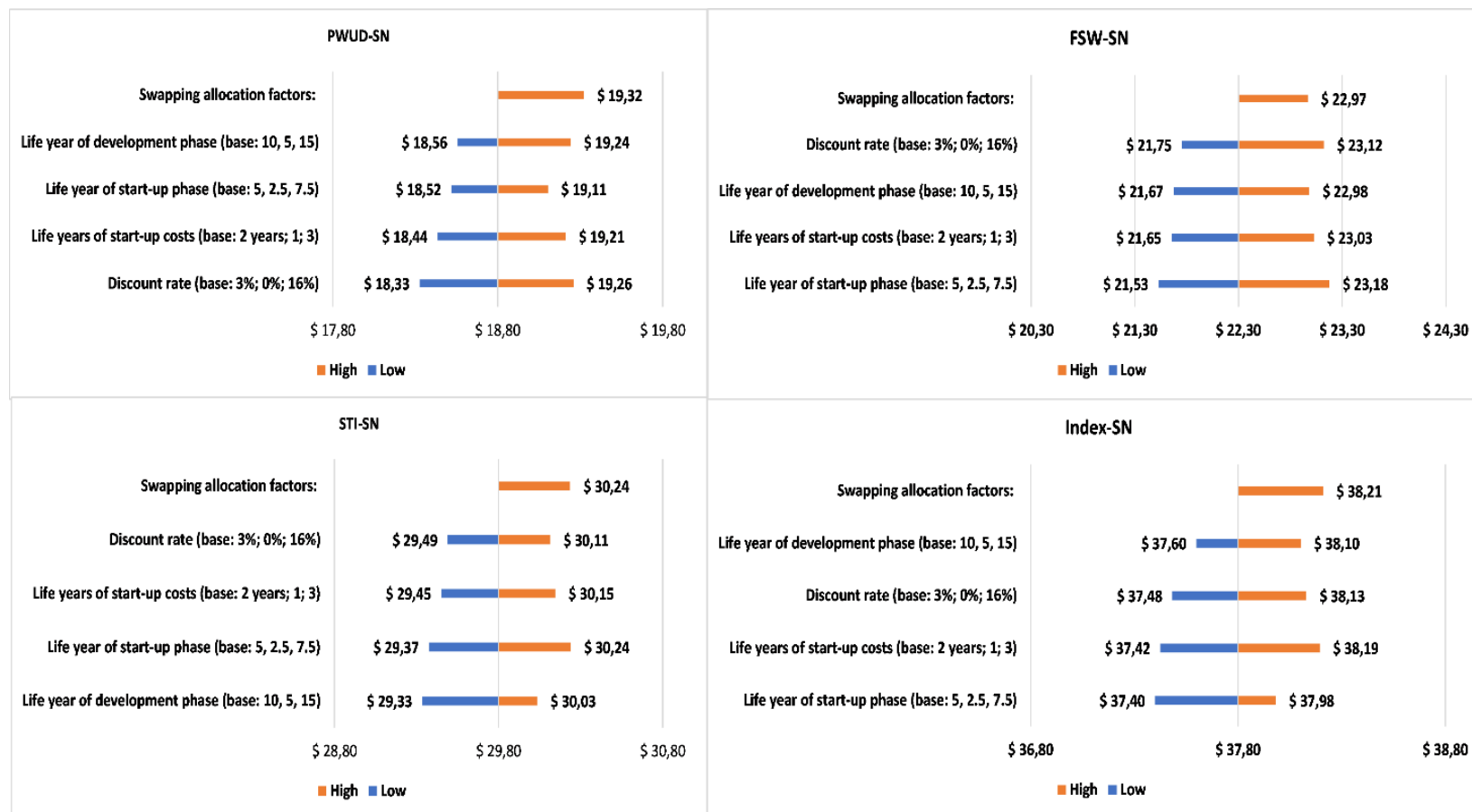
*HIVST: HIV Self-Testing kit; HTS: HIV Testing Services; FSW: Female Sex workers; MSM: Men who have Sex with Men; PWUD: People who use drugs; STI: STI: partners of sexually transmitted infections patients; PLHIV people living with HIV; Index Testing: sexual partners of PLHIV;*

**Appendix 5b Tornado diagrams of findings from deterministic sensitivity analysis in health facilities in Mali**



*HIVST: HIV Self-Testing kit; HTS: HIV Testing Services; FSW: Female Sex workers; MSM: Men who have Sex with Men; PWUD: People who use drugs; STI: STI: partners of sexually transmitted infections patients; PLHIV people living with HIV; Index Testing: sexual partners of PLHIV;*

### Appendix 5c Tornado diagrams of findings from deterministic sensitivity analysis in health facilities in Senegal



*HIVST: HIV Self-Testing kit; HTS: HIV Testing Services; FSW: Female Sex workers; MSM: Men who have Sex with Men; PWUD: People who use drugs; STI: STI: partners of sexually transmitted infections patients; PLHIV people living with HIV; Index Testing: sexual partners of PLHIV;*