



Cote d'Ivoire DSD Performance Review

Preliminary results

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HIV LEARNING NETWORK
The CQUIN Project for Differentiated Service Delivery

Outline

1. Background/justification for DSD Performance Review (DPR)
2. Objectives of DPR
3. Methodology
4. Preliminary results
5. Overall impression and lessons learned from DPR thus far
6. Next steps

I- Background

- **7 February 2017:** adoption of "Test and Treat All" approach (*Côte d'Ivoire MoH Circular Note No. 0001 / MSHP / DGS / PNLS / DC*). This circular note defines the notion of stable patient, stability criteria, as well as the 'what and when?' of differentiated care (clinical visits, ARV pickup visits, adherence support and biological monitoring) for stable and non-stable adult and pediatric patients.
- Differentiated Service Delivery (DSD) implementation started at selected sites during *April-June 2017 quarter*.
- After 2 years of implementation, the MoH through the DIIS (Directorate in Charge of Informatics and Health Information), with the financial support of the CQUIN Network and in collaboration with the 6 PEPFAR IPs, organized DSD data collection from **September 12-22, 2019** to assess the implementation of DSD models (DSDM).

II- Objectives of the DSD Performance Review

- Identify types of DSDM implemented at the sites
- Determine the proportion of:
 - eligible patients enrolled in DSD
 - eligible patients not enrolled in DSD
 - not eligible patients enrolled in DSD
- Calculate the retention of patients in DSDM at M12-M24
- Determine the proportion of patients who changed DSDM at M12-M24 after enrollment in DSDM
- Determine the proportion of DSD patients who have an increase of VL>1000
- Determine the proportion of patients in DSDM who have an OI
- Calculate the average annual number of clinical visits per patient in DSDM
- Calculate the average annual number of ARV pick-up visits per patient in DSDM

III- Methodology

1- Patient population (facilities and cohorts selected)

- **30** sites were selected: 5 C&T sites implementing DSD in the intervention areas of each of the 6 PEPFAR clinical IPs including: 1 Regional Hospital, 1 District Hospital, 1 Urban Facility, 1 Rural Facility, 1FB Facility. For each category of sites, those with the highest number of ART patients in C&T at the end of March 2019 were selected (DSD being implemented mainly in the high-volume sites)
- **Selection of 3 cohorts of patients:**
 - 2 Cohorts of patients according to the period of enrollment in DSD:
 - 24 M Cohort (patients enrolled in DSD during April-June 2017)
 - 12 M Cohort (patients enrolled in DSD during April-June 2018)
 - 1 cohort of patients who initiated ART during April-June 2018 (ARV Cohort)
 - **April-June 2019** was the reference period for the calculation of the indicators.

III- Methodology

2- Data collection and analysis

– Tool and key data elements:

- Data was collected using an Excel file (adapted from the Zimbabwe DSD data extraction tool) with drop-down lists, incorporating consistency checks to reduce risk of data entry errors, and patients' ID anonymization function.
- An SOP was also developed for the use of this data collection tool
- Data on DSD eligibility criteria's and retention on ART were collected from the patient File (Paper or EMR= SIGDEP2) and the Viral Load Register.
- Data on DSD were collected from the DSD register

III- Methodology

2- Data collection and analysis

– Roles and responsibilities:

- **DIIS:** Lead the activity; Provide information to Regional health team, District and site teams; Coordinate data collection, data transmission and data analysis.
- **PNLS:** Ensure that the data collection methodology is consistent with national DSD guidelines, Participate in Data collection and data analysis
- **ICAP:** Develop the data collection tool; Train data collectors (September 9); Pilot the data collection tool (September 10); Participate in Data collection and data analysis
- **Other IPs:** Introduce investigators to their selected supported sites, Participate in Data collection

IV- Preliminary results

1- Distribution of patients by area and type of Facility

N°	Regions	District	Number of patients			
			DSD Cohorts	ART Cohort	Total	%
1	Abidjan 1-Grands Ponts	Yopougon-Ouest-Songon	1	104	105	11%
2	Abidjan 2	Abobo-Est	52	22	74	8%
		Abobo-Ouest	0	31	31	3%
		Cocody-Bingerville	7	13	20	2%
		Koumassi-Port Bouet-Vridi	12	28	40	4%
		Treichville-Marcory	4	30	34	4%
3	Agneby-Tiassa-Me	Adzope	3	27	30	3%
4	Belier	Yamoussoukro	2	23	25	3%
5	Bounkani-Gontougo	Bondoukou	2	10	12	1%
		Tanda	29	50	79	8%
6	Gbeke	Bouake-Sud	0	9	9	1%
7	Gbokle-Nawa-San Pedro	San-Pedro	1	55	56	6%
		Tabou	0	2	2	0%
8	Haut-Sassandra	Daloa	73	60	133	14%
		Issia	16	50	66	7%
9	Loh-Djiboua	Divo	6	28	34	4%
10	Marahoué	Sinfra	0	2	2	0%
11	N'zi-ifou	Bongouanou	3	7	10	1%
12	Poro-Tchologo-Bagoue	Korhogo 1	55	67	122	13%
13	Tonkpi	Man	34	22	56	6%
Total		20	300	640	940	100%

Distribution of patients by type of Health facility	Number of patients			
	DSD Cohorts	ART Cohort	Total	%
Rural HF (CSR and DR)	11	35	46	5%
Urban HF (FSU and CSU)	60	140	200	21%
Faith-based Facility	62	103	165	18%
District Hospital (HG)	57	178	235	25%
Regional Hospital (CHR)	110	184	294	31%
Total	300	640	940	100%

2- Distribution of patients by Sex/Age Groups

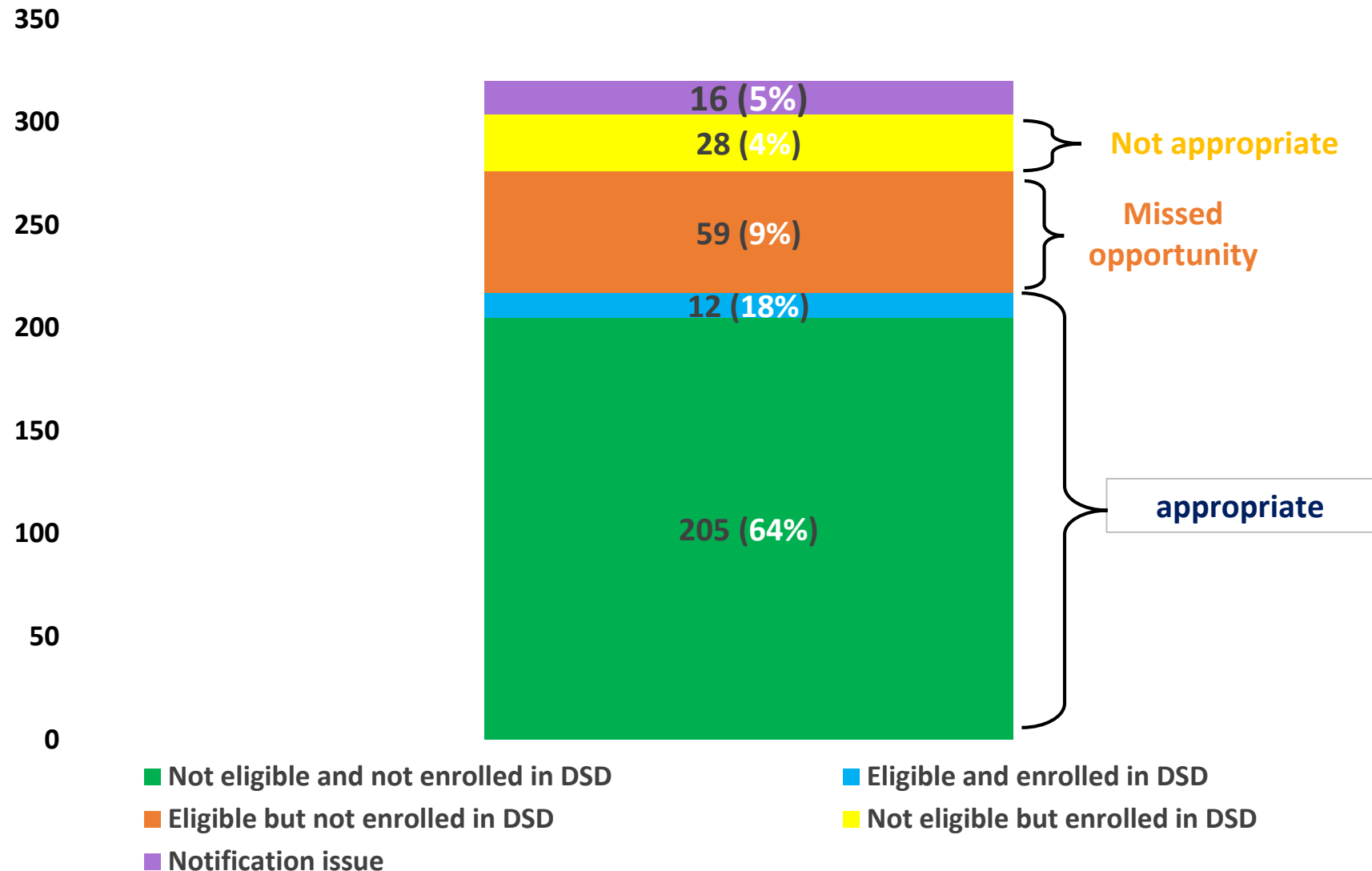
Ages groups	ART Cohort			
	Female	Male	Total	%
> 15 years	16	18	34	5%
15+ years	424	182	606	95%
Total	440	200	640	100%

	Female	Male	Overall
Mean:	37	40	37
Mode:	35	40	39
Median:	36	41	37
Minimum:	1	1	1
Maximum:	89	75	89

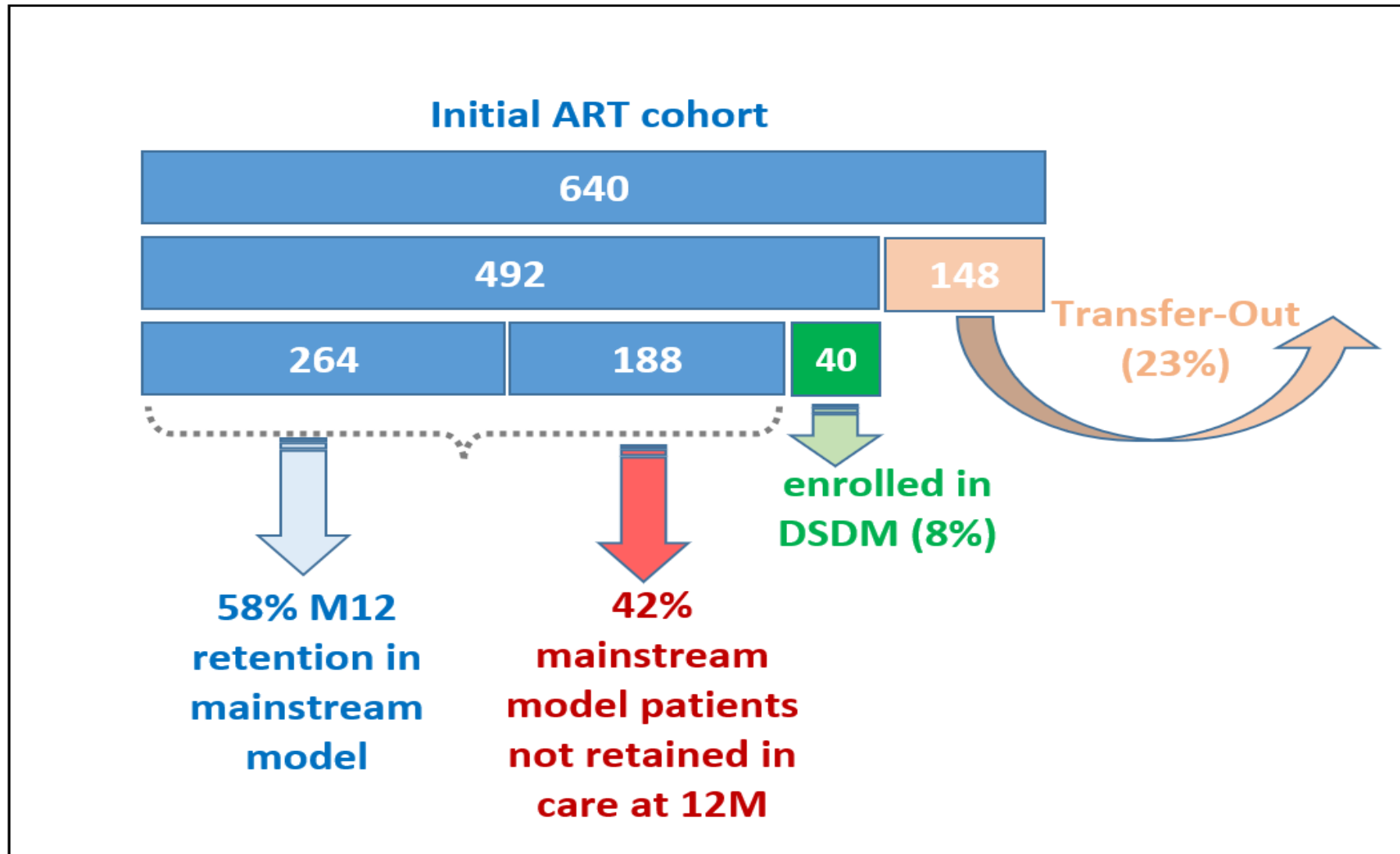
Ages groups	DSD Cohorts			
	Female	Male	Total	%
> 15 years	5	7	12	4%
15+ years	229	59	288	96%
Total	234	66	300	100%

	Female	Male	Overall
Mean:	42	44	42
Mode:	49	39	39
Median:	41	46	43
Minimum:	5	5	5
Maximum:	73	66	73

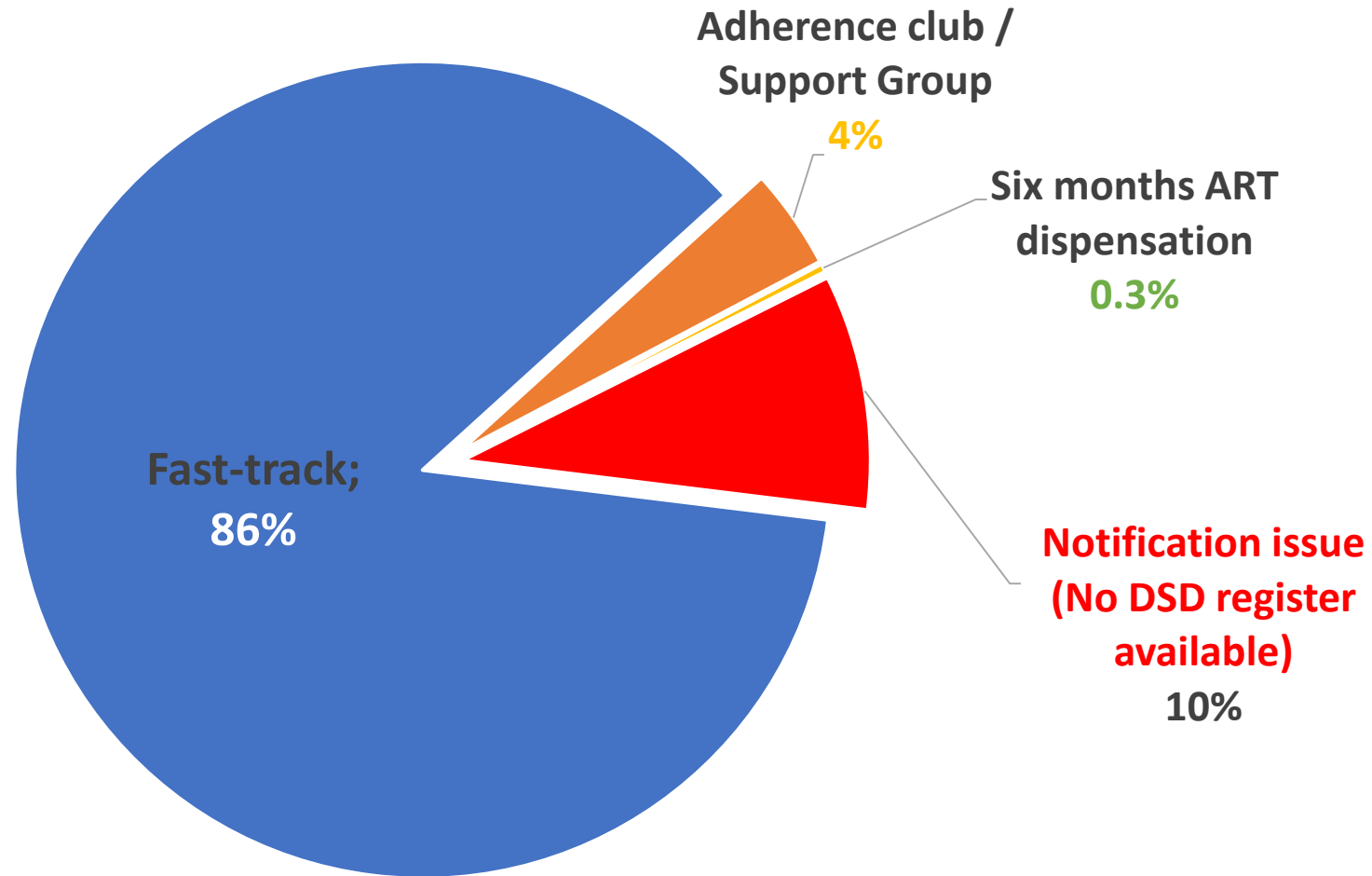
3- ART Cohort Patients eligibility and enrolment in DSD Models



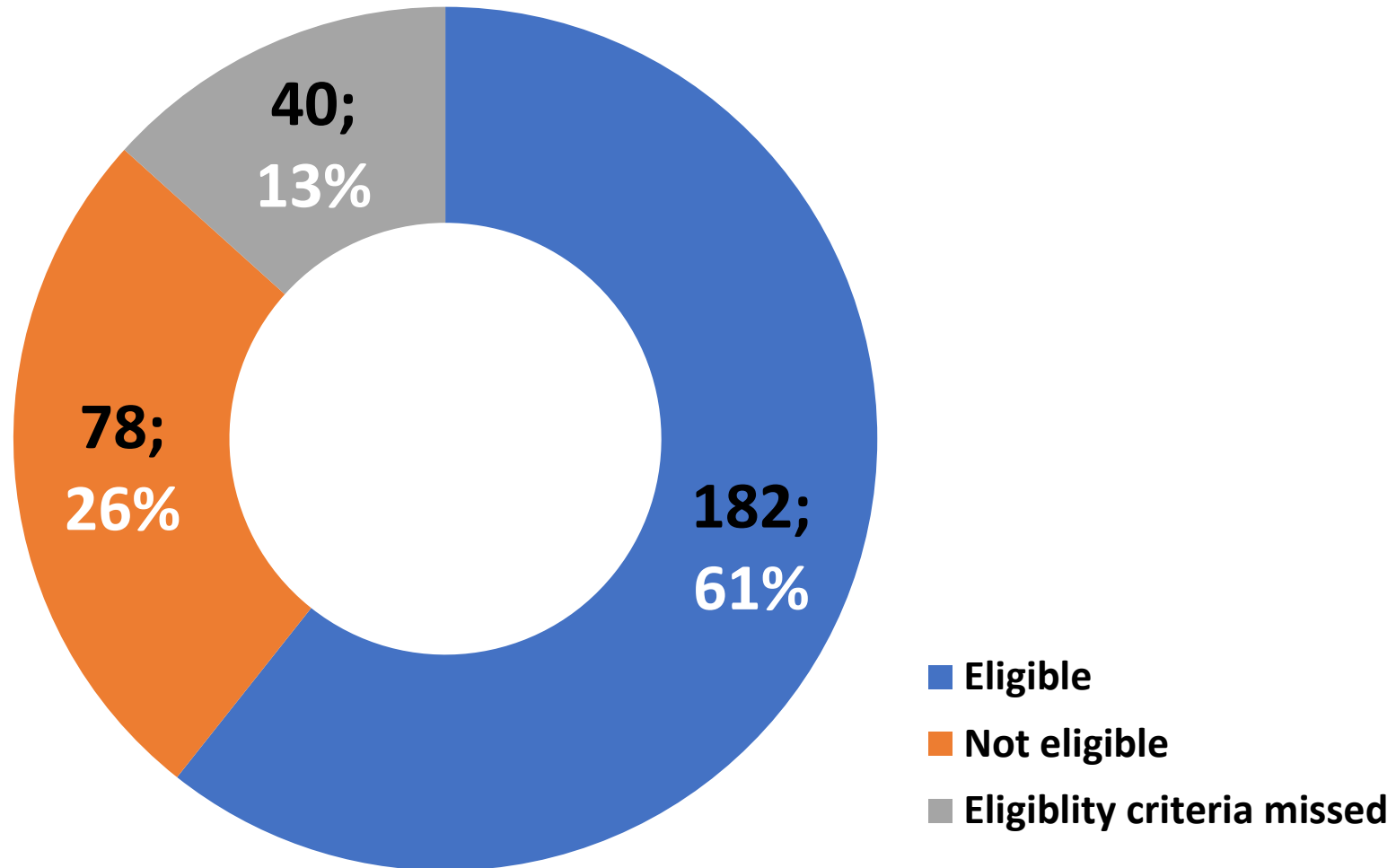
4- ART Cohort Patients retention at 12M



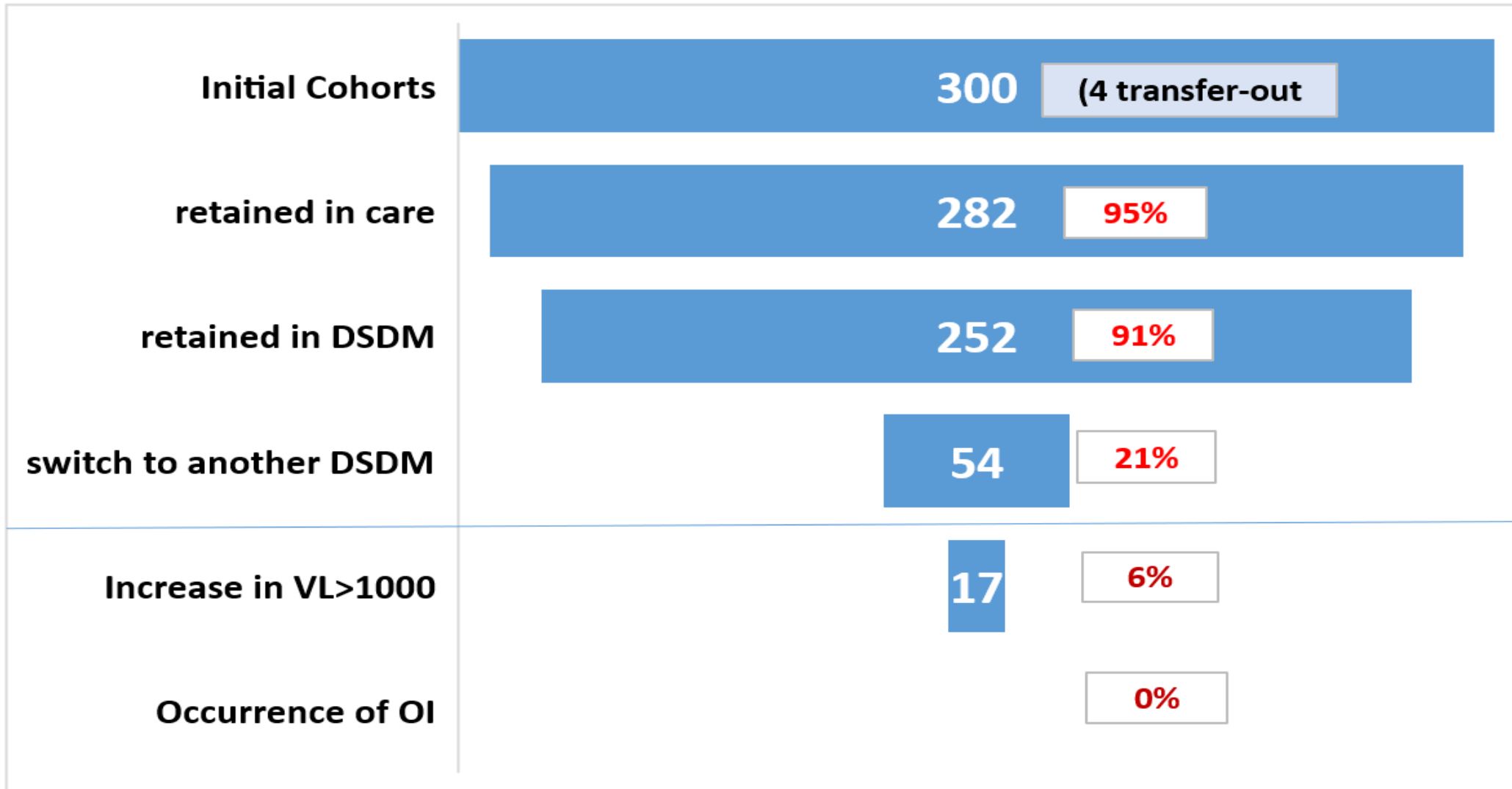
5- DSD Cohort patients initial DSD Model



6- Eligibility of DSD Cohort patients



7- Outcomes of the DSD cohorts patients



8- Yearly number of clinical visits

Number of clinical visits during the last 12 months (among patients retained in care)	Patients retained in DSDM		Patients not retained in DSDM		Total	
	Nb	%	Nb	%	Nb	%
1-2 visit	44	17%	0	0%	44	16%
3-4 visits	80	31%	6	30%	86	31%
5-6 visits	120	47%	2	10%	122	44%
7-8 visits	12	5%	3	15%	15	5%
9+ visits	2	1%	9	45%	11	4%
Total	258	100%	20	100%	278	100%

	Patients retained in DSDM	Patients not retained in DSDM	Overall
Mean:	4	7	5
Mode:	5	9	5
Median:	5	8	5
Minimum:	1	3	1
Maximum:	12	12	12

9- Yearly number of ART pick-up visits

Number of ARVs pickup visits during the last 12 months (among patients retained in care)	Patients retained in DSDM		Patients not retained in DSDM		Total	
	Nb	%	Nb	%	Nb	%
1-2 visit	12	5%	0	0%	12	4%
3-4 visits	66	26%	4	20%	70	25%
5-6 visits	155	60%	4	20%	159	57%
7-8 visits	22	9%	3	15%	25	9%
9+ visits	3	1%	9	45%	12	4%
Total	258	100%	20	100%	278	100%

	Patients retained in DSDM	Patients not retained in DSDM	Overall
Mean:	5	7	5
Mode:	5	5	5
Median:	5	8	5
Minimum:	1	3	1
Maximum:	12	12	12

10- Outcomes by sex groups

Retention, VLS by sexe groups (excluding transfer out)	Female		Male		Total
	Nb	%	Nb	%	
Retained in care	218	94%	64	98%	282
Not retained in care	13	6%	1	2%	14
Total	231	100%	65	100%	296
VLS (< 1000 copies) (among patients retained in care)	207	95%	55	86%	262
Increase in VL (>= 1000 copies)(among patients retained in care)	10	5%	7	11%	17
No VL result documented	1	0%	2	3%	3
Total	218	100%	64	100%	282

11- Outcomes by Age groups

Retention, VLS by Age groups	<15		15+		Total
	Nb	%	Nb	%	
Retained in care	12	100%	270	95%	282
Not retained in care (excluding transfer out)	0	0%	14	5%	14
Total	12	100%	284	100%	296
VLS (< 1000 copies) (among patients retained in care)	9	75%	253	94%	262
Increase in VL (>= 1000 copies)(among patients retained in care)	3	25%	14	5%	17
No VL result documented	0	0%	3	1%	3
Total	12	100%	270	100%	282

V- Overall impression and lessons learned from DPR

- Patients in DSDM have better retention than patients in mainstream model, and have also low or no occurrence of OI or increased viral load (except children <15)
- Missed information on eligibility criteria impacts the results
- The DSD register is not used at most sites (except ICAP supported sites) although this register has been validated and appropriated by PNLs
- DSD models are not yet well understood by most sites : this is why Fast-track (or 3-month visit spacing for ART pick up) is the most frequent DSD model implemented. Not because it is the first choice of the patients, but mainly because it is the best-known model by the providers. Patients are attributed to the FT model as soon as they are stable without giving the patients the opportunity to choose from the existing DSD models)
- Sharing guidelines (Test and Treat and DSD) is not enough to ensure implementation with fidelity of a program: Training of HCW and regular mentorship and monitoring are also needed to ensure effective implementation.

VI- Next steps

- ➡ Finalize data analysis and share the draft presentation with stakeholders for input
- ➡ Finalize the presentation
- ➡ Hold the DSD performance data review meeting (November 26-28, 2019)



Thank You!



ICAP
Empowering Health
Columbia University
Mailman School of Public Health