Differentiated service delivery for chronic disease

The fundamentals

Helen Bygrave
Differentiated service delivery for other chronic diseases
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Monthly visits to collect ART
3 hour trip to clinic: Cost of transport
Long queues at the clinic
Leaving family and activities at home

Since 2008…. As a response to access challenges and the progressive scale up of ART

Effectiveness of Patient Adherence Groups as a Model of Care for Stable Patients on Antiretroviral Therapy in Khayelitsha, Cape Town, South Africa *Fernandes et al PloS One 2013*

97% of club patients remained in care compared to 85% of other patients.
Club participation reduced loss to care by 57% (HR 0.43 95% CI 0.21-0.91)

South Africa National Roll Out aiming for 100,000 clubs by next year

RESEARCH ARTICLE

Community ART Support Groups in Mozambique: The Potential of Patients as Partners in Care

Kebba Jobarteh[1☯]*, Ray W. Shiraishi[2☯], Inacio Malimane[1], Paula Samo Gudo[1], Tom Decroo[3], Andrew F. Auld[2], Vania Macome[4], Aleny Couto[4]

1 Division of Global HIV/AIDS, Center for Global Health, Centers for Disease Control and Prevention, Maputo, Mozambique, **2** Division of Global HIV/AIDS, Center for Global Health, Centers for Disease Control and Prevention, Atlanta, United States of America, **3** Medical Department, Médecins Sans Frontières, Operational Centre Brussels, Brussels, Belgium, **4** Mozambique Ministry of Health, Maputo, Mozambique

Response to lack of multi-month refills:
IMPORTANT often discussed as a barrier to DSD for other chronic diseases

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Differentiated service delivery: Consensus definition

Differentiated Service delivery :

is a **client-centred** approach that simplifies and adapts HIV services **across the cascade** to reflect the preferences and expectations of groups of people living with HIV (PLHIV) while **reducing unnecessary burdens on the health system**.

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Differentiated service delivery: Consensus definition

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is a **client-centred** approach that simplifies and adapts **chronic disease** services **across the cascade** to reflect the preferences and expectations of groups of people living with **chronic diseases** while **reducing unnecessary burdens on the health system**.

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Evolution in HIV programming

How are we going to double the treatment cohort with the same resources?

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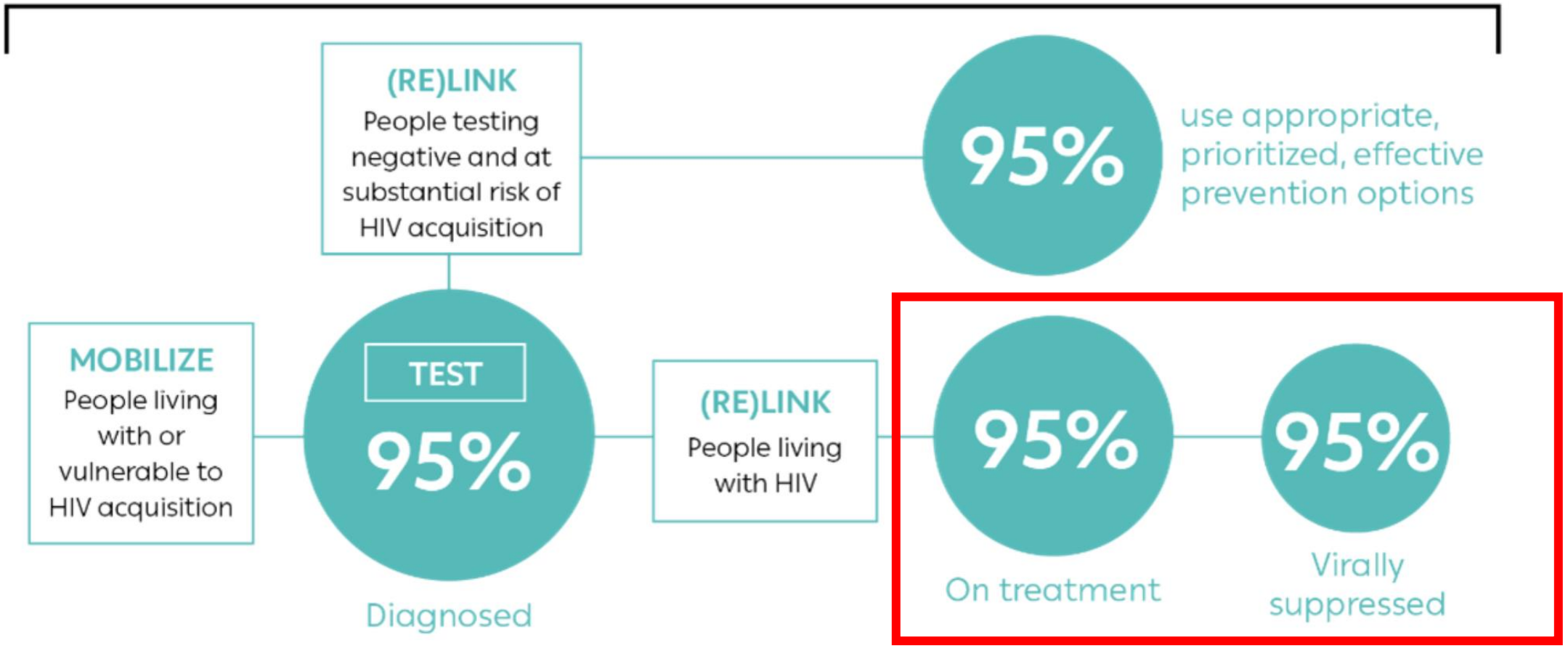
Differentiated service delivery



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What were the key enablers for DSD for HIV treatment

- Non-toxic regimen
- Simplified clinical guidance
  - one regimen across populations
- Fixed dose combinations supporting adherence and simplifying supply chain
- Clinical monitoring
  - started with CD4 and VL simplified
- Cohort monitoring
  - to demonstrate impact on retention and control

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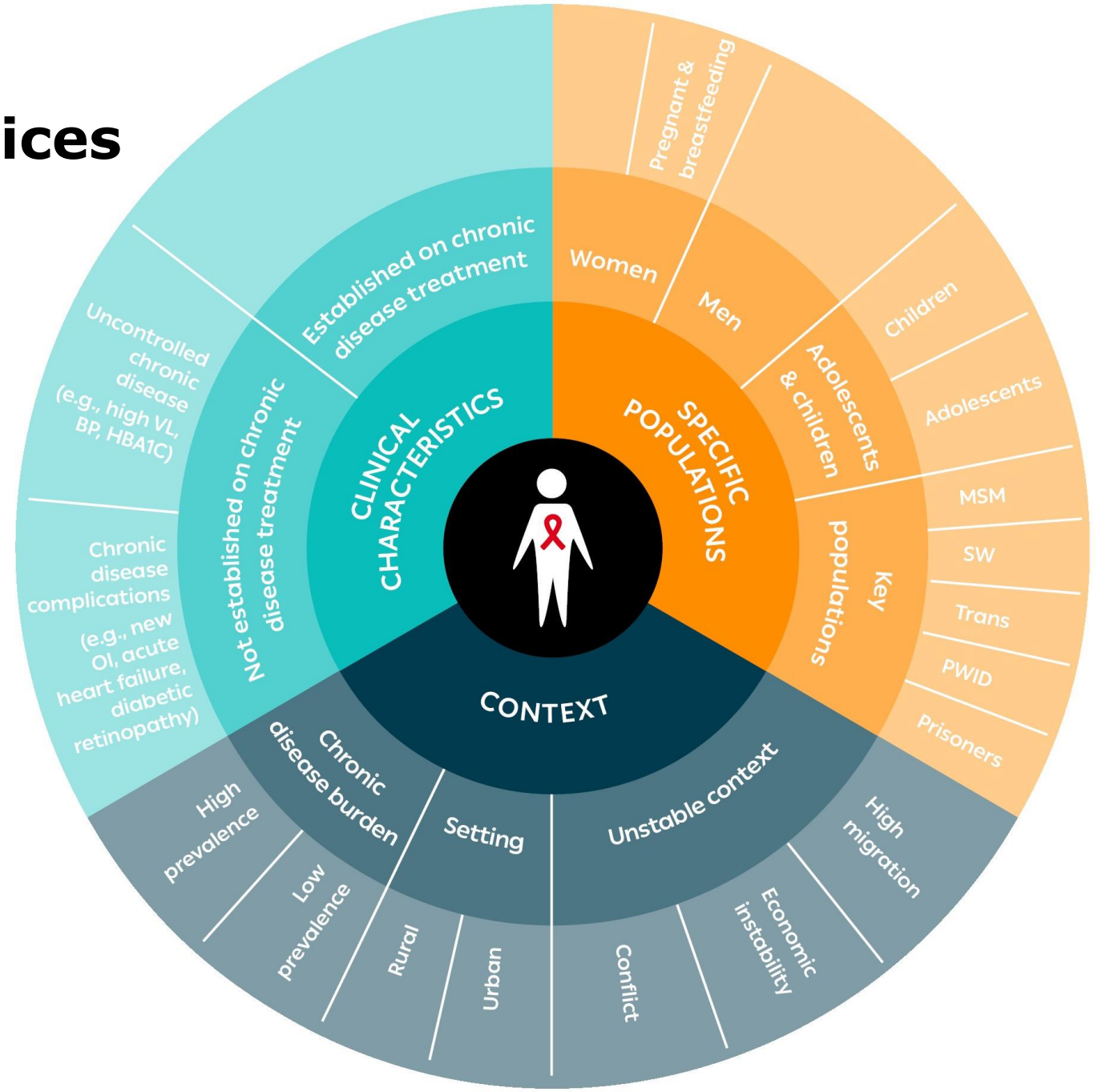
Who are we providing services for?

The three elements

- **Clinical characteristics**
- **Specific populations**
- **Context**



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2010

- On ART for 5 years
- Clinically well
- Still was asked to come every month to the clinic

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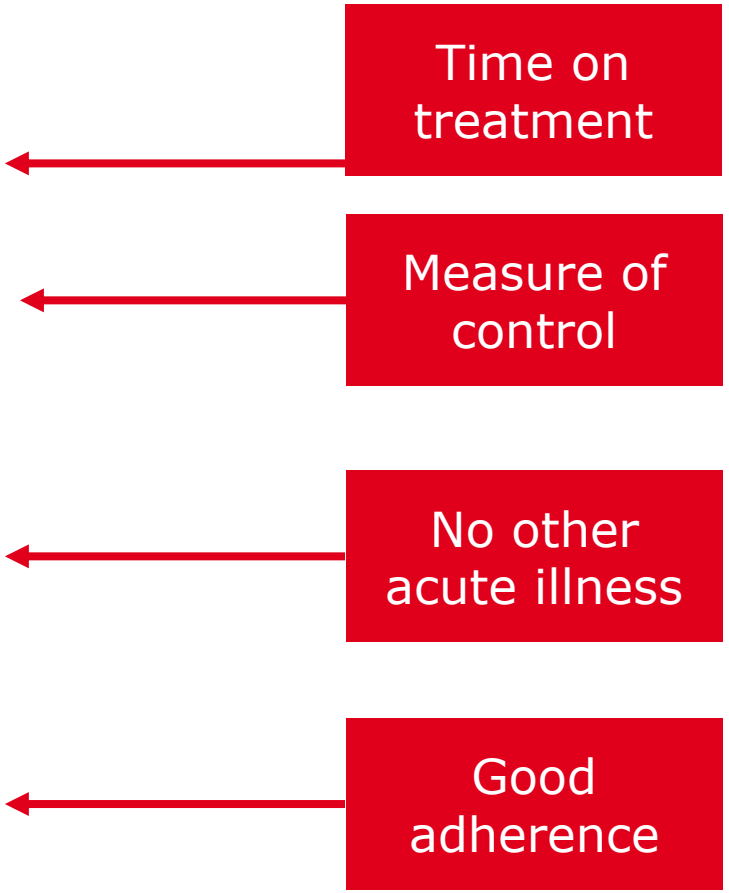
How are clients defined as established on treatment?

Criteria for established on treatment	HIV (WHO 2021)
Time on treatment	Receiving ART for at least six months
Other current illness	no current illness, which does not include well-controlled chronic health conditions
Evidence of treatment success	at least one suppressed viral load result within the past six months (if viral load is not available: CD4 count >200 cells/mm3 or CD4 count >350 for children 3-5 years or weight gain, absence of symptoms and concurrent infections)
Adherence	good understanding of lifelong adherence: adequate adherence counselling provided

How are clients defined as established on treatment: Nigeria hypertension guideline example

The following criteria can be used to identify a 'stable' patient:

- Must have been on anti-hypertensive treatment for at least six months.
- Must be on current medication combination for at least three months.
- Have their BP under control – BP < 140/90mmHg at the last two consecutive visits/measured on two occasions at least one month apart.
- Patients must generally be well, without acute illness/co-morbidity requiring intensive follow-up.
- Absence of any adverse drug reaction (ADR) and side effect that requires constant monitoring.
- A good understanding of life-long treatment and adherence.



How are clients defined as established on treatment- Zimbabwe example

	HIV	HTN	T2DM
Criteria for established on treatment	A RoC (adult, child over two years, adolescent, pregnant or breastfeeding woman, or member of a key population) established on ART (any treatment line) is defined as someone who: • Has no current OIs • Has good understanding of lifelong adherence • Is at least six months on their current regimen • Has a VL of <50 copies/ml in the past six months	Not described in EDLIZ OSDM: • 140/90 measured on two occasions at least one month apart • At least three months on current regimen • No other uncontrolled co-morbidities requiring more frequent clinical interventions • Good understanding of lifelong adherence: adequate adherence counselling provided	Not described in EDLIZ OSDM: • HbA1C <7% recorded in the last 3 months Or • Fasting blood sugar (FBS) < 7 mmol/L recorded in the last 3 months • At least three months on current oral regimen • No other uncontrolled co-morbidities requiring more frequent clinical interventions • Good understanding of lifelong adherence: adequate adherence counselling provided

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Remember- we previously defined “stable” using CD4

- For HIV, viral load is key enabler of DSD
- For hypertension, taking blood pressure available and doable now
- For diabetes, HbA1C could be key enabler of DSD for diabetes

Once established on treatment, what do we do differently?

V

Separate the clinical from the refill visit

At a refill visit the client does not need to see a clinician

AND – strong treatment literacy of symptoms and signs to attend clinic any time between appointments

Building blocks of DSD

When are services provided

Where are services provided

Who provides the service

What is the package of services provided

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Adapt the building blocks for the clinical visit and for the refill visit

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Building blocks - Differentiated service delivery

Before

	Clinical visits + ART
WHEN	Monthly
WHERE	Clinic or hospital
WHO	Doctor or nurse
WHAT	ART Clinical assessment

AFTER

	Clinical visits	***ART refills***
WHEN	*6-12 monthly*	*2-6 monthly*
WHERE	*Clinic or hospital*	*Pharmacy, community pick up point, etc.*
WHO	*Doctor or nurse*	*Peer, CHW, etc.*
WHAT	*ART* *Clinical assessment*	*ART* *+ other meds*

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"WHEN"

V

World Health Organization guidance

For HIV

7.5.3 Frequency of clinical visits and ART pick-up

Recommendations (2021)

People established on ART should be offered clinical visits every 3–6 months, preferably every six months if feasible[a] *(strong recommendation, moderate-certainty evidence).*

[a] When routine clinical consultations are due, they should be coordinated with planned medicine pick-ups to reduce visit frequency.

People established on ART should be offered refills of ART lasting 3–6 months, preferably six months if feasible[b] *(strong recommendation, moderate- to low-certainty evidence).*

[b] ARV drug supply management should be strengthened to ensure the availability of ARV medicine and prevent stock-outs in the context of less frequent medication pick-ups.

Source: *Updated recommendations on service delivery for the treatment and care of people living with HIV (63)*

For Hypertension

7. RECOMMENDATIONS ON FREQUENCY OF ASSESSMENT
WHO suggests a monthly follow up after initiation or a change in antihypertensive medications until patients reach target.
Conditional recommendation, low-certainty evidence
WHO suggests a follow up every 3–6 months for patients whose blood pressure is under control.
Conditional recommendation, low-certainty evidence

"WHEN" IS ART DELIVERED?

	WHEN Clinical visit (established on treatment)	WHEN Refill visit (established on treatment)
HIV	3-6 monthly – preference for 6 monthly	3-6 monthly – preference for 6 monthly
Hypertension	3-6 monthly	
Diabetes		

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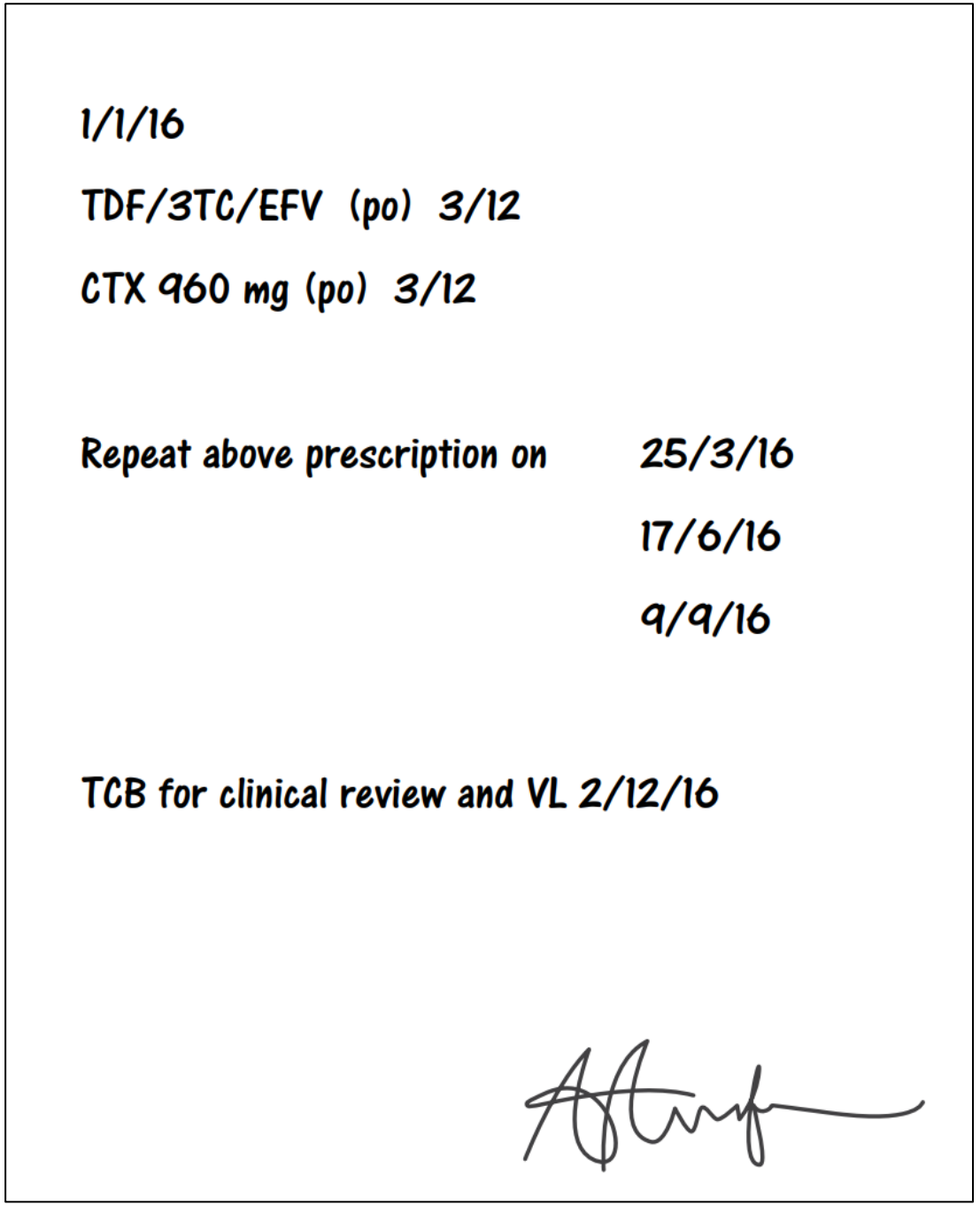
What if we cannot give more than one month of medication from the pharmacy?

Multi-month prescribing versus multi-month dispensing

- Prescribing – script length, by a qualified prescriber
- Dispensing – amount of drug given, from a qualified dispenser
- Distributing – providing pre-packed dispensed medications, by any one including peers/lay providers

- Separate the clinical visit and the refill visit - and use DSD to facilitate the refill



Needs clear documentation SOP

Patient care and treatment book documentation at the clinical visit

OI/ART NUMBER P P - D D - S S - Y Y Y Y - A - S S S S S

1	2	3	4	5	6	7	8	9		10	11		12		13	14	
Visit No. *(Includes visits made at other facility while the patient is away)*	Date of review	Weight (kg)	Height for Children below 15 years (cm)	5a. Pregnancy/ Lactating Status *(see codes below)*	Family Planning Status *(multiple response: use codes below)*	Functional Status *(use codes below)*	WHO *Clinical Stage (1-4) refer to Page 1*	TB Status		Opportunistic Infections and Other Problems *(use codes below)*	Cotrimoxazole Prophylaxis		IPT Criteria		Reason for Not Starting or Stopping IPT *(use codes below)*	Isoniazid Preventive Therapy	
	Visit Type *(use codes below)*			5b. Date of 1st ANC booking and LNMP date				9a. TB Screening *(use codes below)*	9b. TB Investigation Result *(use codes below)*		Quantity dispensed (tablets/ml)	% Adherence	12a-IPT Eligibility (Y/N)	12b - IPT Status *(use codes below)*		14a. Quantity dispensed (tablets/ml)	14b. % adherence
	- - -			- - - -								X					X
	- - -			- - - -													
	1/1/16 F	68		NIA	C	W	2	Y			90	100%	NE				
	- - -			- - - -							90						
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OI/ART NUMBER P P - D D - S S - Y Y Y Y - A - S S S S S

15		16	17	18	19	20			21	22	23			24	25	26	27	28	
Fluconazole		ARV Status (see codes below)	Adverse Events Status (see codes below)	ARV Reason (see codes below)	ARV combination regimen (see codes below)	ARV medicine			CD4 count/ % & Test Date	Viral Load & Test Date	a) ALT (Alanine Transaminase)	b) Creatinine	c) Other diagnostics test	Referral To: (see codes below)	Next Review date	Visit Status (see codes below)	Follow up Status (see codes below)	Name	
15a. Quantity prescribed (tablets/ml)	15b. Quantity dispensed (tablets/ml)					20a) Quantity prescribed (tablets/ml)	20b) Quantity dispensed (tablets/ml)	20c) % Adherence										Of Clinician (Initials)	Of Pharmacy (Dispenser) (Initials)
								X								X			
		3			IF	90	90	100%							25/3/16	OT	TX	AA	BB
						90									17/6/16				
						90									9/9/16				
						90									2/12/16				

"WHERE" IS ART PROVIDED?

Move towards out-of-facility initiation and maintenance

Mentorship/supervision

Supply chain

WHO Guidelines

Box 4: Recommendations on decentralization

Decentralization of HIV treatment and care should be considered as a way to increase access to and improve retention in care:

- Initiation of ART in hospitals with maintenance of ART in peripheral health facilities (strong recommendation, low-quality of evidence);
- Initiation and maintenance of ART in peripheral health facilities (strong recommendation, low-quality of evidence);
- Initiation of ART at peripheral health facilities with maintenance at the community level (that is, outside health facilities in such settings as outreach sites, health posts, home-based services or community-based organizations between regular clinical visits) (strong recommendation, moderate-quality of evidence).

"WHO" IS PROVIDING DIFFERENTIATED ART DELIVERY?

WHO Guidelines

Box 5: Recommendations on task shifting and task sharing

- Trained and supervised lay providers can distribute ART to adults, adolescents and children living with HIV (strong recommendation, low-quality evidence).
- Trained non-physician clinicians, midwives and nurses can initiate first-line ART (strong recommendation, moderate-quality evidence).
- Trained non-physician clinicians, midwives and nurses can maintain ART (strong recommendation, moderate-quality evidence).
- Trained and supervised community health workers can dispense ART between regular clinical visits (strong recommendation, moderate-quality evidence).

8. RECOMMENDATION ON TREATMENT BY NONPHYSICIAN PROFESSIONALS
WHO suggests that pharmacological treatment of hypertension can be provided by nonphysician professionals such as pharmacists and nurses, as long as the following conditions are met: proper training, prescribing authority, specific management protocols and physician oversight.
Conditional recommendation, low-certainty evidence

Four models of DSD for HIV treatment

- Multi-month dispensing is an enabler
- Clinical consultations can be considered separately to ART refills and psychosocial support

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Individual model based at facility: e.g. Fast track

	ART refills	Clinical consultation
WHEN	3-monthly	6-monthly
WHERE	Clinic pharmacy	Clinic
WHO	Pharmacist	Nurse
WHAT	ART CTX Other meds	ART refill Viral load Clinical consult

ART refill

- Direct pick up of medication from pharmacy or refill point at clinic
- No clinical consult
- Repeat prescription written at previous clinical consultation

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Individual model not based at facility:
Community pharmacy, Drop in centre, peer or CHW delivery

	ART refills	Clinical consultation
WHEN	3-monthly	6-monthly
WHERE	Community pharmacy	Clinic
WHO	CHW	Nurse
WHAT	ART CTX Other meds	ART refill Viral load Clinical consult

Group Models managed by health-care workers "Adherence Clubs" (15-20 clients)

Group model managed by clients

Self-forming groups (4-12) clinically stable adults, collecting ART for each other

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Videos for the four models

DSD for HIV treatment: Facility-based individual model – standard operating procedure
https://www.youtube.com/watch?v=hMSbadlynDs&list=PLjP62mGJ21IK-7YN7Xh6Z8u_yuibrqNPR&index=20

DSD for HIV treatment: Out-of-facility individual model – standard operating procedure
https://www.youtube.com/watch?v=EGd9tEn8Trs&list=PLjP62mGJ21IK-7YN7Xh6Z8u_yuibrqNPR&index=19&t=29s

DSD for HIV treatment: Healthcare worker-managed groups – standard operating procedure
https://www.youtube.com/watch?v=JylXt1_4-94&list=PLjP62mGJ21IK-7YN7Xh6Z8u_yuibrqNPR&index=21

DSD for HIV treatment: Client-managed groups – standard operating procedure
https://www.youtube.com/watch?v=0ZbL61Jktqo&list=PLjP62mGJ21IK-7YN7Xh6Z8u_yuibrqNPR&index=22

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Key messages

1. The principles of DSD can be applied to other chronic diseases
2. We need to define:
   - Eligibility for DSD for clients established on treatment
   - Building blocks of " when", "where" and "who"
3. The building blocks are adapted for the clinical visit and refill visit
4. Choose which of the four categories of DSD models for clients established on treatment addresses the heath system and client access challenges