The CQUIN Learning Network: Partnering to Advance Differentiated Care

Differentiated Care for Individuals at High Risk of Disease Progression

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Outline

- Defining "high risk"
- Why do people at high risk need DSDM?
- Experience from Kenya

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Defining "High Risk"

- Presenting with advanced disease
 - CD4 < 200 cells/mm³
 - WHO stage 3 or 4
- "Unstable" on ART, e.g. on ART for \geq 1 year but
 - Not virally suppressed
 - Advanced immunosuppression
 - Adverse drug reactions
 - Active opportunistic infection
 - Nonadherent to ART
 - Substance use
 - Mental illness

Why Focus on Patients at High Risk?

- The proportion of people starting ART in LMIC with CD4 < 200 is falling, but remains high (30-40%)
- Mortality amongst this population is high, particularly in the first 3-6 months on ART (8-26% in SSA)
- Systems and strategies for patients on ART but virally unsuppressed (patients with "unstable" HIV) lack a robust evidence base

Differentiated Care for Adults at High Risk of HIV Disease Progression



A Call to Action

HIV LEARNING NETWORK The CQUIN Project for Differentiated Care



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- Defining "high risk"
- Why do people at high risk need DSDM?
- Experience from Kenya

DSD Extends Beyond Stable Patients





Programmatic Challenges

Challenge	Illustrative Barriers/Challenges
Identification of high-risk patients	Delayed ART eligibility assessment
	Delayed identification of failing regimens
	Delayed linkage from testing to treatment
ART initiation and management	Delayed switch to 2 nd /3 rd line regimens
	Lack of standard operating protocols (SOPs) for high risk patients
Prevention and management of acute co- morbid conditions(s)	Insufficient or absent OI screening/prophylaxis
	Weak linkages for up-referral to more specialized site/providers
	Discontinuity between inpatient, outpatient, and community-based
	services
	Siloed HIV and NCD services
Management of chronic co- morbid condition(s)	Lack of strong home care systems
	Need for specialized adherence support

Illustrative Programmatic Challenges

- How can we swiftly identify P@HR and "flag" them for rapid and prioritized services?
- How can we provide services that are both intensified and patient-centered?

DSDM for P@HR

SERVICE FREQUENCY	SERVICE INTENSITY
- Weekly or biweekly visits?	Enhanced prophylaxis?Enhanced counseling?
SERVICE LOCATION	SERVICE PROVIDERS
 Specialty clinics? Intermediate care facilities? Housing near facility (like maternity waiting homes)? Home-based care? 	 NIMART "plus"? Super-mentors in Kenya Oversight committees

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- Defining "high risk"
- Why do people at high risk need DSDM?
- Experience from Kenya: patients with advanced HIV

CD4 Distribution at Enrolment in Kenya



- CD4 Distribution at enrolment among PLHIV ≥ 5 yrs enrolled in 2015
- PLHIV with CD4 count of 0 to 249 cells/mm³ represented 35% of the population



- CD4 Distribution at enrolment by age group among PLHIV ≥ 5 yrs enrolled in 2015
- Late entry into care for PLHIV 10-14 yrs, and PLHIV > 35 yrs

2015 Cohort 12 Month Outcomes



- 2015 12 Month Pre-ART Cohort Outcomes
- Overall mortality of 1%

- 2015 Cohort 12 month ART outcomes by baseline CD4
- 5 % mortality for 0-249 CD4 count

ICAP in Kenya Program

- At the end of September 2015, ICAP in Kenya program data review revealed an increase in mortality and lost to follow-up among PLHIV
- Reviewed program data for PLHIV initiated on ART at 62 ICAP supported facilities from January 2013 to December 2013
- Assessed patient outcomes for PLHIV with CD4 < 100 cells/mm³ at 6 months and 12 months after ART initiation



CD4 Count and TB Status at ART Initiation (62 facilities)



Treatment Outcomes for Severely Immunosuppressed PLHIV (n=479)



Survival Analysis

- Expanded the analysis further to patients with 80 months follow-up time after enrolment into care at ICAP-supported facilities
- Conducted a Kaplan Meier Survival analysis and further disaggregated the data by CD4 count and by age of patient at the time of enrolment into care

Survival Analysis Stratified by CD4



Survival Analysis Stratified by Age



Modified Approach to Patient with Severe Immunosuppression

ROOM	SERVICES		
RECORDS ROOM	 Filing of CD4 results from laboratory Identify and flag files with CD4 less than 100cells/mm³ or CD4 less than 15% using the checkered SIPOC sticker Insert SIPOC patient assessement form in patient file 		
CLINICAL ROOM	Clinical assessment including TB screening at each clinica Clinical examination includidetecting Opportunistic Infe	: Il visit ing temperature with special ections (OI)	attention to
LABORATORY/ RADIOLOGY	Investigations: Haemoglobin Xpert MTB/Rif assay testing Cryptococcal antigen (CrAg) Hepatitis B screening Stool for parasites and AFB Other investigations to consid Chest X-ray in patients with Liver Function Test (LFT) Mid-Stream Urine in clients Fine Needle Aspirate (FNA)	g screening in anyone with diarrhea ler presumptive TB with urinary symptoms or biopsy in patients with foc	al lymphadenopathy
CLINICIAN/ NUTRITIONIST/ COUNSELLOR	Clinical Management: Cotrimoxazole Preventive Therapy Initiation of ART as per national guidelines IPT after 3 months Fortnightly clinical visits after ART (Assess for IRIS)	Nutritional Assessment: Nutritional assessment, counseling and supplementation Grade nutrition and manage accordingly	 Psychosocial support: Adherence counseling at each clinic visit Clinical visits scheduled fortnightly for one month then monthly thereafter Linkage to peer educator with weekly phone call to assess progress

Conclusion

- Other Care Models for Patients at High Risk of Disease Progression in SSA
 - REALITY study
 - Lighthouse ALUP model
- In spite of convincing evidence, the quality and coverage of DSDM for P@HR is substandard
- There is need to take the opportunities presented by these models to scale
- CQUIN provides an opportunity to move from policy to practice