



Children and adolescents with HIV in a community antiretroviral therapy delivery programme: implementation and outcomes

Yukteshwar Sookrajh, Lara Lewis, Thokozani Khubone, Johan van der Molen, Moherndran Archary, Riona Govender, Andy Gray, Nigel Garrett, Phelelani Sosibo, Munthra Maharaj, Jienchi Dorward, Rosemary Van Heerden





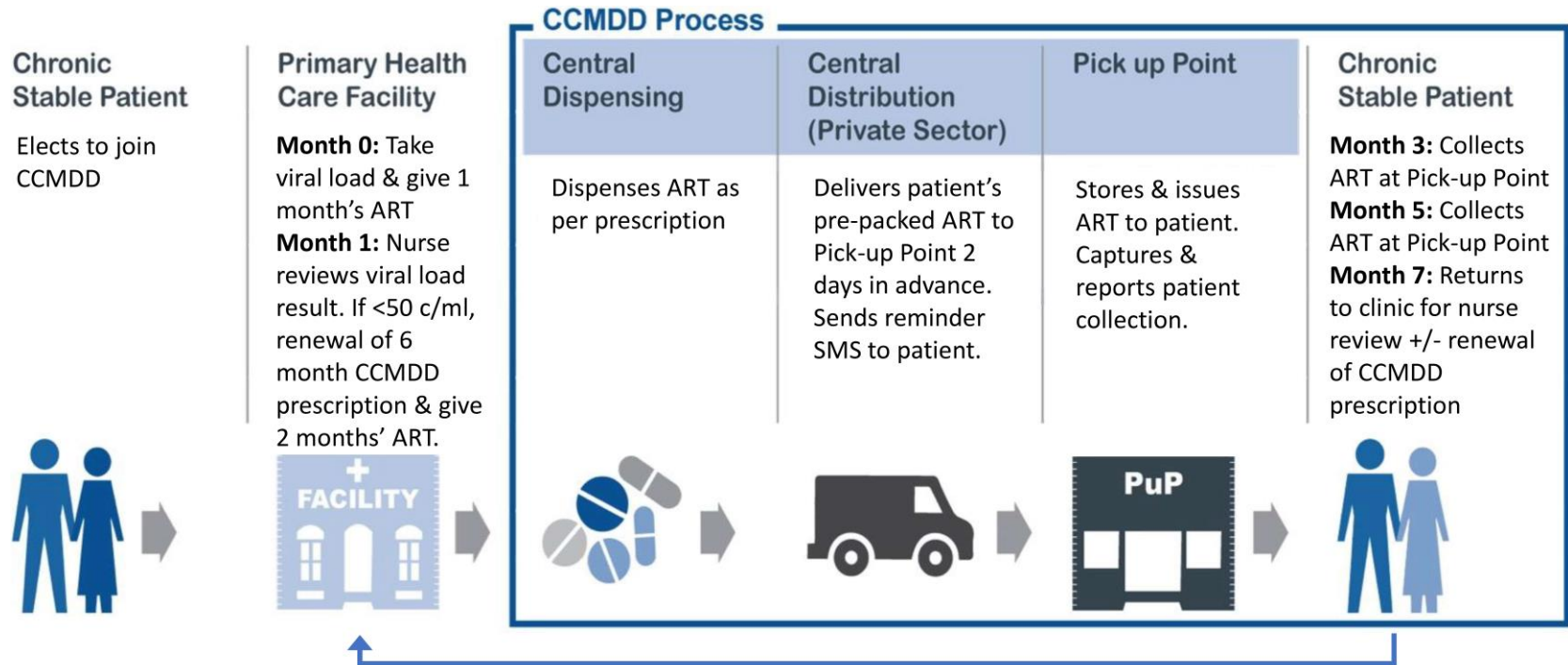
www.durban.gov.za

01 | Background

BY 2030 ETHEKWINI WILL BE AFRICA'S MOST LIVEABLE CITY

- The District of eThekweni, containing the city of Durban, is found on the East Coast of South Africa and is the economic hub of the province of KwaZulu-Natal
- The District currently has 7289 children and adolescents (<15 years of age) in chronic HIV care with 2258 of these patients in care at clinics run by the eThekweni Municipality Health Unit
- One of the key Differentiated care strategies implemented within eThekweni was the Central Chronic Medicine Dispensing and Distribution (CCMDD) approach
- CCMDD allows people who are clinically stable to collect their chronic medication, including antiretroviral therapy (ART), from community pick-up points and private pharmacies, instead of attending clinics





Roberts. CCMD: A Public/Private Partnership to Increase Access to ART. 2018
http://files.icap.columbia.edu/files/uploads/ICAP_Grand_Rounds_Project_Last_Mile_Slides.pdf.

- The WHO currently recommends that children and adolescents with HIV (CAWH) should be enrolled in differentiated ART delivery programmes such as CCMDD, but has called for more evidence on the impact of these programmes on clinical outcomes
- In South Africa, at the beginning of the COVID-19 pandemic CAWH ≥ 5 years old became eligible for ART collection in CCMDD
- Up to this timepoint, the CCMDD programme was only accessible to patients over the age of 18 years
- The need to reduce clinic visits and clinic congestion (social distancing); accompanied with the focus to ensure constant supply of chronic medication (in the context of lockdown restrictions) formed the basis for this change in strategy



www.durban.gov.za

02 | Objectives

BY 2030 ETHEKEWINI WILL BE AFRICA'S MOST LIVEABLE CITY

- We aimed to assess enrolment of children and adolescents with HIV into the CCMDD programme after the South African guideline change
- We also aimed to assess clinical outcomes after 12 months among a subset of children and adolescents with HIV enrolled in CCMDD with enough follow-up time

03 | Methodology

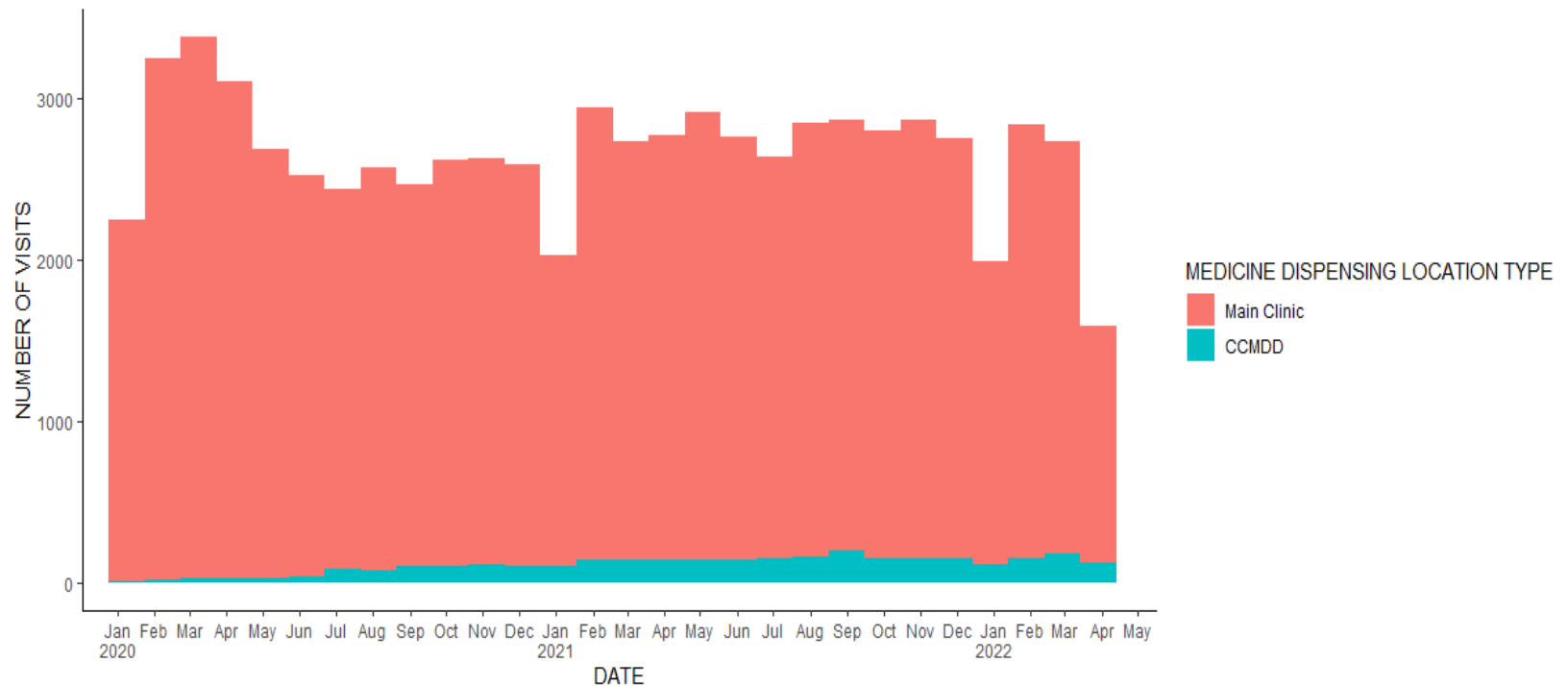
- We conducted a retrospective cohort study
- The primary data source was de-identified TIER.net data from 59 clinics run by eThekweni Municipality (TIER.net is a facility-based patient management system implemented throughout South Africa)
- CAWH aged 5-18 years and in care between June 2020-April 2022 were included in the analysis of the main outcome of:
 - CCMDD enrolment
- For a subset enrolled in CCMDD before December 2020 (allowing 12 months of follow-up), we assessed the outcomes of:
 - 12-month retention in care
 - 12-month viral suppression (<50 copies/mL as per South African ART Guidelines)

04 | Results

BY 2030 ETHEKWINI WILL BE AFRICA'S MOST LIVEABLE CITY

- 6985 CAWH were in care between June 2020 to April 2022, 951 (13.6%) were referred to CCMDD

Figure 1: Clinic visits and CCMDD referrals by month among children and adolescents with HIV receiving antiretroviral therapy in eThekweni



- 194 CAWH were referred to CCMDD before Dec 2020 (cutoff time to allow assessment of subsequent 12-month outcomes)

Table 1: Characteristics of children and adolescents with HIV referred into CCMDD between June-Dec 2020

		Total (N=194)	5-9 years (N=18)	10-14 years (N=48)	15-18 years (N=128)
Gender, %(n)	Female	60.3(117)	44.4(8)	60.4(29)	62.5(80)
	Male	39.7(77)	55.6(10)	39.6(19)	37.5(48)
Prescription lengths in months, %(n)	6	59.3(115)	72.2(13)	70.8(34)	53.1(68)
	12	40.7(79)	27.8(5)	29.2(14)	46.9(60)
ART regimen, %(n)	ABC/XTC/DTG	1(2)		2.1(1)	0.8(1)
	ABC/XTC/EFV	12.9(25)	44.4(8)	18.8(9)	6.3(8)
	ABC/XTC/LPV/r	5.2(10)	11.1(2)	12.5(6)	1.6(2)
	ABC/XTC/NVP	1(2)		4.2(2)	
	AZT/XTC/EFV	1(2)		2.1(1)	0.8(1)
	AZT/XTC/LPV/r	4.6(9)	11.1(2)	14.6(7)	
	AZT/XTC/NVP	0.5(1)			0.8(1)
	TDF/XTC/DTG	32.5(63)		16.7(8)	43(55)
	TDF/XTC/EFV	39.7(77)	33.3(6)	25(12)	46.1(59)
	TDF/XTC/LPV/r	1.5(3)		4.2(2)	0.8(1)

- **Retention at 12 months:**
 - 178/194 (91.7%) CAWH were retained-in-care.
- **Viral suppression at 12 months:**
 - 148/178 (83.1%) had a 12-month viral load
 - 123/148 (83.1%) were suppressed <50 copies/mL

05 | Conclusion

BY 2030 ETHEKWINI WILL BE AFRICA'S MOST LIVEABLE CITY

- Initial CCMDD uptake among CAWH was low, but retention-in-care and viral suppression were relatively high in those enrolled.
- This is reassuring and suggests that this could be viable strategy if implemented on a larger scale
- The rollout of simplified ARV regimens with greater use of Fixed Dose Drug Combinations will also assist to scale up utilization of CCMDD as part of a differentiated care approach for this group
- Continued monitoring and evaluation of CCMDD as part of the differentiated care approach in paediatrics is recommended to ensure that longer term outcomes are in line with programmatic objectives

06 | Acknowledgements



www.durban.gov.za

We thank staff at the EtheKwini Municipality Health Unit and primary care clinics
We would like to acknowledge the technical support received from CAPRISA towards the completion of this work



BY 2030 ETHEKWINI WILL BE AFRICA'S MOST CARING AND LIVABLE CITY

