

Differentiated care for people living with HIV and non-communicable diseases:

An account of the experience within the eThekwini Municipality Primary Health Care clinics, Durban, South Africa

Yukteshwar Sookrajh, Vishen Jugathpal, Lara Lewis, Johan van der Molen, Nigel Garrett, Phelelani Sosibo, Munthra Maraj, Rosemary Van Heerden and Jienchi Dorward





www.durban.gov.za

#### eThekwini District

- The District of eThekwini, 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 488 048 adult people living with HIV (PLHIV) in chronic HIV care, with 211 944 (43%) of these patients in care at clinics run by the eThekwini Municipality Health Unit.
- Differentiated models of care (DMoC) have constituted a crucial strategy to reduce waiting times at facilities, to enhance patients' treatment experience, to facilitate their retention in care, and to ensure that ever-increasing numbers of patients are managed effectively to ensure the best clinical outcomes.







www.durban.gov.za

The Central Chronic Medicine Dispensing and Distribution (CCMDD) programme allows people who are clinically stable to collect their chronic medication, including antiretroviral therapy (ART) and for non-communicable diseases (NCDs), from community pick-up points and private pharmacies, instead of attending clinics.

CCMDD Process					
Chronic Stable Patient Elects to join	Primary Health Care Facility Month 0: Take	Central Dispensing	Central Distribution (Private Sector)	Pick up Point	Chronic Stable Patient Month 3: Collects
CCMDD	viral load & give 1 month's ART <b>Month 1:</b> Nurse reviews viral load result. If <50 c/ml, renewal of 6 month CCMDD prescription & give	Dispenses ART as per prescription	Delivers patient's pre-packed ART to Pick-up Point 2 days in advance. Sends reminder SMS to patient.	Stores & issues ART to patient. Captures & reports patient collection.	ART at Pick-up Point Month 5: Collects ART at Pick-up Point Month 7: Returns to clinic for nurse review +/- renewal of CCMDD prescription
	2 months' ART.  FACILITY  II II			PuP	

Roberts. CCMDD: A Public/Private Partnership to Increase Access to ART. 2018 <a href="http://files.icap.columbia.edu/files/uploads/ICAP">http://files.icap.columbia.edu/files/uploads/ICAP</a> Grand Rounds Project Last Mile Slides.pdf





- With this extensive ARV roll-out, we have witnessed increased life expectancy among PLHIV and this has led to an emergence of comorbid non-communicable diseases (NCDs) among PLHIV.
- Cardiovascular disease has emerged as the number one non-HIV cause of mortality and morbidity for PLHIV.. (WHO, 2023)
- PLHIV with co-morbid NCDs represents an emerging area of clinical care, and an analysis of DMoC for PLHIV with NCDs requires more time and attention.
- When considering DMoC in eThekwini; the CCMDD approach has been the primary strategy that has been implemented within eThekwini District





- South Africa has embraced CCMDD; developed an online electronic prescriber platform – Synchronised National Communication in Health (SyNCH).
- SyNCH allows prescribers to create unique profiles for patients and then electronically prescribe medication, which is dispensed centrally and delivered to various patient selected community based pick-up points.
- Our study aims to explore the implementation of DMoC for PLHIV with co-morbid NCDs.



### Objectives



- We aimed to evaluate the roll-out of DMoC across all Municipal clinics in eThekwini.
- More specifically, we aimed to determine the level of integration between HIV and NCD care for patients who are part of DMoC, i.e. registered on CCMDD.



### Methodology



- We analysed de-identified clinical electronic prescriptions submitted onto the SyNCH prescribing platform from 59 Primary Health Care clinics in eThekwini Municipality from 2022 to 2024 as part of the DMoC programme.
- The analysis included the number of patients offered CCMDD over time, and the prevalence of co-morbidities among patients (particularly HIV and NCDs), and the type of pick-up point to which the medication was delivered.





- In 2022, 91 102 PLHIV from the 59 clinics were eligible for CCMDD.
- Between 2022 and 2023, 78 838 PLHIV collected medication through the CCMDD programme.

	DMoC for ARV only	DMoC for ARV and NCDs
2022	89%	11%
2023	87%	13%

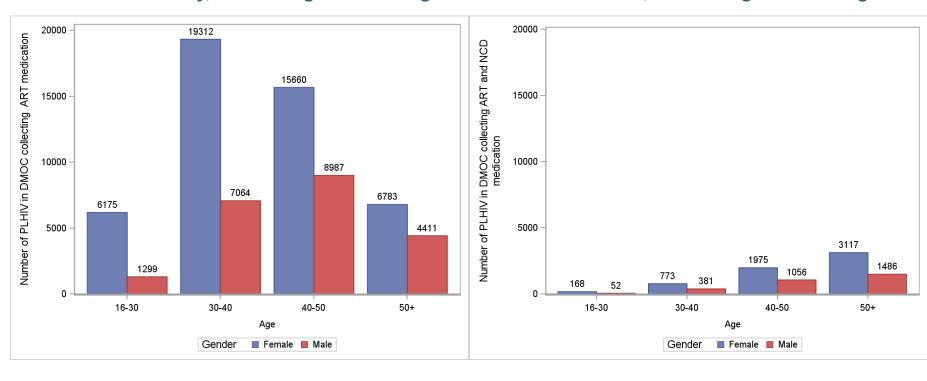




www.durban.gov.za

#### Number of PLHIV using DMoC for ART medication only, based on gender and age

#### Number of PLHIV using DMoC for ART and NCD medication, based on gender and age

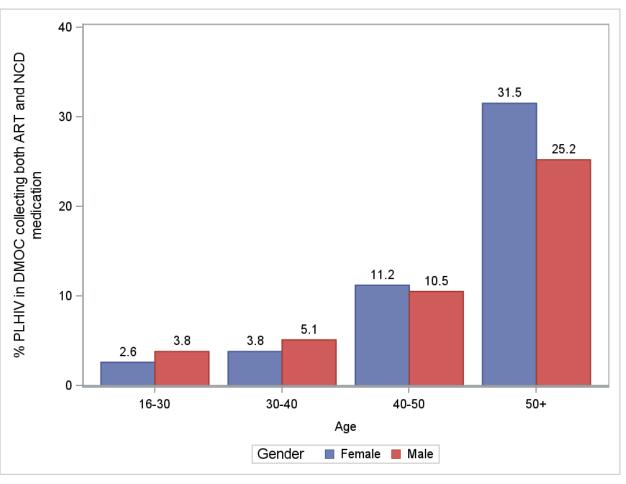






www.durban.gov.za

# Percentage of PLHIV using DMoC for both ART and NCD medication based on gender and age



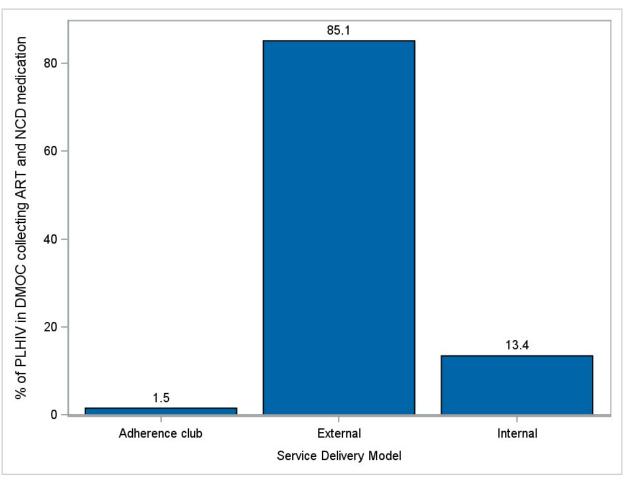
BY 2030 ETHEKWINI WILL BE AFRICA'S MOST LIVEABLE CITY





www.durban.gov.za

### Breakdown of pickup point type among PLHIV using DMoC for both ART and NCD medication



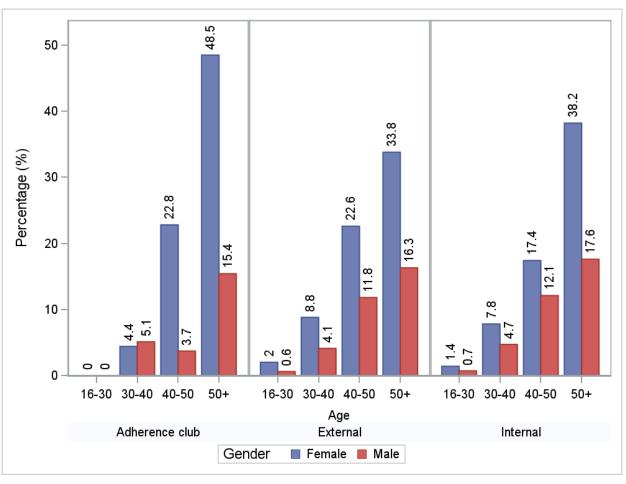
BY 2030 ETHEKWINI WILL BE AFRICA'S MOST LIVEABLE CITY





www.durban.gov.za

# Percentage of PLHIV using DMoC for both ART and NCD medication, by pickup point type



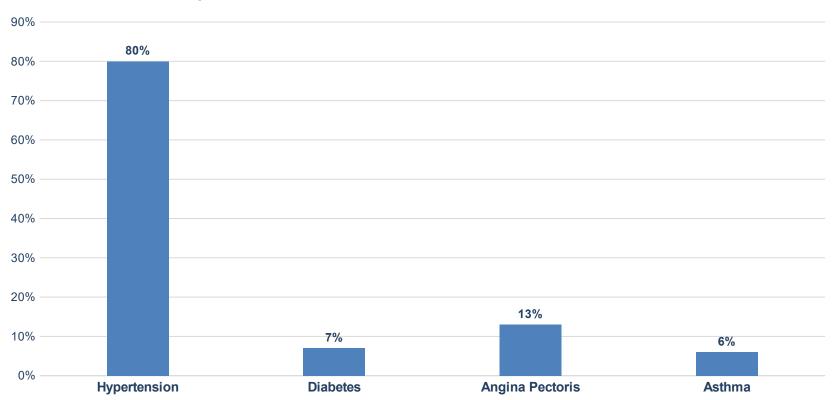
BY 2030 ETHEKWINI WILL BE AFRICA'S MOST LIVEABLE CITY





www.durban.gov.za

#### Proportion of conditions of PLHIV on DMoC with NCDs





#### Conclusion



- With advancing age in PLHIV, the presence of NCDs is an emerging area of clinical care that requires attention.
- The data suggest a moderate increase in the uptake of DMoC for PLHIV with NCDs over the period under study.
- This may not be in keeping with the expected rate of growth in this group when one considers the increasing numbers of patients living with HIV who are ageing.
- This suggests that greater efforts may be required to increase the uptake of DMoC in this specific category of PLHIV.
- NCDs also have their own specific eligibility criteria for DMoC, and further research is required to explore the interaction between NCDs and HIV within the DMoC framework.



### References



www.durban.gov.za

 World Health Organization. Integrating non-communicable diseases into HIV service packages: Technical Brief. Geneva: WHO; 2023.

URL: <a href="https://www.who.int/publications/i/item/9789240073470">https://www.who.int/publications/i/item/9789240073470</a>



### Acknowledgments



- We thank staff at the eThekwini Municipality Health Unit and Primary Health Care clinics.
- We acknowledge the technical support received from CAPRISA towards the completion of this work.
- We would also acknowledge Health Systems Trust for their assistance in facilitating access to the data analysed as part of this work.