

ADDRESSING TB IN DURBAN'S HIGH RISK HOMELESS AND DRUG USER POPULATION: A MOBILE X-RAY TESTING INITIATIVE

### Presented by Percy Gumede

Centre Manager – Bellhaven Harm Reduction Centre

Percy Gumede, Michael Wilson, Amanda Brumwell







Advance Access & Delivery

FAST TRACK CITIES 2023 - AMSTERDAM

## BACKGROUND

- 328 000 estimated people who developed TB
- 234 000 (71%) estimated people who developed TB and were coinfected with HIV.
- 89 000 people were diagnosed with both TB and HIV.
- South Africa is estimated to have more than 136,000 missing cases of tuberculosis (TB).
- eThekwini has an estimated 16 000 homeless individuals. 60% of homeless individuals self reported to using drugs in a 2016 HSRC study.
- Unhoused individuals and people who use drugs (PWUD) at high risk of TB and HIV.
- High rates of co-morbid conditions (e.g. addiction, HIV) in these populations.



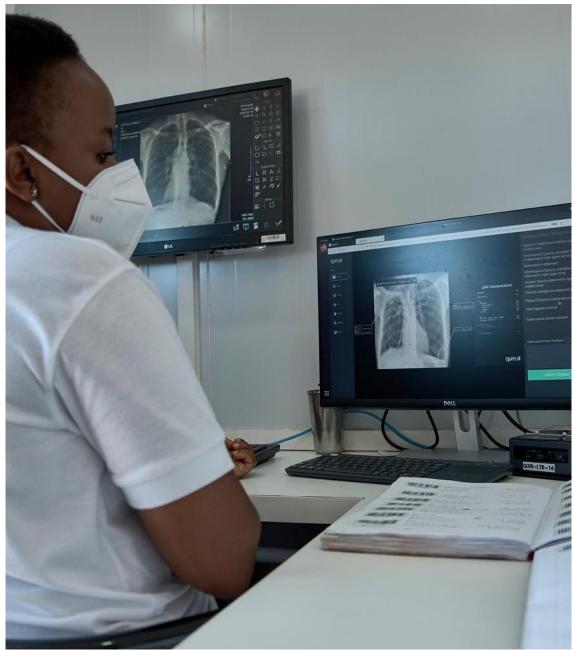
## METHODS

#### Screening Approach:

- A mobile screening team was established to conduct screenings targeting unhoused individuals and PWUD. The initiative covered shelters, hostels, and frequented public spaces.
- The goal was to proactively identify TB cases in these populations, as they are more susceptible due to living conditions, food insecurity, stigmatization and other factors.

Benefits of the Initiative:

- Early detection of TB cases among unhoused individuals and PWUD is crucial for timely treatment and reducing transmission.
- Utilizing mobile teams and advanced diagnostic tools enhances access to healthcare services for marginalized communities.
- Gene Xpert and qXR software improve diagnostic accuracy, reducing the likelihood of false positives or negatives.
- This initiative aligns with global efforts to eliminate TB as a public health threat.



## **RESULTS BREAKDOWN**

Indicators	Totals
Screened via Mobile X-Ray	435
Abnormal X-Ray	112 (26%)
TB Suggestive	45 (40%)
Total percent of all screened that had x-rays indicative of TB	9%

## RESULTS

- 435 individuals received chest radiography, 112 (26%) of those individuals had abnormal x-rays.
- 45 (40%) of those 112 individuals with abnormal x-rays were suggestive of TB
- 3 individuals who had normal X-Rays were initiated onto treatment using their sputum results and may have been missed if we had only the x-ray results as the only means of diagnosis.
- 6 individuals (13%) had abnormal x-ray findings but tested negative for TB using Gene Xpert, highlighting the importance of employing multiple diagnostic tools.
- The mobile X-ray testing initiative identified a significant number of potential TB cases (9%), emphasizing the urgent need to address TB in people living with HIV.



# Recommendations & Conclusions

Recommendations: Based on findings and lessons learned, we recommend a multifaceted approach to address TB and HIV among Durban's homeless population. This includes targeted resources, enhanced stakeholder collaboration, and innovative strategies for holistic care. Here are some key take-aways.

- Allocate targeted resources for homeless-specific TB and HIV programs in Durban due to high TB prevalence.
- Implement mobile chest X-ray initiatives to locate hidden TB cases among the homeless.
- Strengthen collaboration between NGOs and the Department of Health to identify missing TB cases in key populations.
- Emphasize peer support post-diagnosis to ensure treatment linkage and adherence for individuals.
- Conclusion: The increasing number of homeless individuals globally demands immediate action to address their pressing health challenges, especially the high rates of TB and its association with HIV. This mobile X-ray testing initiative serves as a compelling case study, emphasizing the need for targeted interventions and collaborative efforts.



