THE QUALITY OF THE COMMUNITY-BASED OPIOID SUBSITUTION THERAPY PROGRAMME IN FIVE SOUTH AFRICAN DISTRICTS

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Background

Opioids are a major global drug problem, impacting vulnerable populations. South Africa faces significant heroin use and injection drug use, despite national policies supporting opioid substitution therapy (OST) and harm reduction. However, public healthcare implementation of these strategies remains limited.

Model of Care Description

The NACOSA PWUD harm reduction program uses peers to deliver harm reduction in four South African provinces. Its methadone-based OST aims to reduce opioid dependence, HIV and hepatitis transmission, as well as the negative health and human rights outcomes among intravenous opiate users through a hybrid model of drop-in or clinic facility-based, and mobile outreach OST services in 5 districts.

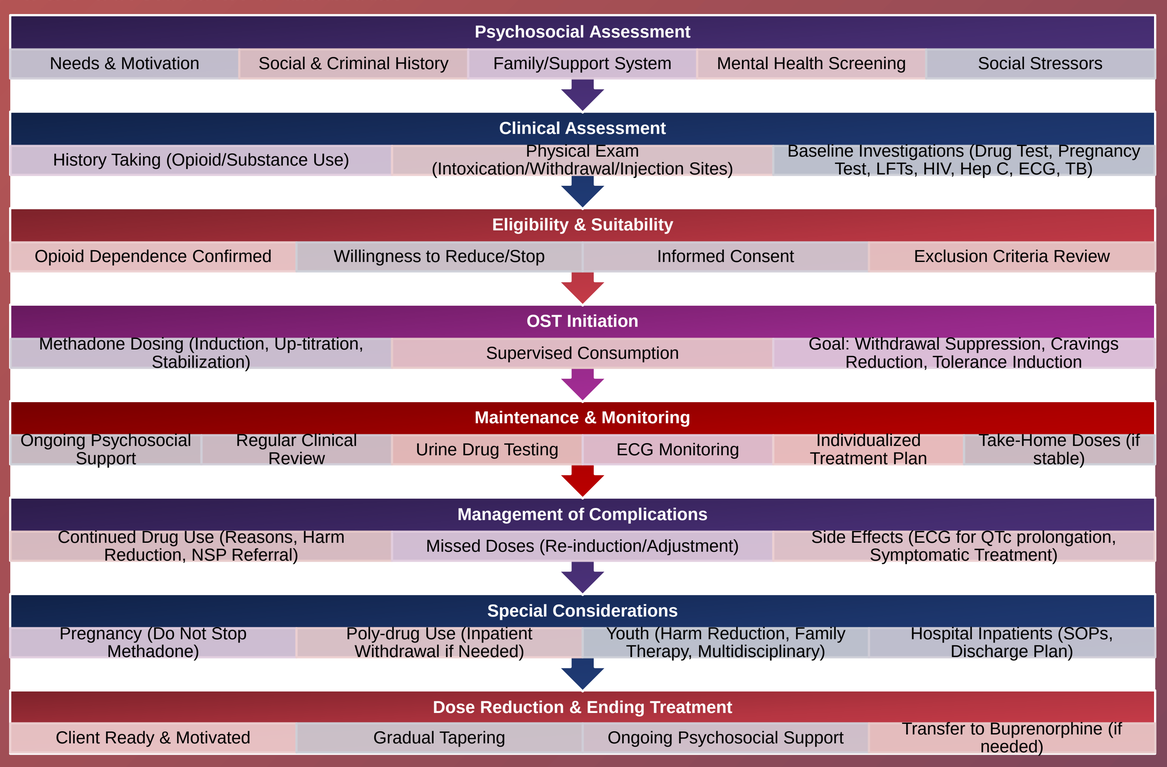

Figure1. NACOSA OST Model of Care

Effectiveness was assessed via a mixed-methods approach using routine programme data from 2019-2024, surveys, interviews, focus groups, and a contribution analysis model to map activities to outcomes.

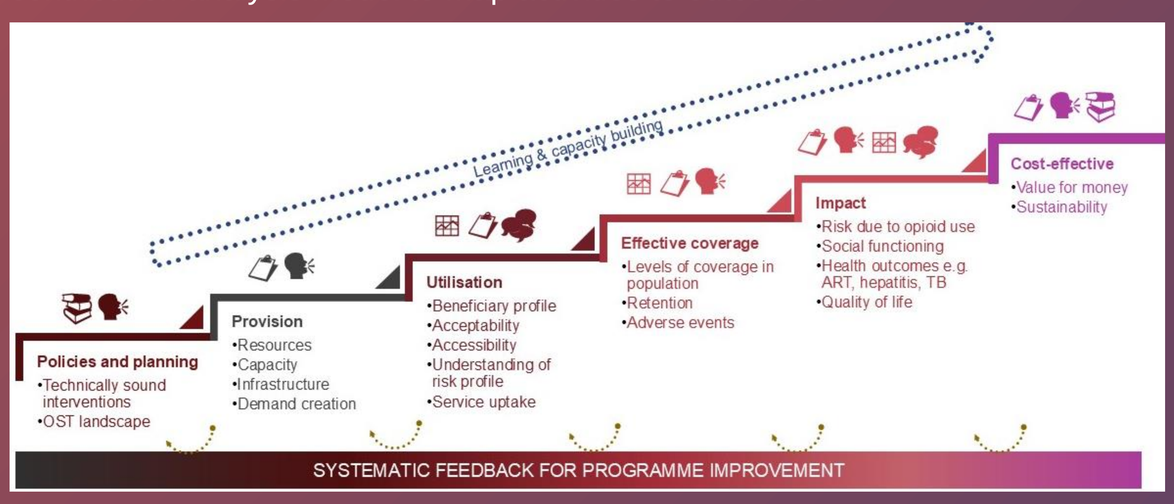

Figure 2. Contribution Analysis Model

Effectiveness

To program reached n=53381 people who use drugs, and n=2046 OST beneficiaries over a 65-month period. The evaluation surveyed n=326 current and n=39 former OST beneficiaries. Focus groups engaged n=85 beneficiaries. Surveys included n=60 peers and n=35 support-persons. N=80 Implementing staff members participated in surveys and interviews.

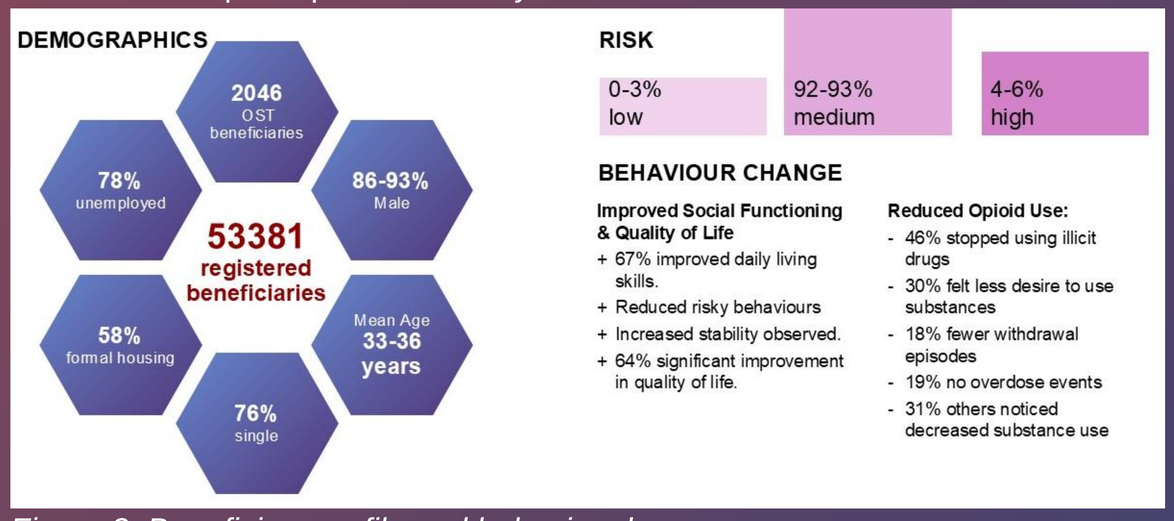

Figure 3. Beneficiary profile and behavior change.

The OST programme demonstrates effectiveness with high beneficiary satisfaction, shown by positive feedback (97.2%, m=317) and service uptake. However, methadone access faces regulatory and funding challenges. Beneficiaries value comprehensive care, yet desire economic empowerment (55%, n=180), transport support (47%, n=152), and community reintegration (39%, n=128).

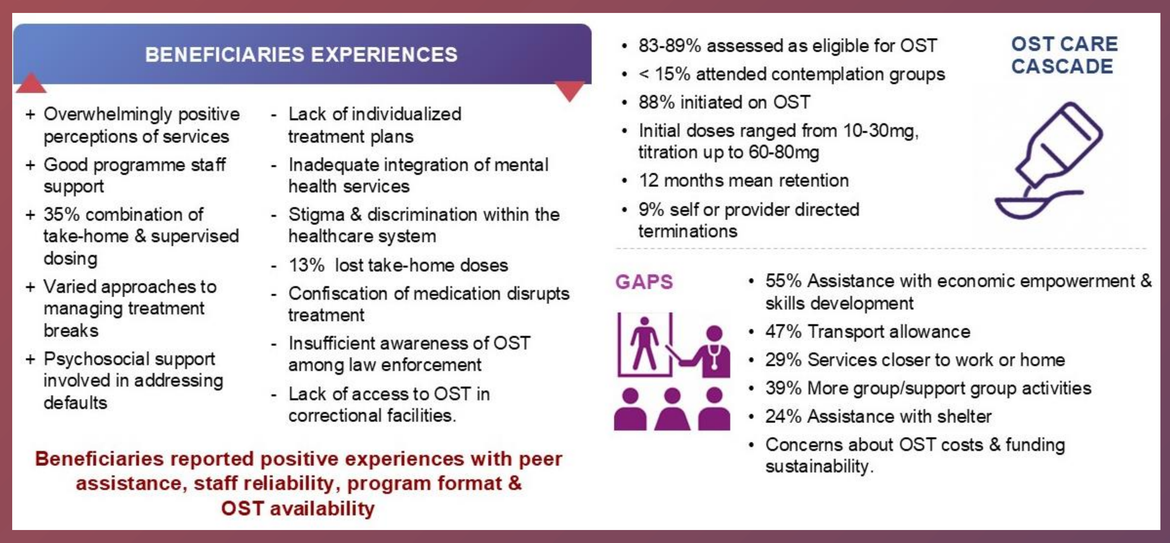

Figure 4. Programme Quality

OST initiation rates are at (74.1% (95%CI 72.0-76.0), and on average PWID were retained on OST longer than PWUD, with a mean retention of 15.9 months (SD9.5). Dosing aligns with WHO guidelines, though variations exist (mean maintenance at 60-80mg).

Variable	NFM2 2019-2022						NFM3 2022-2024					
	PWUD			PWID			PWUD			PWID		
	n	%	95%CI	n	%	95%CI	n	%	95%CI	n	%	95%CI
Recruitment												
Contemplation	0	0.0	0.0-18.5	120	7.4	6.2-8.8	161	48.1	42.6-53.6	1070	47.6	45.5-49.6
OST Screen	18	11.0	2.1-9.4	1617	6.5	6.2-15.6	335	14.1	12.8-15.6	2250	5.6	5.4-5.9
OST Eligible	16	88.9	65.3-98.6	1343	83.1	81.1-84.9	276	82.4	77.9-86.3	1871	83.2	81.5-84.7
OST Initiated	13	81.3	54.4-96.0	777	57.9	55.2-60.5	254	92.0	88.2-94.9	1654	88.4	86.9-89.8
OST Ineligible	2	11.1	1.4-34.7	274	16.9	15.1-18.9	59	17.6	13.7-22.1	379	16.8	15.3-18.5
Type												
Methadone 2mg/ml	3	23.1	5.0-53.8	222	28.6	25.4-31.9	29	11.4	7.8-16.0	226	13.7	12.0-15.4
Methadone 10mg/ml	10	76.9	46.2-95.0	553	71.2	67.8-74.3	185	72.8	66.9-78.2	986	59.6	57.2-62.0
Buprenorphine	0	0.0	0.0-24.7	2	0.3	0.0-0.9	2	0.8	0.1-2.8	3	0.2	0.0-0.6
Unspecified							38	15.0	10.8-20.0	439	26.5	24.4-28.7
Retained on OST												
3 months	5	38.5	13.9-68.4	585	79.8	76.7-82.7	175	82.2	76.3-87.1	1269	88.8	87.1-90.4
6 months	5	38.5	13.9-68.4	490	72.5	69.0-75.8	131	70.8	63.7-77.2	995	75.9	73.5-78.2
12 months	4	30.8	9.1-61.4	363	71.0	66.9-74.9	97	58.1	50.2-65.7	700	62.5	59.6-65.3
Mean	*7.2*			*11.5*			*9.8*			*11.6*		
Std. Dev.	*10.5*			*9.6*			*9.1*			*9.6*		
Median	*0.0*			*10.0*			*6.6*			*8.4*		
IQR	*13.0 [0.0,13.0]*			*17.9[2.8,20.6]*			*14.8[1.5,16.4]*			*20.6[2.8,23.4]*		
Other outcomes												
Loss to follow up	8	61.5	31.6-86.1	231	29.7	26.5-33.1	138	54.3	48.0-60.6	582	35.2	32.9-37.5
Complete	0	0.0	0.0-24.7	34	4.4	3.0-6.1	2	0.8	0.1-2.8	37	2.2	1.6-3.1
Terminated	0	0.0	0.0-24.7	74	9.5	7.6-11.8	10	3.9	1.9-7.1	143	8.6	7.3-10.1
Deceased	1	7.7	0.2-36.0	6	0.8	0.3-1.7	3	1.2	0.2-3.4	26	1.6	1.0-2.3
Incarcerated	0	0.0	0.0-24.7	9	1.2	0.5-2.2	1	0.4	0.0-2.2	22	1.3	0.8-2.0
Transfer out	0	0.0	0.0-24.7	13	1.7	0.9-2.8	3	1.2	0.2-3.4	35	2.1	1.5-2.9
Unspecified	0	0.0	0.0-24.7	47	6.0	4.5-8.0	0	0.0	0.0-1.4	109	6.6	5.4-7.9

95%CI= 95% confidence interval. IQR=Interquartile range. OST-Opioid substitution therapy. PWID=People who use drugs. PWUD=People who use drugs. Std dev=Standard deviation. ^Proportion of those eligible to reach month milestone. ~No visit recorded for more than 12 months and no outcome indicator specified.

Figure 5. OST Care Cascade

Take-home doses raise minimal diversion concerns (6.1%, n=20 sharing), pointing to the robust social support interventions. Treatment breaks are managed flexibly, but hospital and incarceration access remain problematic.

"My child is still living on the streets but because of the methadone, I am able to see her more often. I sometimes cook for her and bring the food to her. She needs to remain on methadone so that she can get better."
- Support Person

"He is now a better father to his children, he stays inside the house for the whole weekend without seeing any of his friends. He also now buys food for the whole family on his pay day."
- Support Person

"OST has changed my life for the better. I am now able to function normally and I am no longer using heroin."
- Programme Beneficiary

Figure 6. Stakeholder Perspectives

Recommendations

BENEFICIARY SUPPORT

- Prioritize supportive housing for those experiencing homelessness.
- Address financial challenges through job training, financial assistance, and debt counseling.
- Expand psychosocial support services.
- Prioritize family reunification and strengthen community support systems.
- Invest in expanded peer support programs.
- Integrate economic empowerment programs.
- Strengthen family involvement in treatment.
- Improve access to care through innovative service delivery models.

CAPACITY BUILDING

- Further training for peer educators on OST program components.
- Specialized training in mental health for staff.
- Broader staff training on addiction treatment best practices, cultural competency, and social determinants of health.
- Improved data management and reporting systems.
- Training on addressing stigma and discrimination.
- Training on beneficiary engagement and retention strategies.

COLLABORATION AND PARTNERSHIPS

- Strengthen partnerships with community-based organizations, healthcare providers, and other stakeholders.
- Enhance inter-sectoral collaboration with healthcare providers, community organizations, and law enforcement.
- Strengthen public-private partnerships.
- Increase community engagement and outreach.
- Partner with transportation providers.
- Collaborate with housing and employment social services.
- Partner with academic institutions or research organizations.
- Build strong peer support networks.

Figure 7. Recommendations

Conclusion

Th OST programme has established a solid foundation of policies, interventions, and infrastructure, leading to substantial positive outcomes for beneficiaries, including enhancements in social functioning, health outcomes, and overall quality of life. The programme delivers value for money and offers a promising pathway towards long-term sustainability.

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SEDIBA HOPE MEDICAL CENTRE

NACOSA