



Delivering High-Quality DSD Services at Scale

A CQUIN Learning Network Workshop

April 26– 29, 2022

Johannesburg, South Africa

No differences in recipients of care perceived quality of care
between differentiated service delivery models and conventional
care in South Africa

Results of the first round of AMBIT's Sentinel-South Africa survey

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AMBIT—Alternative Models of ART Delivery: Optimizing the Benefits

- **Objectives:**

- Describe implementation scale of DSD models
- Estimate benefits and costs
- Propose optimal allocation of resources and models
- Identify impacts of DSD models on broader health system

- **By doing what?**

- Data collection, data synthesis, data analysis, and mathematical modeling
- In Malawi, Zambia, and South Africa
- Relying on both existing data (e.g. national EMRs) and newly generated data (SENTINEL survey)

- **Project implementation**

- 2019-2024
- BMGF support
- HE²RO (South Africa), CHAI (Zambia and Malawi), Boston University



Background

- Like many countries across sub-Saharan Africa, South Africa has been scaling up differentiated service delivery models (DSD) to improve ART coverage
- DSD models aim to increase the responsiveness of HIV treatment programs to the individual needs of recipients of care (RoC) to improve treatment outcomes and quality of life.
- Current evidence shows that compared to conventional care, DSD models of care can lead to slightly improved treatment outcomes, lower costs for patients, and (sometimes) slightly lower costs for health systems
- **Little is known about how patients' experiences of care in DSD models differ from conventional care.**
 - Patient satisfaction with the quality of care provided is imperative because care should be responsive to patients' needs and respectful of their circumstances and it's an important determinant of health-seeking behaviour.
- AMBIT's SENTINEL survey conducted to assess patient experience, provider experience, and other aspects of DSD model implementation.



Methods

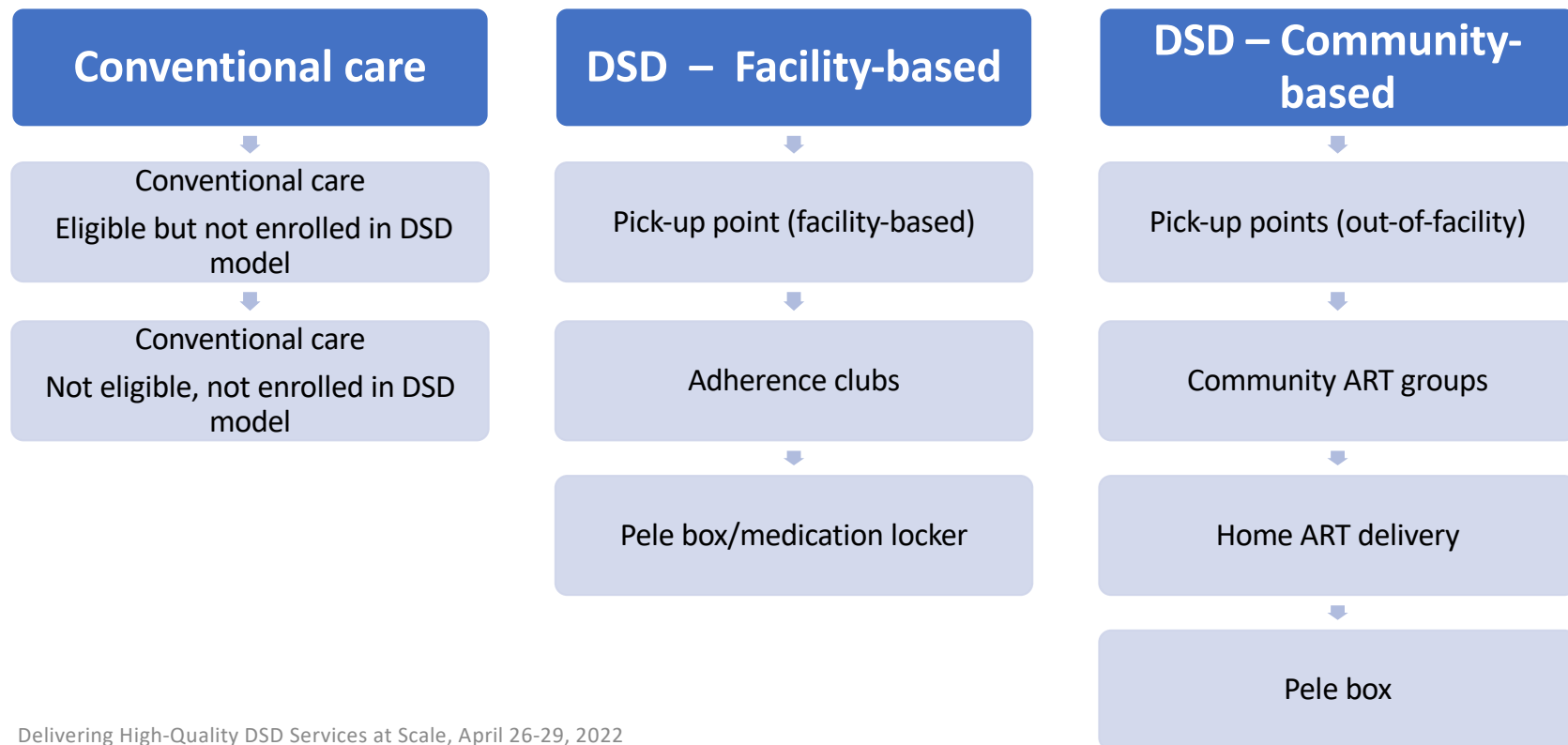
- **STUDY DESIGN:** Cross-sectional survey
- **STUDY POPULATION:** Adults on ART for ≥ 6 months at the study site and either enrolled in a DSD model, eligible for but not enrolled in a DSD model, or not eligible
- **STUDY LOCATION:** 21 primary clinics in 4 districts in 3 provinces of South Africa
- **SAMPLE SIZE:** Up to 10 individuals/model x up to 5 models/site (maximum n=1050)
- **STUDY PERIOD:** May to November 2021



✓ We assessed the experiences of RoC participating in DSD models compared to those remaining in conventional care



Models of ART delivery in South Africa





Outcomes measures

PERCEIVED QUALITY OF CARE – “High” vs “Low”

- Questionnaire included a 10-item, 5-point Likert scale (strongly disagree to strongly agree) assessing participants' perceived quality of care (QoC)
- The final scale included 6 items assessing:
 - Provider attitude
 - Trust in the providers
 - Time spent with the provider
 - Clinic administrative processes
 - Information received regarding HIV/ART
- Asked how HIV services could be improved (multiple response selection & “other”)



Data analysis

- We dichotomized the final mean QoC scores as **“High”** QoC (score >3) or **“Low”** QoC (score ≤3)
- Logistic regression analysis to assess factors associated with
 - **“Low”** perceived QoC
 - **“High”** satisfaction
- Adjusted regression models for DSD model participation, duration of ART, plural health-seeking behaviour, additional diseases treated at the facility, ART dispensing duration, the annual number and type of clinic visits, and the number of missed visits annually
- We report adjusted odds ratio (AOR) of low perceived QoC



Characteristics of enrolled study participants (n=867)

Fig 1. DSD model participation (overall)

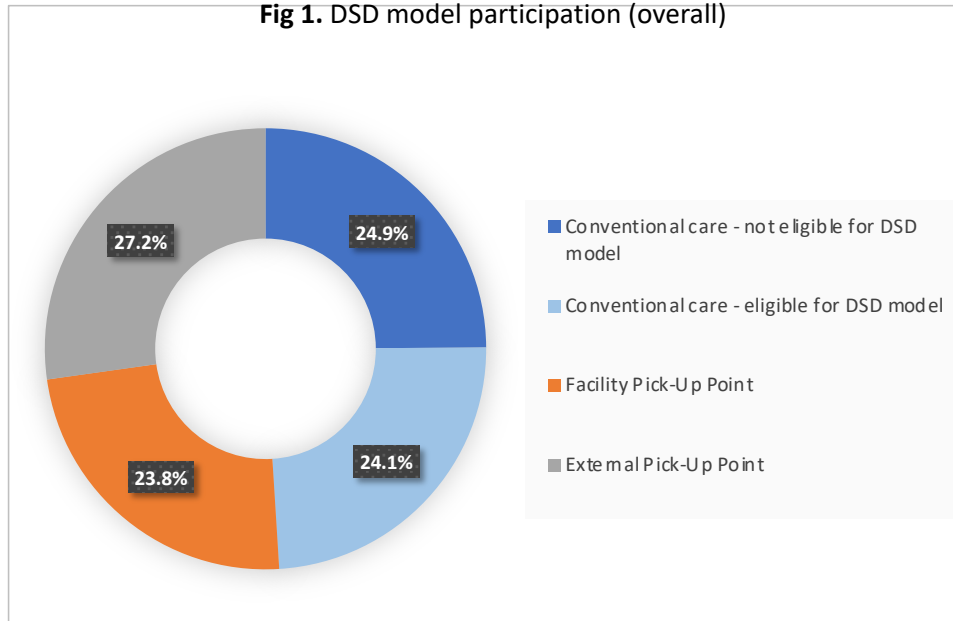
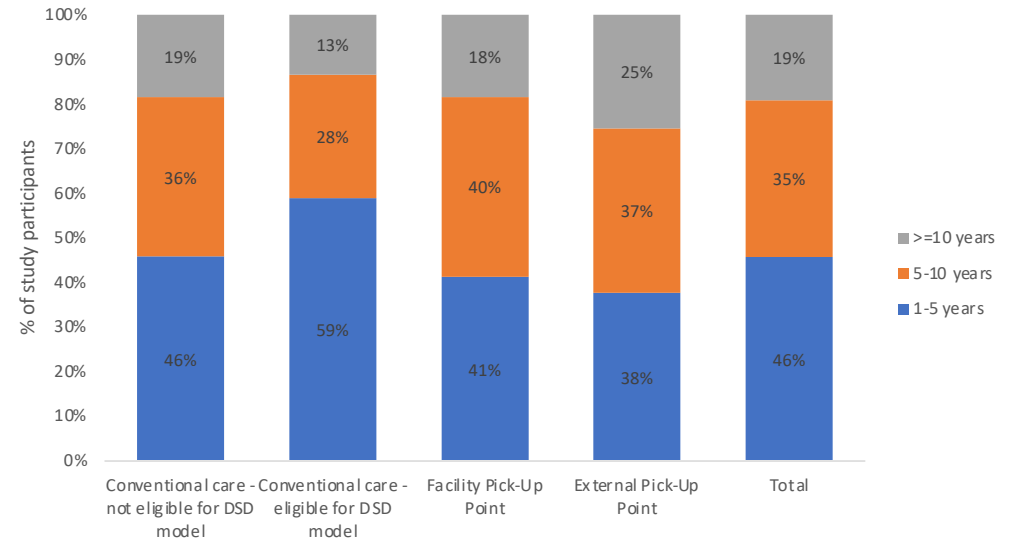


Fig 4. DSD model participation by ART duration





Characteristics of enrolled study participants (n=867)

Fig 3. DSD model participation by age

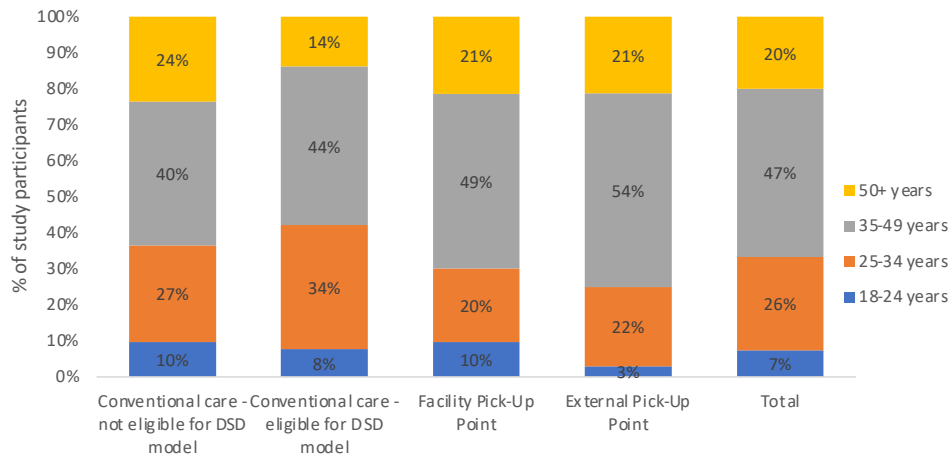
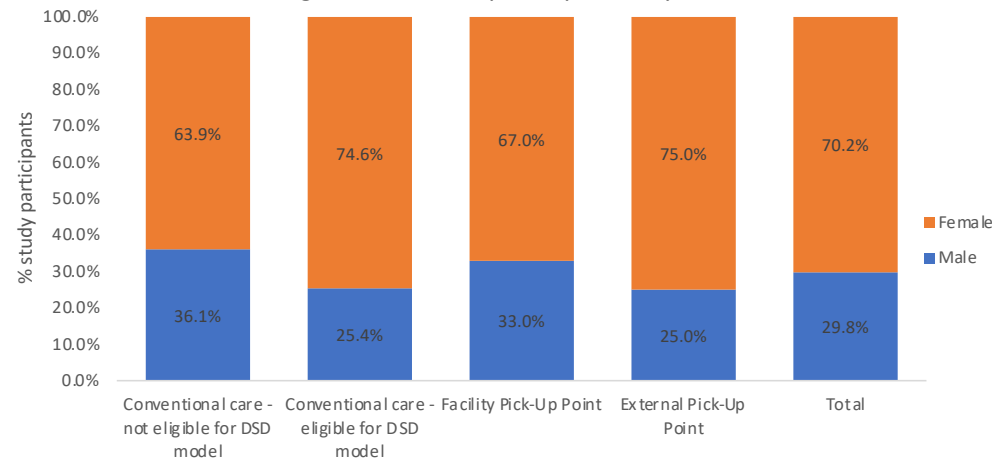
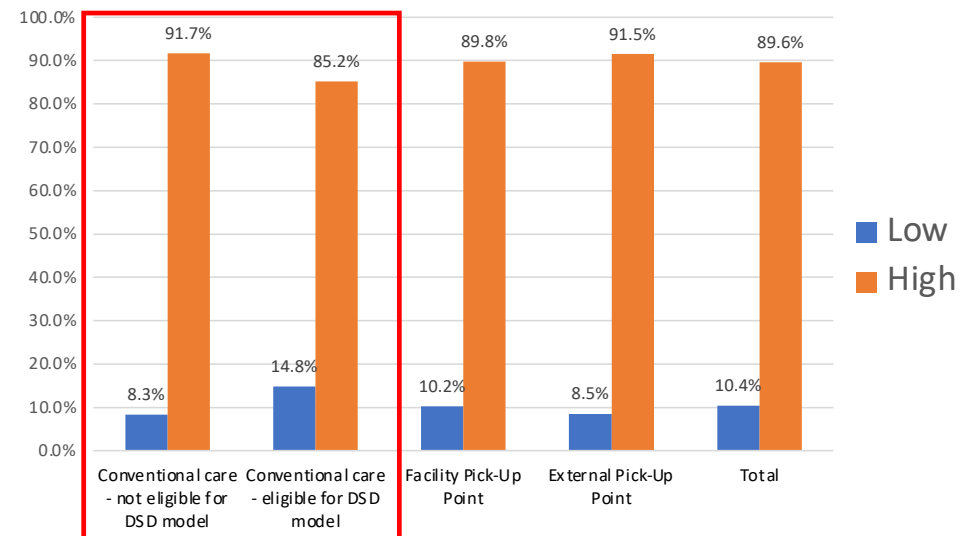
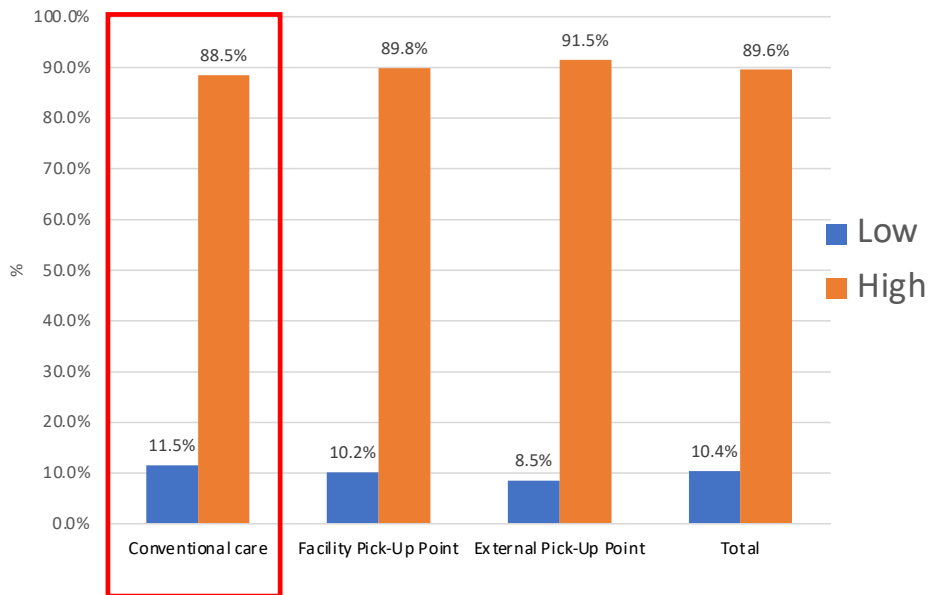


Fig 2. DSD model participation by sex





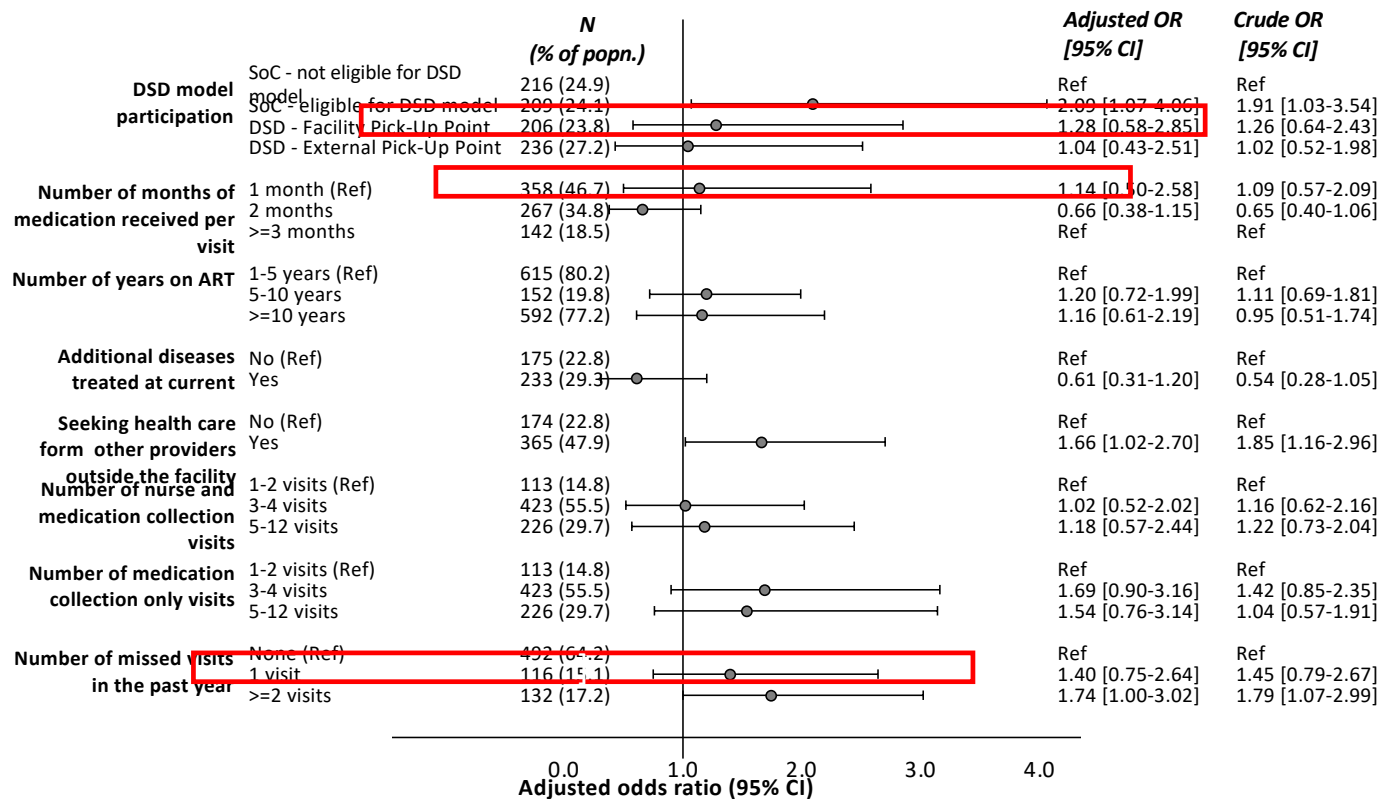
Perceived quality of care among study participants (n=867)



- Low perceived QoC was slightly higher among study participants in conventional care (11.5%) compared to 10.2% for facility pick up points and 8.5% for external pick-up points
- When those in conventional care were disaggregated by eligibility for DSD model enrolment, almost 15% of those who were eligible but not enrolled in DSD models had low perceived QoC



Crude and adjusted odds ratios of low perceived QoC for DSD model and conventional care study participants



- There were no significant differences in perceived QoC among those enrolled in DSD models compared to those in conventional care
- However, RoC in conventional care who were eligible but not enrolled in DSD models were more likely to have low perceived QoC
- RoC seeking outside healthcare and those who missed two or more visits in the year prior to study enrolment, were also more likely to have low perceived QoC



Suggested HIV service improvements – Conventional care





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Less clinic visits, come only when necessary

~ Male, 53 years old, Conventional care, not eligible for DSD model

The system they are using is in order I wouldn't like to see any improvement as they are trying their best I have been a patient since 2015 at this facility and they treat me very well every time.

~ Female, 36 years old, Conventional care, not eligible for DSD model

We should have staff assigned to attend patients who came for HIV or chronic only and also be able to pick up medication without queuing the same queue with patients who are here for consulting.

~ Female, 34 years old, Conventional care, not eligible for DSD model

They must allow us when we send people to come and collect meds for us if we had missed appointments due to work commitment

~ Female, 48 years old, Conventional care, not eligible for DSD model



I wish to go back to adherence club

~ Female, 40 years old, Conventional care, not eligible for DSD model

They should decant more patients. The facility sometimes has a lot of patients, and we get to wait long hours so it would really help if they decant more patients to external pick-up points for myself, I have been on medication for longer so I would appreciate it if they send me to external pick-up point.

~ Female, 29 years old, Conventional care, eligible for DSD model

No need for any improvement the system they are using at the facility is great and works well for us

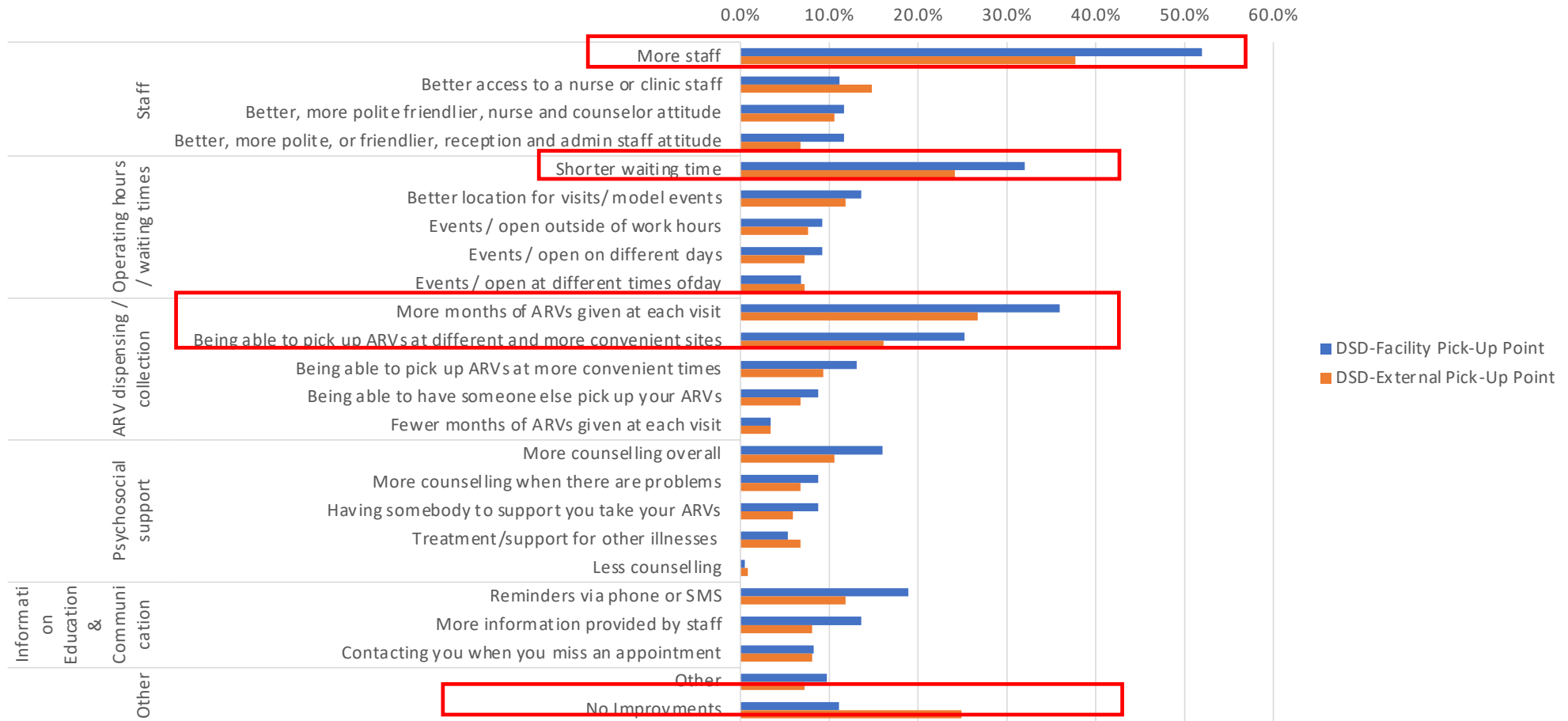
~ Female, 36 years old, Conventional care, eligible for DSD model

Employ more male staff as they seem to be the ones with better attitude towards patients

~ Female, 30 years old, Conventional care, eligible for DSD model



Suggested HIV service improvements – DSD models



Suggested HIV service improvements – DSD models

They have met my expectations. I don't have any complains.

~ Female, 34 years old, DSD - Facility Pick-up Point

Treatment must be delivered to homes and only come once to check bloods and checkups

~ Female, 24 years old, DSD - Facility Pick-up Point

Decanting of patients to outside facilities such as Dischem pharmacy

~ Male, 48 years old, DSD - Facility Pick-up Point

Perhaps they can deliver treatment at home. Also we had an incident where the club nurse left and we suffered because there no club nurse to help us. We went back to long queues as result it was difficult to get treatment on time and I did not want to come collect as I would spend the whole day at the clinic

~ Female, 21 years old, DSD - Facility Pick-up Point

More explanation or education for patients as I was referred to external pick point today and I am happy with collecting my medication at the facility

~ Female, 55 years old, DSD - Facility Pick-up Point

The external PuP should be more flexible as in my vicinity we have just two pharmacies that offered care as an external PuP

~ Female, 37 years old, DSD - External Pick-up Point

They should sort out their admin. Sometimes we used to arrive at the club and not get our treatment because our names are not on that list then we had to come here at the clinic. Pele box is perfect for me because I receive a notification when my treatment is ready.

~ Female, 35 years old, DSD - External Pick-up Point

I would like to be enrolled on the home delivery method and this one model which is an external pick-up point would be ideal for those patients that are new on the treatment.

~ Female, 46 years old, DSD - External Pick-up Point

Everything is ok with the model of care they call me if I didn't get the sms and remind me that my parcel is ready for collection

~ Female, 53 years old, DSD - External Pick-up Point

Being able to renew script at the pharmacy where I collect medications.

~ Female, 41 years old, DSD - External Pick-up Point





Discussion & Conclusions

- RoC report high perceived QoC in the public sector in South Africa.
- RoC enrolled in DSD models in South Africa did not perceive major differences in QoC compared to those in conventional care.
- However, those in conventional care who were eligible for but not enrolled in DSD models were more likely to have low perceived QoC
- Seeking health care outside the current clinic and missing visits are important predictors of low perceived QoC



Discussion & Conclusions

- Findings can inform patient expectations and preferences regarding ART delivery models
- More efforts to enroll all those eligible to DSD model care
- “Satisfaction” may be a function of expectations—many RoC reported themselves to be satisfied with long waiting times and other characteristics we might associate with poorer quality care
 - Need to determine how to assess quality of care when patients’ expectations are very modest
- Routine satisfaction surveys should be integrated into Quality assurance frameworks and routine service delivery (e.g., SA national satisfaction survey)
- It is critical to also incorporate RoC feedback regarding experience and expectations in Quality improvement initiatives



Limitations and next steps

- Limitations
 - Cross-sectional study design, small number of study sites
 - Once-off assessment, the patient experience may change over time
 - Only includes RoC currently in care, no perspectives from those who are no longer in care
 - No health outcomes were measured in this survey; therefore, we don't know how the patient experience affects health outcomes
- Next steps
 - Outcomes from EMR data sets are being matched to survey responses now
 - Analysis of whether self-reported satisfaction with care is associated with outcomes
 - SENTINEL 2.0 to be fielded July-September 2022



Acknowledgements

- Recipients of care who participated in the survey
- Study sites and their staff
- Departments of health at the district, provincial, and national levels
- Bill & Melinda Gates Foundation (with special thanks to Peter Ehrenkranz, program officer)
- Many colleagues who contributed to survey design and interpretation of findings