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Approval Sheet

Patient Satisfaction and Human Immunodeficiency Virus (HIV) Infection in Public Health Facilities in Gauteng, South Africa

By

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_____

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Abstract Cover Page

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Abstract

Patient Satisfaction and Human Immunodeficiency Virus (HIV) Infection in Public Health Facilities in Gauteng, South Africa

By Katherine Milazzo

Patient satisfaction is a useful tool for evaluating the quality of health programs. Following the Donabedian framework from 1988, patient satisfaction questionnaires should consistently measure the structure, process, and outcomes of healthcare experiences. This information allows for the patient perspective in the assessment of health systems and provides data that can inform systems strengthening. South Africa has high rates of human immunodeficiency virus (HIV) infection yet relatively low rates of adherence to antiretroviral treatment (ART), and facilities that offer services to target the disease need strengthening. Literature shows that patient satisfaction may be a predictor of viral load and HIV treatment adherence outcomes, though further research is needed to assess these relationships. Annual Patient Experience of Care questionnaires are conducted in South Africa by the National Department of Health to assess the public health facilities in each province. This study attempts to better understand the relationship between patient satisfaction and HIV control measures in those facilities. Using data from 2017 Patient Experience of Care questionnaires through the Aurum Institute in Johannesburg, supplemented with PEPFAR quarterly monitoring data on ART adherence, this report uses a multiple linear regression analysis to examine factors that contribute to patient satisfaction. The analysis focused primarily on the City of Ekurhuleni within Gauteng Province and found that higher patient satisfaction was associated with additional Aurum-supported staff, fewer patients lost to HIV care follow-up, and greater facility focus on HIV testing and treatment. This analysis may assist Gauteng Province in improving ART adherence and quality of care in the facilities.

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Abbreviations

ABC Abacavir

ART Antiretroviral therapy

CD4 Cluster of differentiation 4; on immune T-lymphocytes

CDC U.S. Centers for Disease Control and Prevention

CHC Community Health Centre

HIV Human Immunodeficiency Virus

HRQL Health-related quality of life

ICP Ideal Clinics Programme

IRB Institutional Review Board

M&E Monitoring and evaluation

NDOH National Department of Health

PEC Patient experience of care

PEPFAR U.S. President's Emergency Plan for AIDS Relief

PHC Primary Healthcare Centre

PI Protease inhibitors

PLHA People living with HIV/AIDS

PSQ Patient Satisfaction Questionnaire

STI Sexually transmitted infection

TB Tuberculosis

TX_CURR Number of people currently receiving ART

Chapter 1: Literature Review

Introduction

South Africa has one of the highest rates of human immunodeficiency virus (HIV) infection in the world with a nationwide prevalence of 18.9% (Avert, 2018). Despite the high prevalence of HIV disease, data show that antiretroviral therapy (ART) is an effective method for controlling the course of illness and can be effective to reduce mortality and morbidity (Mathieu Maheu-Giroux et al., 2017). In addition to improving outcomes for all people living with HIV/AIDS (PLHA), ART has been shown to significantly decrease the risk of death for patients with HIV and tuberculosis (TB) disease, the most common opportunistic condition in this region of the world (Kaplan, Caldwell, Middelkoop, Bekker, & Wood, 2014). Adherence to ART and HIV infection control measures remain relatively low (Malangu & Mngomezulu, 2015) and facilities that engage in infection control precautions need further strengthening. In South Africa, researchers recommend greater integration of HIV services and increase in staff capacity at public health facilities to improve HIV treatment, along with TB infection control (Abdool Karim, Churchyard, Karim, & Lawn, 2009). The Centers for Disease Control and Prevention (CDC) have been working in the country since 1989 and have partnered with the U.S. President's Emergency Plan for AIDS Relief (PEPFAR) to increase healthcare activities aimed at mitigating the burgeoning HIV epidemic. Areas of work include disease prevention services, HIV counseling and testing, and an integration of HIV and TB care. PEPFAR and CDC have begun to increase surveillance activities for the integration of HIV and TB care in South Africa (Centers for Disease Control and Prevention Division of Global HIV and TB, 2017). This work merits monitoring and evaluation activities in their public health facilities to improve health outcomes. Existing data concentrates on the feedback of providers and staff, yet lack information

on the patient experience with the quality of care in HIV and TB facilities. Using data from 2017

patient satisfaction questionnaires from PEPFAR- and a CDC-partner organization the Aurum

Institute in Johannesburg and from PEPFAR quarterly monitoring data on ART adherence, this

report will contribute to an evaluation of the public health facilities in the Gauteng Province in

South Africa. In coordination with the National Strategic Plan on HIV, TB and STIs 2017-2022

(South African National AIDS Council, 2017), this study attempts to better understand the

relationship between patient satisfaction and HIV control measures.

What is Patient Satisfaction?

Quality assurance programs in healthcare have been popularized since the 1960s, when

patients were newly seen as consumers of products and services (Health Services Research

Group, 1992) and health service providers wanted to improve patient utilization of care. Avedis

Donabedian, a researcher at the University of Michigan School of Public Health, is known for

his method for assessing quality of care in healthcare systems and he claims that previously used

methods have been inconsistent and inaccurate (Donabedian, 1988a). His methods are commonly

used as the foundation for quality assessments in healthcare, including patient satisfaction

metrics. Donabedian viewed quality of care as influenced by a series of factors best represented

through steps on a ladder or concentric circles (*Figure 1*, Donabedian, 1988b). At the center of

the figure is the care provided by physicians and other practitioners, which he argues has both

technical and interpersonal dimensions. The technical performance includes the skill of the

provider in using the best strategies for care for the patient, while the interpersonal performance

includes the ability of the provider to communicate the care plan and illness management to the

patient. To Donabedian, the next most important attribute in quality of care is what he terms

"amenities of care", which include the comfort and privacy of the setting in which healthcare

services are provided. Following amenities are the contributions of patients and their families,

requiring the patient to assume part of the responsibility in the quality of care management.

External to the contributions of the patients are the contributions of the community, which focus

on indicators of access to quality care. Donabedian felt it is imperative that assessments of

quality include the patient perspective - if healthcare systems want to provide patients choice in

healthcare; thus, his model also integrates a cost-benefit analysis into the conception of quality

care to incorporate the impact of financial indicators in care.
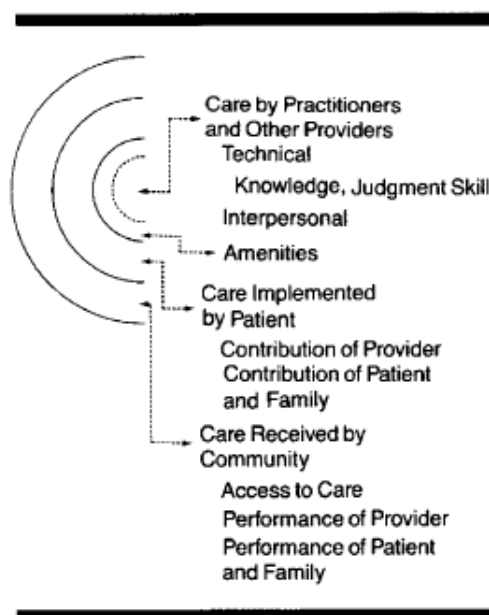
Figure 1. Factors that Influence Quality of Care. From *The Quality of Care: How Can It Be Assessed?*
(p.1744), by A. Donabedian, September 23, 1988.

Using these four elements of healthcare provision, Donabedian classifies quality of care

measures under three categories: structure, process, and outcome (Donabedian, 1988a).

Structure, which includes the resources and organizational dimensions of a service provider,

frames the ability of an organization to address patient concerns and to employ providers with

the greatest skill in provision of care. Process includes both the efforts of the patient in care

seeking and the activities of the medical team in diagnosing and treating the illness; outcome includes changes in the patient's knowledge, behaviors, and health status following the process of care. In his work, Donabedian argues the quality of each of these determines the quality of the others, and these must be thoroughly examined before quality of care can be assessed. However, Donabedian recognizes the challenges in connecting the process of care to health outcomes, as confounding factors are difficult to measure if the relationships are not clearly defined. He claims, nevertheless, that patient satisfaction is vital to assessments of healthcare quality and should be included in all quality assurance programs. Using Donabedian's frameworks, patient satisfaction programs should examine these three indicators to most accurately assess healthcare quality and make recommendations for informing health systems changes.

Many studies follow Donabedian's structure and framework; however, reports that include patient satisfaction as a measure of healthcare quality rarely define the term. Research conducted on patient satisfaction differs in scope and uses of patient satisfaction data, and researchers have called for more consistent use of tools and a standardized definition (Yellen, Davis, & Ricard, 2002). Researchers at the RAND Corporation recognized the limitations in existing patient satisfaction studies and designed a Patient Satisfaction Questionnaire (PSQ) based on an extensive review of the literature and results from testing previous instruments (Ware, Snyder, Wright, & Davies, 1983). They found that the best tools evaluate a personal experience of care, use a multiple-response scale such as the Likert scale, and include multiple questions per topic to best evaluate single issues. The authors recommend keeping the order of response options the same to allow consistent calculations of patient satisfaction, which they assess with a summation of numerical answer choices where higher sums represent greater satisfaction (Hays, Davies, & Ware, 1987).

Patient Surveys as Methods for Evaluation

Patient satisfaction has long been measured in quality improvement programs. In 1957, the United States Public Health Service developed a survey instrument for understanding patient and personnel satisfaction with nursing care in hospitals during a national nursing shortage (Abdellah & Levine, 1957). The survey instrument was implemented in 60 hospitals around the country, and researchers found that younger patients with greater interactions with nurses had the highest levels of satisfaction. The creation of this tool provided hospitals with a method to measure satisfaction and provided evidence for addressing the staffing shortage. In 1993, following the end of the Mozambican Civil War, researchers joined health workers in efforts to rebuild the health system and evaluate inadequacies in urban and rural health programs in Mozambique. Newman and colleagues (Newman, Gloyd, Nyangezi, Machobo, & Muiser, 1998) used the findings from their work to make recommendations regarding better training of medical personnel, greater access to medication, and improvement of transportation capacities in the rebuilding of health centers. Many view patient satisfaction as instrumental in assessing the quality of care provided by a healthcare facility, particularly when the patient is viewed as a consumer whose decisions have financial implications for the practice (Prakash, 2010). Patient satisfaction surveys in the United States became popularized after the rise in consumerism in the 1960s and have been used for marketing and quality improvement in healthcare settings, translating to economic and policy change in healthcare service delivery (Boquiren, Hack, Beaver, & Williamson, 2015). For this reason, many patient satisfaction studies are specific to particular encounters with a health system or with a physician (Boquiren et al., 2015; Kvrgic, Asiedu, Crowson, Ridgeway, & Davis, 2018), evaluating one point in time rather than a series of interactions with a service or a patient care team. However, other studies evaluate how patient

satisfaction affects the long-term care of a patient (Hill & Doddato, 2002), finding a significant correlation between patient satisfaction and a patient's intent to return to the healthcare facility. A meta-analysis of patient satisfaction studies revealed that patient satisfaction can be useful in many fields of healthcare evaluation, including the evaluation of treatments, population-level care, organizations, and health systems (Sitzia & Wood, 1997). The use of patient satisfaction surveys spans from granular approaches to broad systems-level evaluations of healthcare programs.

Measurements in Patient Satisfaction Surveys

Though patient satisfaction surveys have been common for decades, there is no universal standard for which factors should be included for measurement. The surveys are limited in measuring elements specific to a particular context and, though these produce relevant recommendations for local contexts, comparing rates of satisfaction has proven difficult (Locker & Dunt, 1978). Many separate questionnaires by time spent in a facility, addressing satisfaction upon entry, stay, and discharge from facilities such as hospitals (Wong et al., 2015). Some include psychosocial components such as quality of life, emotions, and well-being, especially when surveying specific populations such as cancer patients (Skarstein, Dahl, Laading, & Fossa, 2002). While some elements are expected to be included, such as interactions with providers, the accessibility of the facility, and the effectiveness of the medical treatment (Sitzia & Wood, 1997), the patient's perspective is critical in the design of these surveys and is rarely included (Locker & Dunt, 1978).

Patient Satisfaction and Adherence to HIV Treatment

International studies have found that high rates of patient satisfaction are a useful predictor of adherence to HIV treatment, including explorations of how particular treatment

regimens differ in rates of satisfaction (Jordan et al., 2005). Jordan and colleagues found that ART regimens which included abacavir (ABC) had higher rates of patient satisfaction than those including protease inhibitors (PI), particularly due to the convenience, flexibility, and lifestyle impact of the regimen. Interviews with patients in San Francisco revealed that positive relationships with physicians were key in high adherence levels, as physicians who were seen as trustworthy and helpful addressed reasons for nonadherence including negative side effects and mistrust of the medication (Roberts, 2002). Studies in the United States and in other upper- or middle-income countries do not reflect all of the confounding elements in the relationship between patient satisfaction and medication adherence in South Africa and may not accurately estimate the importance of patient satisfaction in HIV care in the country.

Though many factors have been linked among patient satisfaction and medication adherence in global HIV, studies have presented findings suggesting some measures of healthcare quality are not associated with medication adherence. In one study in Mozambique, Lambdin and colleagues (Lambdin et al., 2011) found no significant association with clinical staffing burden and loss to follow up, regardless of average clinic volume. Patients of clinics with higher pharmacy staff burden had higher rates of attrition, however, and the study demonstrated the need for health systems strengthening the public health clinics in the region. Another study compared four explanatory models of understanding health for PLHA, evaluating people in the United States on patient-provider interaction, patient satisfaction, medication adherence, and health-related quality of life (HRQL) (Oetzel et al., 2015). The authors argued that a combination of the four constructs are frequently used in models to understand PLHA, yet there is no established link among the four. In their analysis, they found that patient satisfaction is not a direct factor in medication adherence or HRQL, and that patient-provider interactions

provided the strongest explanation for the other three factors and should be the focus for healthcare improvement rather than patient satisfaction.

In studies to evaluate the relationship between patient satisfaction and HIV treatment adherence, measures of each variable differ widely and do not provide depth on reasons for either satisfaction or adherence. One study in Houston, Texas used a questionnaire that included only two questions about satisfaction, focusing on overall feelings about the healthcare facility (Dang, Westbrook, Black, Rodriguez-Barradas, & Giordano, 2013). The same questionnaire included only one question regarding treatment adherence, and the study found a significant association between patient satisfaction and retention in HIV care. In addition to patient satisfaction, an objective measure of successful ART outcome is achievement of HIV viral suppression by measurement of blood viral load (Mugavero et al., 2012). In a study to evaluate treatment outcomes of patients on ART, patient satisfaction was included as a predictor of viral load outcomes, including one question on satisfaction with overall healthcare on the patient questionnaire (Crawford et al., 2015). The study, which evaluated a PEPFAR program in Uganda, found that patient satisfaction was positively associated with adherence, HRQL, and CD4 cell recovery, though the study recognized that other factors related to clinic resources likely played a role in these outcomes.

Other studies that examine the correlation between patient satisfaction and adherence to ART often find some relationship between measures of satisfaction and improved rates of adherence, though adherence to care is difficult to measure and is often self-reported. One study conducted in Mexico to evaluate which aspects of patient satisfaction are related to adherence to HIV treatment found that participants who were most satisfied with their physicians had the highest rates of adherence, regardless of availability of medicine, wait time, or other

administrative issues in the healthcare facilities (Pérez-Salgado, Compean-Dardón, Staines-Orozco, & Ortiz-Hernández, 2015). The study also found that physicians often underestimate the rate of nonadherence and need training in evaluating adherence. Despite their findings, the authors cite limitations on verifying patients' adherence rates due to resource-scarcity that prevented use of pill count devices or other validating measures. A study conducted in five African countries (Kenya, Uganda, Zambia, Nigeria, and Rwanda) evaluated factors that influence patients' long-term adherence of ART including perceived quality of care (Etienne, Hossain, Redfield, Stafford, & Amoroso, 2010). The study, which assessed depression, alcohol use, home ownership, employment, and perceived quality of care, found that higher perceived quality of care positively influenced adherence. Among other factors, higher quality was likely to predict higher clinic attendance and better communication between physicians and patients, which were associated with higher adherence. While the authors measured adherence by self-report and by blood measurement CD4 T-lymphocyte count, they cite a great percentage of missing CD4 data as a limitation to their study. While patient satisfaction and adherence to ART may be associated with each other based on literature in similar contexts, it is difficult to find consistency among the literature regarding this relationship.

PEPFAR and HIV in South Africa

This study focuses on public health facilities in an urban region of Gauteng Province in South Africa. According to 2017 estimates, 7.2 million people in South Africa live with HIV, but only 55.7% of people are treated with ART (U.S. President's Emergency Plan for AIDS Relief, 2018). Three of the four largest metropolitan areas in the country are located within Gauteng Province, including the cities of Johannesburg and Ekurhuleni. These four areas constitute 31% of the national HIV burden, though the province only shows 75% of patients living with HIV are

linked to care. PEPFAR is expanding its programs in priority areas to improve adherence to care, including cooperating with provincial and district authorities to identify patient reasons for dissatisfaction in public health facilities. Changes in PEPFAR-supported facilities includes extending operating hours beyond traditional business hours, minimizing wait times through fast track programs, incorporating greater integration of HIV and TB services, and providing PEPFAR-supported staff members (such as lay counselors, linkage officers, peer navigators, nurses, and doctors) in the facilities for additional service delivery. PEPFAR has also committed to increase HIV service delivery to improve retention in care at the community and district levels through greater quarterly monitoring and data analysis. PEPFAR support in South African facilities in priority districts will attempt to improve HIV care in public facilities and increase adherence to HIV treatment in the districts.

In Gauteng Province, which includes the City of Johannesburg, Pretoria (Tshwane), and surrounding areas, over 1.5 million people were living with HIV in 2017, yet only 51.3% of them were receiving ART, according to PEPFAR (U.S. President's Emergency Plan for AIDS Relief, 2017). In 2016 and 2017, only 24% of patients starting ART in the province had a CD4 count of under 200 (U.S. President's Emergency Plan for AIDS Relief, 2018). In 2018, South African HIV experts announced that the country was close to meeting the UNAIDS 90-90-90 goals and had met the first goal that 90% of people living with HIV knew their HIV status (Avert, 2018). Based on the report, only 68% of people who knew their status were on treatment and 78% of them were virally suppressed; however, those numbers only represent 61% and 47% of all PLHA in the country, respectively. To assess the underperformance of public health facilities in the provision of HIV care, PEPFAR in South Africa initiated the "Operation 10-10 Strategy", identifying ten of the highest priority facilities in ten of the highest burden districts and

concentrating services in the facilities to improve care. The Aurum Institute has assisted in evaluating and supporting these facilities through its monitoring and evaluation (M&E) team and through provision of staff members in the public health facilities. In addition to work with PEPFAR, the Aurum Institute has partnered with the National and Gauteng Departments of Health to provide support for their programs, including analyzing patient experience of care (PEC) questionnaires, and partners with CDC in South Africa for additional projects on HIV and TB care in the country. The partnerships among PEPFAR, the Aurum Institute, the CDC, and departments of health are key in improving HIV care and treatment in Gauteng Province.

Patient Satisfaction and HIV in Gauteng Province

The Aurum Institute has identified the need for an evaluation of the public health facilities in Ekurhuleni of Gauteng Province. Using data from the 2017 Patient Experience of Care questionnaires and PEPFAR quarterly monitoring data from public health facilities in the province, this project is an evaluation of facilities supported by the Aurum Institute, PEPFAR, and CDC in South Africa. As the relationship between patient experience of care (here referred to as patient satisfaction) and ART treatment adherence for PLHA has been explored in other contexts, this project will assess the relationship in government-sponsored facilities in the province. Additionally, this project uses a definition for patient satisfaction that aligns with Donabedian's framework and includes consistent measures of the patient experience that represent key elements of satisfaction as defined by the literature. This study will also describe the presence of the Aurum Institute and external support provided by international organizations (PEPFAR, CDC) in these facilities to characterize these contributions to patient satisfaction. This evaluation will assist the province in improving ART adherence and quality of care based on the data analyzed in the manuscript. In 2014, the Joint United Nations Programme on HIV and AIDS

(UNAIDS) agreed to set ambitious targets to diagnose 90% of all HIV positive people, provide

ART for 90% of those diagnosed, and achieve viral suppression for 90% of those treated, by

2020; these have been called the 90-90-90 targets (Levi et al., 2016). The results from this study

may contribute to recommendations to improve the 90-90-90 goals in the province and may

improve understanding of patient satisfaction and factors that contribute to ART adherence in

public health facilities.

Chapter 2: Manuscript

Patient experience of care and human immunodeficiency virus (HIV) infection in primary healthcare facilities in Gauteng Province, South Africa

Katherine Milazzo

March 2019

Abstract.

Objective. To assess the association between clinic factors including size, location, staffing, volume and patient satisfaction in healthcare facilities providing care for people living with HIV/AIDS (PLHA) in Ekurhuleni and West Rand districts of Gauteng Province, South Africa.

Study Design. This was a cross-sectional study. Standardized patient questionnaires were administered once in 10 hospitals, 9 community health centers (CHCs), and 129 primary healthcare centers (PHCs) from June to August 2017.

Methods. Incomplete questionnaires were excluded from analyses. Questionnaire data were separated by in-patient and out-patient questionnaires and were further stratified by districts, facility type, governing authority, and level of external support. Patient satisfaction was divided into six domains and measured as an average of the scores for each domain. Levels of patient satisfaction with clinic services were categorized as follows: $\geq$ 80% "green"; 60-79% "amber", and $\leq$ 59% "red". The final analysis included 21 variables, of which 11 were selected for a predictive model based on a backwards elimination strategy at $\alpha = 0.05$. Frequency distributions were examined, followed by multiple linear regression analysis to identify factors associated with patient satisfaction and treatment outcomes in PLHA attending three facility types from June to August 2017.

Results. The average rate of patient satisfaction was 81.48% across Ekurhuleni and West Rand. The domain with lowest patient satisfaction in the two districts was *waiting times*, and the highest was in *patient safety*. Out of three facility types – hospitals, CHCs, and PHCs - the PHCs performed the best in patient satisfaction. Higher patient satisfaction was associated with additional staff roles, fewer patients lost to HIV care follow-up, and greater facility focus on HIV testing and treatment.

Conclusions. To improve patient satisfaction, facilities should incorporate more lay counselors trained on delivery of quality services, improve accessibility of services through increased staff and extended hours aimed at reducing waiting times, and improve linkage to care for patients living with HIV. Future questionnaires should be redesigned to include additional variables that may be related to patient satisfaction including types of services accessed, cost of visit, and assess patient retention in care.

Background

The Batho Pele initiative was created by the South African government in 1997 to improve service delivery in the country. The eight principles of Batho Pele (Sotho for "people first") include consulting the needs of South African citizens through surveys to assess the quality of services to be provided (Republic of South Africa Department of Public Service and Administration, 2014). In the South African Patient Rights Charter, the National Department of Health lists several components of healthcare that identify the need for patient input, namely the right to participate in healthcare decision-making and the right to complain about health services (Republic of South Africa National Department of Health, 1999).The National Department of Health created the Ideal Clinics Programme (ICP) in 2013 to improve healthcare at primary healthcare centers (PHCs) based on these principles from Batho Pele and the Patients' Rights Charter (Republic of South Africa National Department of Health, 2017b, n.d.). Component 2:11 of the ICP is the Patient Experience of Care (PEC) questionnaire, which is to be conducted annually in all PHCs across the country. The questionnaire results are to be displayed in the facilities, and patients may provide feedback on areas for improvement (Republic of South Africa National Department of Health, 2017b). In 2014, the Health Laboratory (through the National Department of Health) established an average score of 80% or greater as the benchmark for patient satisfaction. Operation Phakisa Initiative, as it was later termed, set three levels of scores for the questionnaire results as follows: 80% or greater as "green", 60-79% as "amber", and 59% or less as "red" (Republic of South Africa National Department of Health, 2017a). The Patient Experience of Care survey measures the quality of services using this scoring system.

Patient experience questionnaires have long collected useful information for improving health systems and patient engagement in care. Patient satisfaction was first conceptualized with

the advent of consumerism in western societies in the 1960s, when medical providers recognized satisfaction with their services affected patient behavior (Health Services Research Group, 1992). As providers and health administrators began incorporating patient feedback in their evaluations, they collected more information from patients on their evaluation of particular service aspects (Jackson, Chamberlin, & Kroenke, 2001). Many of these common factors include patient values, patient knowledge of services or patient health education, emotional support, cost of care, and health outcomes (Heidegger, Saal, & Nuebling, 2006). A study in Ethiopia revealed that the unavailability of medications contributed the most to patient dissatisfaction out of all factors related to the service (Assefa, Mosse, & H/Michael, 2011), as was true in studies in Mozambique (Newman et al., 1998) and South Africa (Morris, 1999). Patient waiting times and staff attitudes were also key factors in patient satisfaction in the studies (Assefa et al., 2011; Newman et al., 1998). A systematic literature review of patient experience of care questionnaires indicated better communication between physicians and patients led to healthier patient behavior; that shorter waiting times led to a reduction in unnecessary emergency room visits; and that better patient safety was associated with fewer hospital-acquired infections and increased patient satisfaction (Morris, 1999). A 2002 study in Norway showed performance of the providers and attitudes of the staff were also associated with patient satisfaction (Skarstein et al., 2002). Despite available data, many patient satisfaction studies are based on customized questionnaires without standardizing measures, making it difficult to compare patient satisfaction findings among the various settings (Boquiren et al., 2015). For example, studies across South Africa have found that demographic variables such as race and socioeconomic status are likely to influence satisfaction with healthcare providers (Myburgh, Solanki, Smith, & Lalloo, 2005), but the Patient Experience of Care questionnaires used in Gauteng did not collect this information.

The questionnaire used for this study was designed to identify areas of improvement within the healthcare sector and to compare patient satisfaction at national, provincial, and district levels as part of the ICP (Republic of South Africa National Department of Health, n.d.). In partnership with U.S. President's Emergency Plan for AIDS Relief (PEPFAR) and the U.S. Centers for Disease Control and Prevention (CDC), the Aurum Institute has been authorized by the Gauteng Department of Health to analyze data from these questionnaires to further identify aspects of healthcare delivery that impact patient satisfaction. The Aurum Institute supports all healthcare facilities in Ekurhuleni, Gauteng Province. Although data were available from Ekurhuleni and West Rand district, the analysis focused on Ekurhuleni to better assess the impact of support from Aurum.

Methods

Patient Recruitment

Trained survey administrators were present in health facilities during opening hours from Monday through Friday and were stationed at exit points within each of the facilities to recruit patients before leaving the healthcare facilities. The study was advertised by facility managers over the public address system at the facilities. The announcement informed patients of the voluntary nature of participation, requirement for written consent, and the purpose of the study (Republic of South Africa National Department of Health, 2017b).

Sample

Survey administrators approached a total of 10 hospitals, 9 CHCs, and 129 PHCs across Ekurhuleni and West Rand in Gauteng Province, South Africa from June to August of 2017. There were 53 facilities in West Rand and 95 in Ekurhuleni sampled during this time period. Sample size for the questionnaire was calculated by the National Department of Health for each type of facility to achieve 95% precision, including 15% of all eligible patients and 5% of

additional patients sought to cover those lost to follow-up (Republic of South Africa National Department of Health, 2017a).

Questionnaire Data Collection

Two questionnaires were adapted by the Gauteng Department of Health from *the National Guidelines to conduct Patient Experience of Care Surveys* (Republic of South Africa National Department of Health, 2017a): one for in-patients and one for out-patients. The questionnaires collected demographic information and a series of "Yes"/ "No" questions, and questionnaires were available in four of the national languages common to the province (English, Afrikaans, isiZulu, and Sesotho). The in-patient questionnaire had 52 questions relating to hospitals and the out-patient questionnaire had 38 questions relating to clinics. The questionnaires collected information on seven domains: *biographical data* (including age, gender, distance travelled to clinic), *access to care* (including facility hours, signs, staffing) *availability and use of medicines* (including instructions, expiration date, label), *patient safety* (including lighting, assistance, complaints), *cleanliness* (in bathrooms, patient rooms, waiting areas), *values and attitudes* (including staff friendliness, privacy, patient rights), and *waiting times* (including length of queues, response times). The questionnaires were administered from June to August 2017 by trained data capturers at exit points within the healthcare facilities. Questionnaires were collected on tablets through a web-based data capturing tool designed by Gauteng province.

Facilities were excluded from the analysis if there were missing data on key variables for each questionnaire conducted at the facility (n=13). Key variables were examined for each facility including sub-district, governing authority, Aurum support level, presence of key staff, the volume of patients on ART, monthly patient headcount, the number of patients on ART lost

to follow up (90 days without treatment after a missed appointment), and the percent of patients

living with HIV that were linked to care in the facilities (Table 1).

Table 1. Ekurhuleni Facilities in Analysis

	TOTAL	Hospitals	PHCs	CHCs
Number of Facilities	**89**	6	75	8
Sub-District				
East	**29**	2	24	3
North	**28**	2	24	2
South	**32**	2	27	3
Authority				
Metropolitan	**70**	1	68	1
Provincial	**19**	5	7	7
Support Level*				
Direct Service Delivery	**38**	6	24	8
Technical Assistance	**50**	0	50	0
Facilities with Adherence Counselors	**17**	0	11	6
Facilities with Lay Counselors	**35**	4	28	3
Facilities with Patient Navigators	**36**	0	30	6
Facilities with Extended Hours	**26**	-	18	8
Volume of Patients on ART (mean)	**2,598**	2,337	2,861	4,163
Average Monthly Headcount (mean)	**9,690**	-	8,371	13,804
Number of Patients Lost to Follow Up (mean)	**355**	347	341	412
Percent Linkage to HIV Treatment (mean)	**93.1**	93.3	90.75	98.0

* Data for support level are missing for one facility in Ekurhuleni

Inclusion/Exclusion Criteria

Patients invited to complete the questionnaire were those above age 18 years and who

were able to give informed consent in writing or verbally; if a patient could not give consent but

were accompanied by someone who could, the patient's companion could participate on behalf

of the patient. In addition, all patients who were able to think clearly or be in control of and

responsible for their actions as determined by interviewers were included. Patients were

excluded from the questionnaire if they did not have the capacity to represent themselves in

decision-making; could not think clearly or be in control of and responsible for their actions or

otherwise deemed not mentally fit to understand and respond to survey questions; or were too ill

to participate in the questionnaire and were not accompanied by respective family members

(Republic of South Africa National Department of Health, 2017a). Capacity to respond was determined by questionnaire administrators.

Statistical Analysis

Patient satisfaction data were stratified by in-patient and out-patient datasets. The data were further stratified by facility district (Ekurhuleni and West Rand) and sub-district, facility type (hospital, CHC, and PHC), authority type (district and provincial government), the level of support from the Aurum Institute (direct service delivery or technical assistance), the presence of Aurum staff members in different roles (adherence counselors, lay counselors, and patient navigators), the volume of patients on ART, and if the facilities offered extended hours (beyond the business day). Other variables considered in analysis include the number of patients lost to follow-up, the average monthly headcount at the facility, the percent of the headcount tested for HIV, the percent of the headcount on ART, and the percent of HIV-positive patients linked to care. For the purpose of analysis, only data from Ekurhuleni were examined. Descriptive analysis for West Rand facilities was conducted for comparison with Ekurhuleni facilities.

Satisfaction was calculated as an average of six domains, excluding biographical data, as set by the *National Guidelines*. The average had to be 80% or greater to meet national and provincial standards for the facilities (Republic of South Africa National Department of Health, 2017b). A multiple linear regression analysis of patient satisfaction was developed for Ekurhuleni with 21 variables including age, gender, facility type, sub-district, authority type, level and type of Aurum support, the number of patients on ART (and related variables) and time of stay at the facility. All statistical analysis was done in SAS® 9.4 (SAS Institute Inc., Cary, NC). This project was determined on May 18, 2018 to constitute program evaluation and not a research activity and therefore did not require IRB review from Emory University.

Results

Patients

A total of 40,366 patients participated. Data are missing on the number of patients invited to participate. There were 38,453 (95.3%) patients who had complete information on the questionnaire (2,841 in-patient and 35,642 out-patient) and were included in the analysis (Table 2). The majority, 24,719 (64%), of patients were female and between the ages of 20 and 39 years (56.7%) with an average age of 36. PHCs were the most common location, with 28,382 (73.8%) patients surveyed at those facilities, and 24,552 (63.7%) patients were surveyed in Ekurhuleni.

Table 2. Questionnaire Participants by District

	Ekurhuleni			
	TOTAL	**Hospitals**	**PHCs**	**CHCs**
Number of Participants	**24,552**	5,523 (22.5)	16,910 (68.9)	2,119 (8.6)
Gender				
Male	**7,686**	2,010 (26.2)	5,077 (66.1)	599 (7.7)
Female	**15,340**	3,319 (21.6)	10,590 (69.0)	1,431 (9.4)
Other	**1,526**	194 (12.7)	1,243 (81.5)	89 (5.8)
Age				
0-9	**309**	111 (35.9)	166 (53.7)	32 (10.4)
10-19	**1,847**	335 (18.1)	1,285 (69.6)	227 (12.3)
20-29	**7,149**	1,362 (19.0)	5,109 (71.5)	678 (9.5)
30-39	**6,856**	1,518 (22.1)	4,738 (69.1)	600 (8.8)
40-49	**4,269**	921 (21.6)	3,043 (71.3)	305 (7.1)
50-59	**2,354**	648 (27.5)	1,556 (66.1)	150 (6.4)
60+	**1,745**	624 (35.8)	995 (57.0)	126 (7.2)
Age (mean)	**36.1**	37.9	34.8	31.5
Time of Stay (mean)	**35**	33.9	34.7	36.4
	West Rand			
	TOTAL	**Hospitals**	**PHCs**	**CHCs**
Number of Participants	**13,931**	2,187 (15.7)	11,472 (82.4)	272 (1.9)
Gender				
Male	**4,063**	862 (21.2)	3,143 (77.4)	58 (1.4)
Female	**9,379**	1,284 (13.7)	7,902 (84.2)	193 (2.1)
Other	**489**	41 (8.4)	427 (87.3)	21 (4.3)
Age				
0-9	**149**	14 (9.4)	135 (90.6)	0 (0.0)
10-19	**1,041**	118 (11.3)	913 (87.7)	10 (1.0)
20-29	**4,084**	543 (13.3)	3,449 (84.5)	92 (2.2)
30-39	**3,732**	624 (16.7)	3,028 (81.1)	80 (2.2)
40-49	**2,311**	381 (16.5)	1,892 (81.9)	38 (1.6)
50-59	**1,432**	252 (17.6)	1,154 (80.6)	26 (1.8)
60+	**1,175**	254 (21.6)	895 (76.2)	26 (2.2)
Age (mean)	**35.9**	38.5	33.4	33.5
Time of Stay (mean)	**35.45**	36.05	34.85	30.2

Patient Satisfaction

Preliminary results across in- and out-patient datasets indicate an average patient satisfaction of 81.48% across the two districts, with the best domain performance in *patient safety* (87.01%) and the worst in *waiting times* (76.12%). Patient satisfaction reached greater than 80% in Gauteng in 2017 for three domains: *access to care, availability and use of medication*, and *patient safety* (Gauteng Province Department of Health, 2017). Measuring the percent of patients reporting 80% patient satisfaction or higher, facilities in West Rand scored higher (72.21% of patients) than in Ekurhuleni (63.34%). Across both districts, PHCs had the greatest report of 80% satisfaction (71.02%), followed by hospitals (54.18%) and CHCs (54.12%). In Ekurhuleni, hospitals had the lowest percent of patients reporting 80% satisfaction (51.32%), while PHCs had more (63.26%) and CHCs had the most (65.82%). Within Ekurhuleni, the North sub-district reported the highest rates, with 68.97% of patients reporting 80% satisfaction or higher, followed by the South (63.71%) and the East (59.06%). In West Rand, Rand West reported the highest (74.16%), followed by Mogale (73.21%) and Merafong (68.52%). In Ekurhuleni (Table 3a), the domain with the highest rates of patient satisfaction was *patient safety* (86.72%), and the lowest rates were in *values and attitudes* (75.63%). In West Rand (Table 3b), the best performance was in *patient safety* (87.65%) and the worst in *waiting times* (76.29%). *Biographical data* is included for reference but was excluded from the analysis as it was used for descriptive purposes only.

Table 3a. Ekurhuleni Mean Satisfaction Scores by Domain

Domain	Variable	Mean Satisfaction Score
1	Biographical Data	48.48
2	Access to Care	81.84
3	Availability and Use of Medicines	84.12
4	Patient Safety	86.72
5	Cleanliness	81.37
6	Values and Attitudes	75.63
7	Waiting Times	76.14
TOTAL	**Satisfaction**	**80.97**

Table 3b. West Rand Mean Satisfaction Scores by Domain

Domain	Variable	Mean Satisfaction Score
1	Biographical Data	47.64
2	Access to Care	80.39
3	Availability and Use of Medicines	86.08
4	Patient Safety	87.65
5	Cleanliness	83.85
6	Values and Attitudes	77.70
7	Waiting Times	76.29
TOTAL	**Satisfaction**	**81.99**

Regression Analysis

A multiple linear regression analysis was conducted for all Ekurhuleni facilities. The final predictive model included 8 variables: the facility type, the presence of lay counselors, the presence of patient navigators, the support level, the number of patients lost to follow-up, the percent of the headcount tested for HIV, the percent of HIV-positive patients linked to care and the percent of the headcount on ART. Variables were excluded from the model if there were no significant associations with the outcome of satisfaction ($p>0.05$; n=9), if there were issues of multicollinearity (n=1), or if the variables were interrelated (n=3). Variables were assessed for correlation with satisfaction and rates of satisfaction were measured for each variable type (Table 4). When the multiple linear regression analysis was run, all variables left in the model had a statistically significant relationship with the outcome (Table 5). The presence of a lay counselor, extended hours, the percent of HIV-positive patients linked to care, and the time of stay all had a positive association with patient satisfaction, while the other variables in the model were negatively associated with rates of patient satisfaction (Table 5). A regression analysis was not done for West Rand as data were missing for 15 of the 21 variables.

Table 4. Ekurhuleni Mean Satisfaction Scores by Variable

Variable	Average Satisfaction	Percent of Patients Reporting Over 80% Satisfaction	Correlation	P-Value
Type of Facility			0.12101	<0.0001
Hospital	76.36	51.32		
PHC	84.09	63.26		
CHC	79.23	65.82		
Sub-District			-0.01144	0.0836
East	82.41	59.06		
North	84.54	68.97		
South	80.79	63.71		
Authority			-0.12535	<0.0001
Metropolitan	83.14	64.98		
Provincial	79.59	56.74		
Support Level			0.08814	<0.0001
Direct Service Delivery	81.18	59.95		
Technical Assistance	83.29	59.24		
Facilities with Adherence Counselors	81.83	68.97	-0.02600	0.0001
Facilities with Lay Counselors	83.17	64.06	-0.01117	0.1007
Facilities with Patient Navigators	82.31	64.5	-0.02026	0.0029
Facilities with Extended Hours	81.81	66.58	-0.08403	<0.0001
Distance Traveled to Clinic			-0.09769	<0.0001
< 2 hours	83.46	65.91		
> 2 hours	78.46	56.78		
Average Monthly Headcount*	-	-	-0.01795	0.0146
Percent of Monthly Headcount Tested for HIV*	-	-	0.07771	<0.0001
Number of Patients Lost to Follow Up*	-	-	-0.01201	0.0693
Percent of Monthly Headcount on Treatment*	-	-	0.03623	<0.0001
Percent of HIV+ Patients Linked to Care*	-	-	-0.0855	<0.0001
Patient Time of Stay*	-	-	0.98392	<0.0001

Continuous variables without categories to measure average satisfaction

Table 5. Ekurhuleni Final Regression Model

Variable	Parameter Estimate	P-Value
Intercept	099066	<0.001
Facility Type	-0.05662	<0.001
Facilities with Lay Counselors	0.01808	<0.001
Facilities with Patient Navigators	-0.02025	<0.001
Support Level	-0.03643	<0.001
Number of Patients Lost to Follow Up	$-1.29\text{ E-}5$	0.008
Percent of Monthly Headcount Tested for HIV	$2.51\text{ E-}4$	<0.001
Percent of HIV+ Patients Linked to Care	$2.239\text{ E-}4$	0.012
Percent of Monthly Headcount on Treatment	-0.00730	<0.001

Discussion

The data presented for this analysis indicate that patient satisfaction experiences may be

associated with several indicators linked to HIV care. Higher rates of average patient satisfaction

were associated with greater access to services and with greater individualization of care through lay counselors and patient navigators. This suggests that facilities with additional support from national public health agencies, particularly staff members in these roles, are likely to report 80% or greater patient satisfaction. The presence of an adherence counselor was not found to be statistically predictive of patient satisfaction. Publications reporting on patient satisfaction questionnaires that include HIV indicators are limited (Wouters, Heunis, Rensburg, & Meulemans, 2008); other published studies include disease- or population-specific indicators in their measurements (Assefa et al., 2011; Myburgh et al., 2005; Newman et al., 1998; Skarstein et al., 2002). The findings of this study suggest that additional research is needed to further identify specific indicators related to HIV and services provided at public health facilities to better inform factors which influence patient satisfaction. Patient satisfaction can be a useful indicator of patient retention in care, patient behavior, and emergency department visits (Morris, 1999) and interventions to improve these should be drawn from patient satisfaction questionnaires. Ideally, these subjective indicators should be validated against other objective indicators, such as retention in care, adherence to prescribed treatment, and viral load suppression in patients receiving ART. By evaluating satisfaction in HIV care and linking these to HIV viral suppression, the Aurum Institute and its collaborators may be able to improve the quality of services in public health facilities and improve HIV-related treatment outcomes.

Limitations

The questionnaire data had several limitations. First, they are limited to ascertaining patient satisfaction among those who are accessing healthcare services and exclude patients who have fallen out of care due to their lack of satisfaction with the services provided. This survey is not designed to fill that knowledge gap. Second, there were data missing from a number of

clinics within each district, and several facilities had very few questionnaires available for analysis. The data presented for analysis do not match other sources of data from the facilities, and the number of patients surveyed per facility were different in different datasets provided for analysis. The data used in this analysis had fewer participants than the aggregated reports due to incomplete or missing questionnaires. There were issues of incorrect coding and inconsistent reporting during data capturing, which limited the validity of the data for analysis. Variables such as ward had to be excluded because of incorrect or missing data for all in-patient facilities, therefore little is known about the services the patient received at the time of the questionnaires. The out-patient questionnaire results contained the variable *ward* though the questionnaire did not specify, so the variable was removed from out-patient analysis. Despite the format of the two questionnaires, the in-patient questionnaire was conducted at clinics and CHCs as well as hospitals instead of only in-patient facilities. The questionnaires were adapted from the National Department of Health guidelines and therefore do not match national standards and may not be accurate when comparing to questionnaires from other provinces. The inability to obtain retrospective data about the facilities regarding staff, size, and operational hours precluded the ability to accurately reflect these conditions at the time the questionnaire was conducted.

Recommendations

Future questionnaires should be redesigned to incorporate questions regarding different staff roles, the cost of the visit for the patient, and patient retention in care at the facility. Questionnaires should also capture information about the size of the facilities and the approximate number of patients present at the facility when they were conducted, to allow for assessment of respondent bias and representativeness. Future questionnaires should also consider existing patient satisfaction surveys done in similar contexts, such as former surveys from

Ethiopia, Mozambique, and South Africa (Assefa et al., 2011; Morris, 1999; Newman et al., 1998; Skarstein et al., 2002). The results from the Patient Experience of Care questionnaire should ideally be combined with measures of patient waiting times for analysis, and patient waiting times should be further assessed by root cause analyses for improvements. The City of Ekurhuleni should evaluate sub-district performance to increase consistency across all sub-districts, as the East had the lowest scores across all databases, though the North and South produced different measures in different databases.

Future studies should also consider staff perspectives on the facility flow and quality of care to incorporate additional factors including facility management and structure. To better assess HIV services at the facilities, further questionnaires could be conducted with patients receiving these services and questionnaires could incorporate the variables included in this analysis. Questionnaire data capturers should be trained to improve the accuracy of reports on patient demographics and facility information. Finally, redesigned questionnaires should aim to include more information on patient demographics, including race and household income, and the services the patient received at the time of the study to better target the types of service needed for different sub-populations or groups.

Chapter 3: Conclusion and Recommendations

Patient satisfaction is commonly used to evaluate the quality of care of healthcare facilities. In order to improve the quality of care for people living with HIV/AIDS, patient satisfaction should be assessed to provide relevant information on the needs of patients in a local healthcare setting. The 2017 Patient Experience of Care data for Gauteng Province show that patient satisfaction and HIV treatment adherence are associated and the quality of HIV care at public health facilities is a useful predictor of patient satisfaction. Gauteng Province, South Africa has among the highest rates of HIV infection in the country and has demonstrated a need for improvements in linkage and adherence to HIV care for PLHA (U.S. President's Emergency Plan for AIDS Relief, 2018). Predictors of patient satisfaction including patient-staff interactions, facility cleanliness and structure, waiting times, and staff knowledge and use of treatment are useful variables for evaluating specific aspects of a facility that may be improved. In order to meet South Africa's 90-90-90 goals, Gauteng Province needs to strengthen its public health facilities to provide greater care for PLHA throughout the course of their treatment and improve their HRQL.

Infrastructure

The data show that improvements to infrastructure in the public health facilities could improve patient satisfaction and adherence to ART regimens. Health systems strengthening has been shown to positively influence HIV care in PEPFAR programs (Palen et al., 2012), and providing additional staff members would address staffing shortages in South Africa, particularly among nurses (Andersen, 2018). Variables in the analysis included staff members such as patient navigators, lay counselors, and adherence counselors, all of whom had the primary role of connecting with PLHA and assisting them in their services accessed within the health facility.

The presence of lay counselors and patient navigators were statistically associated with patient satisfaction, and facilities that had these staff members were more likely to have increased satisfaction. Providing additional support in understaffed facilities could improve the linkage to care for PLHA and may be associated with improved treatment adherence. In addition to improving linkage and adherence, increasing the staffing may assist in managing high patient volumes and in reducing patient wait times. Addressing the issue of high patient volume may allow for greater individualization of care provided at the facilities and could increase the number of patients receiving continued care for all services.

Collaboration

Improvements to the infrastructure of public health facilities should be supported by a network of organizations providing care for PLHA. The public health facilities in the dataset were under the authority of either local or provincial governments and received additional services from external institutions. Nearly 80% of facilities were led by the City of Ekurhuleni Metropolitan Authority, though many hospitals, CHCs, and larger clinics were run by the Gauteng Provincial Government. As such, the facilities in the district were not all under the same authority and lacked coordination of services between facilities. Facilities may be strengthened through increased collaboration between metropolitan and provincial authorities which could allow for greater consistency in the quality of services. Facilities within Ekurhuleni differed in rates of patient satisfaction by sub-district, suggesting the need for evaluating the concentration of resources and the provision of services by location. In addition to collaboration between local and provincial governments, strengthening the networks among local and national governments could increase the reliability of measures such as the patient experience of care. PEC questionnaires differed among provinces in South Africa, limiting the strength of association

within the data at a national level. Consistent tools for evaluating the quality of service are needed to provide recommendations for improving the quality of care across the country. Increased coordination among governing bodies and nongovernmental organizations such as the Aurum Institute will allow for more targeted service provision and should align national and organizational objectives for improving HIV treatment in the country. Additionally, support from external institutions including PEPFAR and the CDC should provide international resources and assist with M&E activities for public health facilities in the province. Improved collaboration at local and provincial levels of these organizations may improve patient satisfaction and HIV care in the facilities.

90-90-90 Goals

The UNAIDS 90-90-90 goals to end the AIDS epidemic demonstrate three key indicators of HIV care that should be prioritized in all public health programs that service PLHA (UNAIDS, 2014a). Data from the 2017 PEC questionnaire in Gauteng Province include variables directly related to the first two goals: that 90% of people living with HIV know their status, and that 90% of people who know their status are on ART. Data on the third goal, that 90% of people who are on ART achieve viral suppression, were not available for Gauteng Province at the time of the analysis. The final regression analysis demonstrated that a greater percentage of patients tested for HIV was associated with higher patient satisfaction, suggesting there is a relationship between patient satisfaction and HIV testing rates. Similarly, greater numbers of patients linked to care were associated with higher patient satisfaction and may be predictive of perceived quality of care. South Africa has already met the first goal of testing as of autumn 2018 and is close to achieving the third goal of viral suppression, yet is still working towards getting PLHA on ART (Avert, 2018). In the future, it will be crucial to include routine monitoring and

evaluation of the third component of this strategy, and to provide objective outcome indicators of successful ART achievement of viral suppression. The country is now moving towards the 95-95-95 goals to end the epidemic by 2030 (UNAIDS, 2014b) but this will require continued progress in strengthening the health systems at local and provincial levels in a manner that fosters scaled up efforts for prevention and treatment of HIV.

Conclusion

Patient satisfaction is a useful measure in evaluating HIV care, and indicators of the quality of care are associated with improved outcomes of patient satisfaction. Despite the extensive history of patient satisfaction questionnaires used for evaluating the quality of care in a facility, the outcome would benefit from consistency in measurement, as tools differ by facility type, region, disease measured, and additional factors. Many patient satisfaction questionnaires are used only for evaluating programs specific to one location or institution and are difficult to compare outside of these networks. A new questionnaire should be considered for the future of the South African National Department of Health based on the literature and evidence from the 2017 PEC survey data. Improvements in consistency among patient satisfaction reports should be informed by reporting measures of facility resources, waiting times, services provided, staff training and clinical knowledge, and other indicators of patient satisfaction proven useful by prior research. This consistency should also lead to improvements in data quality across facilities, institutions, and localities, and will be useful in evaluating the quality of care in public health facilities in South Africa. Patient satisfaction surveys should be continually assessed to inform recommendations for ongoing improvements in the provision of care by governments and external institutions. Patient satisfaction can provide useful data in predicting adherence to HIV

treatment and should be further coupled with viral load suppression outcomes to more

objectively evaluate additional indicators regarding linkage and adherence to ART regimens.

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Appendix A: Patient Experience of Care (PEC) Questionnaire

health
Department:
Health
REPUBLIC OF SOUTH AFRICA

QUESTIONNAIRE ON PATIENTS' EXPERIENCE OF CARE FOR OUT-PATIENTS

Date: _____   Facility Ref _____   External Ref _____

(To be completed by patients at Primary Healthcare facilities and Hospital Out-Patient Departments only)

NB! *Patients who are exempted by any legislation or are having a health condition that impedes their ability to represent themselves may be represented by their parents / guardians / family members. Completion of questionnaire should commence from **SECTION 1** while **A** is completed by data collectors.*

A	IDENTITY OF A HEALTH FACILITY		
Name of Health Facility:			
Type of Health Facility:			
Province:			
District Name:			
Sub-District Name:			
GENERAL INSTRUCTION	PLEASE MARK THE APPROPRIATE ANSWER WITH X		
SECTION 1	BIOGRAPHICAL DATA		
1.1	Patient's Age		
1.2	Gender (Male/ Female/ Other) Specify in space provide		
1.3	Have you visited this health facility in the past 12 months?	Yes	No
1.4	How long does it take you to get to this health facility travelling in a car, taxi, bus, train, walking etc.	<2hrs	>2hrs
SECTION 2	ACCESS TO CARE		
2.1	The services provided by this health facility are displayed at the main entrance	Yes	No
2.2	At the main entrance of the health facility there is a staff member directing patients to the health service areas they require.	Yes	No
2.3	I was never turned away from this facility without receiving the services I came for	Yes	No
2.4	The service times of this facility are acceptable to me e.g. (07h00 – 1600)	Yes	No
2.5	There are clear directions/ signage to all service points I visited e.g. X-Ray, toilets, pharmacy, emergency exits etc.	Yes	No
2.6	The health facility is wheelchair friendly (walkaways) to all service points I visited including the ablutions	Yes	No
SECTION 3	AVAILABILITY AND USE OF MEDICINES		
3.1	I was asked about allergies to any medication	Yes	No
3.2	I received all medicines that were prescribed for me.	Yes	No
3.3	I was informed of how to take my medicines / treatment	Yes	No
3.4	My medication was not expired	Yes	No
3.5	All my medications were labelled with my name	Yes	No

SECTION 4		PATIENT SAFETY		
4.1		I was provided with a chair/bench to sit on while waiting to be attended to.	Yes	No
4.2		My illness was explained to me in a polite manner.	Yes	No
4.3		I was assisted when I required help.	Yes	No
4.4		I was informed on how to lodge a complaint.	Yes	No
4.5		In my opinion I felt safe in this facility.	Yes	No
SECTION 5		CLEANLINESS		
5.1		Clean drinking water and clean disposable cups are available in the waiting areas	Yes	No
5.2		Waste disposal bins are available at the service areas where I went pass/ went to	Yes	No
5.3		Patients toilets are clean and the following accessories are in place	Yes	No
5.4		• toilet in good working order and flushing well	Yes	No
5.5		• toilet paper	Yes	No
5.6		• hand washing basin	Yes	No
5.7		• liquid soap dispenser with soap	Yes	No
5.8		• disposable hand paper towel	Yes	No
5.9		• 2x waste disposal bins with lids (contaminated waste/ general waste)	Yes	No
5.10		• running tap water	Yes	No
5.11		In my opinion the health facility is generally clean	Yes	No
SECTION 6		VALUES AND ATTITUDES		
6.1		The staff members were wearing visible name badges	Yes	No
6.2		The staff members introduced themselves before they attended to me.	Yes	No
6.3		My permission was asked before a procedure/ treatment was carried out.	Yes	No
6.4		I was given an opportunity to ask questions about my illness.	Yes	No
6.5		My privacy was maintained during the procedure/ treatment other people could not see or overhear.	Yes	No
6.6		In my opinion the staff members were generally respectful to me.	Yes	No
SECTION 7		WAITING TIMES		
7.1		There was a staff member monitoring the queues.	Yes	No
7.2		The estimated/ benchmark waiting times are displayed at the service areas where I went to.	Yes	No
7.3		The general patient waiting time at this facility is acceptable to me.	Yes	No

Questions fully completed	**YES**	**NO**
Reasons for incompleteness		
Name & Surname – Field Worker		Date:
Name & Surname – Supervisor		Date:

QUESTIONNAIRE ON PATIENTS' EXPERIENCE OF CARE FOR IN-PATIENTS

Date: _____ Facility Ref _____   External Ref _____

(*To be completed by patients who spent at least one night admitted in the health facility)*
NB! *Patients who are exempted by any legislation or are having a health condition that impedes their ability to represent themselves may be represented by their parents / guardians / family members.*

A	GEOGRAPHIC PARTICULARS OF A HEALTH FACILITY		
Name of Hospital:			
Level of Hospital:			
Ward Name and Description (Ward 1: Male Medical)			
Province:			
District Name:			
Sub-District:			
GENERAL INSTRUCTIONS	**PLEASE MARK THE APPROPRIATE ANSWER WITH X**		
SECTION 1	**BIOGRAPHICAL DATA**		
1.1	Patient's Age		
1.2	Gender (Male/ Female/ Other)		
1.3	Have you been admitted in this hospital in the past 12 months?		
SECTION 2	**ACCESS TO CARE**		
2.1	I was welcomed into the ward and I was informed about:		
2.2	• the doctor in charge of my ward		
2.3	• the Unit Manager in charge of my ward		
2.4	• how to get hold of any of them if I needed help		
2.5	• the visiting times		
2.6	• my illness and treatment		
2.7	• I was shown where the bathrooms and toilets are		
2.8	I was informed about the transfer possibilities to another facilities if needs be		
SECTION 3	**AVAILABILITY OF MEDICINES**		
3.1	I was asked about allergies to any medication		
3.2	I was informed of how to take my medicines / treatment		
3.3	I received all medicines that were prescribed for me		
SECTION 4	**PATIENT SAFETY**		
4.1	I was made to wear an identity band		
4.2	My illness was explained to me		
4.3	I felt safe while admitted in this ward		
4.4	There is good lighting throughout the ward I am able to see where I am going		
4.5	I was assisted immediately when I needed help		

SECTION 5	CLEANLINESS		
5.1	The bed linen and hospital attire is always clean (sheets, blankets, pillows)		
5.2	I was provided with nappies, sanitary towels, pyjamas when I needed them		
5.3	Patients bathrooms are clean and the following accessories are in place		
5.4	• bath tub with a stopper		
5.5	• shower in good working order		
5.6	• wash basin with a stopper		
5.7	• warm water enough to bath / shower with		
5.8	Patients toilets are clean and the following accessories are in place		
5.9	• toilet in good working order and flushing well		
5.10	• toilet paper		
5.11	• hand washing basin		
5.12	• liquid soap dispenser with soap		
5.13	• disposable hand paper towel		
5.14	• 2x waste disposal bins with lids (red lined/ general waste)		
5.15	• running tap water		
5.16	There is clean drinking water with a clean glass within reach		
5.17	I did not see any of the following pests in the ward: cockroach, rodent, flies etc.		
5.18	In your opinion do you think this facility was generally clean		
SECTION 6	VALUES AND ATTITUDES		
6.1	The staff members wear wearing visible name badges		
6.2	The staff introduced themselves before attending to me		
6.3	I was informed of my rights as a patient		
6.4	My permission was asked before a procedure/ treatment was carried out		
6.5	My health condition / illness was explained to me		
6.6	I was given an opportunity to ask questions about my illness		
6.7	I was allowed to suggest alternative treatment I preferred		
6.8	I was informed about safe keeping of my valuables and clothes		
6.9	I was treated with respect and dignity		
6.10	My privacy was maintained during the procedure/ treatment other people could not see or overhear		
6.11	I was informed on how to lodge a complaint		
6.12	I received feedback regarding the complaint I lodged		
6.13	There has been improvement regarding the issue I complained about		
SECTION 7	WAITING TIMES		
7.1	There is a functional nurse call system within reach in the ward		
7.2	Staff members respond immediately when called		
7.3	On discharge I was given treatment, an appointment card and/or disability aids such as crutches, walking ring, spectacles, etc. to take home.		
7.4	I did not wait long to receive any of the above mentioned items		