NATIONAL GUIDELINE ON MANAGEMENT OF PATIENT WAITING TIME IN CLINICS, COMMUNITY HEALTHCENTERS, AND OUTPATIENT DEPARTMENTS OF PUBLIC HOSPITALS OF SOUTH AFRICA

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FOREWORD BY THE DIRECTOR-GENERAL OF HEALTH

Dr SSS Buthelezi
Director-General: Health

The public health care system is currently overburdened by justifiable demands for care, in particular an increase in the burden of diseases and increasing number of patients seeking care. Studies have proven that the length of time that a patient waits to receive health services is one of the important drivers of satisfaction and compliance with treatment and is indeed one of the commonest, most consistent bitterness issues that most complain about.

The Department of Health remains committed to providing an improved quality of services to all the people seeking care in our public health establishments through proper management of patient waiting time systems.

Various interventions have been implemented in our public health establishments to improve patient waiting time and satisfaction, however; the effects thereof differ across health establishments. In our quest to improve patient waiting time, we therefore align ourselves with globally and locally proven initiatives for improving patient waiting time.

Successful implementation of this guideline requires concerted efforts from all levels of health in particular, managers from provincial Quality Assurance and Improvement units, Public Relations and or communication officers, sub/districts and front-line staff members including clinicians and respective managers.

The outcome of our efforts in improving patient waiting time will be communicated by users of health services through various feedback platforms/sessions including, among others, Patient Experience of Care surveys, other media platforms focusing on patient feedback including inspection reports from the Office of Health Standards Compliance.

I therefore urge all public health officials to consciously be guided by this National Guideline on Management of Patient Waiting Time in Clinics, Community Health Centers, and Outpatient departments of public hospitals in South Africa and to do everything in their power to improve patient waiting time.

Dr SSS Buthelezi
Director-General: Health
Date: 14/12/2023

ACKNOWLEDGEMENT BY THE DIRECTOR-GENERAL OF HEALTH

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The development of the National Guideline on Management of Patient Waiting Time in Clinics, Community Health Centers, Outpatient Departments of public hospitals of South Africa required rigorous inputs from various experts and stakeholders, thus it took time to research, consult, test, re-test to finalize.

Many officials in the public health establishments and health partners shared their contribution to the development, testing and compilation of this guideline. Therefore, we would like to express our sincere appreciation to every one of them for their contribution to this guideline.

Although acknowledging people by names carries the risk of unknowingly excluding other contributors, allow me to convey my appreciation to various advisory committees of the Technical Committee of the Health Council, namely the National Services Platform, National Health Information System of South Africa (NHISSA), Senior Management Committee and other officials from the National Department of Health and to Dr Gavin Reagan from the School of Public Health in the University of Western Cape for his guidance on measurement system of patient waiting time.

I would like to convey our gratitude to one of our health partners, namely, John Snow Incorporate: SA for drafting communication system for managing patient waiting time, Operation Phakisa: Health – Patient Waiting Time stream for guiding the technical content of the guideline, MEASURE Evaluation–Strategic Information for South Africa (MEval SIFSA) for extensive research on various automated mechanisms that may be used to objectively measure patient waiting time, and to Ms. Annie Jautse in the NDoH: QAI for spearheading the research, development, documenting and finalization of this guideline.

Dr SSS Buthelezi
Director-General: Health
Date: 14/12/2023

CONTENTS

1. ACRONYMS

CHC	Community Health Centre
CCMDD	Central Chronic Medicine Dispensing and Distribution
EEDD	Existing Event Driven Data.
EML	Essential Medicines List
FtA	Failure to Attend
GDP	Gross Domestic Product
IHF	Ideal Health Facility
IPC	Infection Prevention and Control
NHI	National Health Insurance
OPDs	Out Patient Departments
OPDPs	Outpatient Department Pharmacies
PWT	Patient Waiting Time
RFID	Radio Frequency Identification
SATS	South African Triage Scale
SDI	Service Delivery Improvement
SMS	Short Message System
TSIE	Time Spent in the Establishment
TSRS	Time Spent Receiving Services
TTO	Treatment to be Taken Out
TSWFS	Time Spent Waiting for Services
USSD	Unstructured Supplementary Service Data
WBPHCOT	Ward based Primary Health Care Outreach Team
HPRS	Health Patient Record System

2. DEFINITION OF TERMS AS USED IN THIS GUIDELINE

OPD	Outpatient departments include all service areas that provide outpatient services such as patient information desks, patient record/registry departments, various hospital clinics, outpatients' pharmacy, radiology, Accident and Emergency departments.
PWT	The time spent by a patient waiting for health services in the health establishment per visit taking into consideration the official opening time of the health establishment. It is calculated from the official opening time of the health establishment. It is a time a patient spends waiting between the arrival in a service point to the time they receive services. The sum of patient waiting time in all service areas per patient's visit is therefore regarded as patient waiting time for services.
Time spent in the health establishment	A sum of a time spent waiting for services and a time spent receiving services per patient visit to the public health establishment. It is calculated from the time the patient arrives at the reception area of the health establishment to the time they leave the health establishment.
Service time	The total time spent interacting with the health professional and is calculated from the time the health service is provided in response to the patient presentation to the time the service is completed, and the patient departs the service area.
Measurement	A process of determining how long the patient waits for services, for receiving services and aspired maximum time they spent in the health establishment per visit as compared with the relevant standards.
Failure to attend	The patient did not show up in the health establishment and or a service area as per appointment or expectation**.**
Median	Any number that lies in the middle (midpoint) of the numerically arranged numbers. In an instance where the numerically arranged numbers are even, the two middle numbers (midpoint) are added together and divided by two to obtain a median.

3. INTRODUCTION AND CONTEXTUAL FACTORS ASSOCIATED WITH PATIENT WAITING TIME IN CLINICS, COMMUNITY CENTRES AND OUTPATIENT DEPARTMENTS OF PUBLIC HOSPITALS OF SOUTH AFRICA.

Patient waiting time for services is among the most common patients' complaints and is one of the emerging and increasingly important parameters employed in the assessment of health care quality[1]. Long patient waiting time for health services in the clinics, CHCs and Outpatient departments of public hospitals is therefore one of the commonest, most consistent bitterest complaints of people using public health facilities[2]. Studies have further proven that the length of time that a patient waits to receive health services is one of the important drivers of satisfaction and compliance with treatment[3]. Increased patient dissatisfaction with care and litigations emanating from complications of health conditions that happen while waiting for healthcare services negatively influence daily health care seeking pattern of patients[4].

In many health establishments justifiable demands for services is greater than the capacity at hand. This may be explained by daily long queues for services where, in some instances, patients return home without having received the required health services. In South Africa, 84% of the population access health services from public health sector while 16% receive health services from the private sector. Both the public and private health sectors equally share the Gross Domestic Product's (GDP) expenditure on health.

To correct the disparity between the public and the private sector, the South African government is implementing the National Health Insurance (NHI) whose purpose is to ensure that all South Africans have equal access to universal quality health care as enshrined in the Constitution[5].

As the NHI program is unfolding, it is important to understand and consistently measure other factors which are associated with PWT in Clinics, CHCs, and OPDs of public health establishments and use such findings to improve PWT. Emanating from years of observations, patient feedback, complaints, literature studies and various analytics, factors that are associated with PWT for services in clinics, CHCs and Outpatient departments of public hospitals include:

- Organisational practices
    - absence of a standardised patient waiting time that should be used to guide efficiency of service provision.
    - batch booking (appointments) of all patients in the mornings with no matching staffing to provide respective services.
    - performance of other administrative work such as meetings, in-service trainings,

and cleaning/housekeeping of facilities in the mornings when there are already many patients waiting for services.

- Absence of fast lane queues for critically ill, aged, disabled patients and school children.

- Staffing
  - a mismatch of staff members with the number of patients seeking health care.
  - Absence of a consistently staffed information desks and patient triage to guide patients and prioritise urgency of services respectively.
  - Management oversight and supervision.
- Building infrastructure
  - Poor signages to allow easier navigation of patients through the health establishment result in patients getting lost and thus spend long time searching for services.
  - Long patient waiting for files that are not easily found due to poor patient record storage and management systems. This includes multiple storage areas of patient files that are always far from the front desk.
- Patient factors
  - Failure to comply with the agreed upon appointment dates and times.
  - Preferential use of certain health establishments over others irrespective of the patients' health conditions.
- Others
  - inappropriate referral systems including suboptimal use of other services such as CCMDD resulting in overcrowding of facilities.
  - lack of medicines at some facilities (as per EML prescripts) for special health conditions requiring patients to seek services in facilities elsewhere.

To address the other factors that are associated with PWT, various mechanisms have been implemented in different health establishments over the years, however, long PWT for services remains one of the priority issues that inform overall patient satisfaction.

4. LEGISLATIVE MANDATE AND POLICY PRESCRIPTS

Management of Patient Waiting Time in clinics, Community Health Centers and Outpatient departments of public hospitals is guided by pieces of various legislation, policies and guidelines that advocate for efficiency and responsiveness in the provision of care in the Public Healthcare system. Such legislation entails:

4.1 The South African Constitution: Section 27: Bill of Rights: everyone has a right to access health and reproductive health (2) The state must take reasonable legislative and other measures, within its available resources, to achieve the progressive realization of each of these rights.

4.2 Norms and Standards Regulations applicable to different categories of Health Establishments: Item 22: The health establishment must monitor patient waiting time in line with the national core standards for health establishments in South Africa.

4.3 Patient Rights Charter: Access: Everyone has the right of access to health care services that includes (i) receiving timely emergency care at any health care health establishment that is open regardless of one's ability to pay.

4.4 Negotiated Service Delivery Agreement: Sub-Output 4.4.2: Improving Patient Care and Satisfaction "To ensure that patients do not face long waiting times"

4.5 South Africa's Ministerial Priority Areas of Care to fast-track improvement of healthcare services namely, patient waiting time for services, staff attitudes, cleanliness, patient safety and security, Infection Prevention Control, availability, and use of medicines.

4.6 Operation Phakisa: Health: 2: Patient waiting time is a time spent by a patient waiting for health services per visit taking into consideration the official opening time of the health establishment. It is calculated from the time the patient enters the health establishment (taking into consideration the official opening time of a health establishment) to the time the patient leaves the health establishment. Operation Phakisa:2 defines PWT in PHC establishments as the aspired maximum time that every patient is expected to wait per visit and that it is two hours. Taking into consideration the time to be spent receiving healthcare services of one hour, the overall targeted time to be spent by a patient in a health establishment per visit is therefore, three hours.

4.7 The service time is the time spent receiving a healthcare service per patient visit.

4.8 The South African triage scale which is an effective scientific tool to ensure that the most seriously ill and or injured are attended to with the appropriate urgency that is required, prioritizes patient waiting time according to various colour codes.

5. PURPOSE AND OBJECTIVES OF THE GUIDELINE

Patient waiting time for services is one of the priority issues in health service delivery. The risk of not improving patient waiting time for services may lead to various negative results such as the:

- quality of care further decreasing as workload continuously increases.
- decreasing staff morale and increasing staff dissatisfaction with the situation. This may manifest itself in various forms such as negative staff attitude towards patients, high staff turn- over in public health establishments, escalating adverse events and potential rise in litigations to persons or establishments.
- higher treatment defaulting rates and resultant increase in bacterial / viral resistance to medications.
- a collapse of the health care system as patient flow into health establishments increases and the system just becomes totally unmanageable[6].
- frustration and aversion to the health system increases.
- Increase in morbidity and mortality.

There is a need to comply with the available legal and policy frameworks and to realize the benefits of quality health care, especially those that prescribe that health services must be timely, equitable, integrated, and efficient[7].

It is in this regard that this guideline aims to provide generic guidance on management of Patient Waiting Time in clinics, Community Health Centres and Outpatient departments of public hospitals SA.

The objectives are to describe and recommend methods that should be employed to:

- measure and analyze results of waiting time.
- improve patient waiting time.
- implement the guideline.

6. SCOPE OF APPLICATION

The guideline is applicable for use in all Clinics, Community Health Centers and Outpatient Departments of public hospitals of South Africa.

SECTION A

7. MEASUREMENT OF PATIENT WAITING TIME

Measurement of PWT requires that the aspired (maximum) patient waiting time be determined, consistently sign-posted at every service area for patients to see. Health care providers should then dedicate specific efforts to comply with the aspired patient waiting time.

Other variables that always come to the fore when managing PWT are “service times” and “times spent in a health establishment per patient’s visit”.

The service time is the time spent receiving a health service per patient visit to the establishment[8]. The time spent receiving services may not be easy to standardize in clinical service areas due to the complexity and uniqueness of health conditions that each patient presents with e.g., the provision of a service for a patient who has multiple co- morbidities and complications may take longer than that of a patient with only one, uncomplicated health condition. However, it is important to include it in the variables for PWT so it can assist in determining root causes of the overall PWT.

The time spent in a health establishment is the entire time that the patient spends in a establishment per visit. It is a sum of patient waiting time and time spent receiving health services.

7.1 Determining the aspired maximum Patient Waiting Time

Due to complexity of healthcare services and health conditions that patients present with, there is a variation of PWT in various levels of health services, namely, clinics, Community Health Centers (CHCs) and outpatient departments of public hospitals.

7.1.1 Clinics and CHCs

In clinics and CHCs, the aspired maximum patient waiting time for services is 120 minutes (two hours) while the total time spent receiving services at various service points per patient visit is sixty minutes (one hour). The aspired maximum time to be spent by a patient per visit is therefore, 180 minutes (three hours)[9].

7.1.2 Hospital Outpatient Departments

In hospitals, the aspired maximum patient waiting time is informed by the complexity of the patients’ health conditions, the need for undergoing diagnostic tests and or intervention by multiple clinical specialists and respective treatment options before a patient can leave the service area.

Over the years, various investigative mechanisms such as literature studies, operational research, observations, and complaints from patients about PWT, demonstrated that the measurement of PWT vary across hospitals hence the need to determine aspired maximum PWT. Considering the feedback received from frontline workers and trends in PWT for services in outpatient departments of hospitals, it is estimated that in specialised, district, regional and tertiary/central hospitals, the average PWT for healthcare services per visit is 60, 120, 120 and 140 minutes, respectively. The aspired maximum PWT for services, service time and aspired maximum time spent per patient's visit in the outpatient departments of public hospitals is therefore outlined in table 1.

Table 1: Aspired maximum PWT for services, service time and aspired maximum time spent per patient's visit[10.]

LEVEL OF ESTABLISHMENT	PATIENT WAITING TIME FOR SERVICES	TOTAL TIME SPENT RECEIV- ING SERVICES	TOTAL TIME SPENT IN A HOSPITAL
Specialised hospitals	60 minutes (1 hour)	60 minutes (1 hour)	120 minutes (2 hours)
District Hospitals	120 minutes (2 hours)	60 minutes (1 hour)	180 minutes (3 hours)
Regional hospitals	120 minutes (2 hours)	120 minutes (2 hours)	240 minutes (4 hours)
Tertiary/Central hospitals	140 minutes (2 hours and thirty minutes)	190 minutes (3 hours)	320 minutes (5 hours thirty minutes)

7.1.3 Accident and Emergency departments

In the Accident and Emergency departments of a hospital, patient waiting time is informed by a patient's health condition as well as the required urgency to address them. The adjusted International Triage coding system and South African Triage System (SATSA)[11] was considered to inform the aspired PWT in (A&E) departments.

On arrival of the patient at the A&E department, clinicians assess the patient's condition in a quick but organized approach utilizing a specific method of documenting patient's health condition, namely, Subjective, Objective, Assessment and Planning (SOAP). Quick assessment of a patient on arrival in A&E is utilized to determine the urgency of intervention and prioritization. The four colour codes are used to communicate the severity of a health condition and required urgency of intervention as outlined in table 2.

Table 2: Adjusted Triage coding system

Colour code	Aspired maximum time to be spend waiting
Red	No waiting
Orange	ten minutes
Yellow	thirty minutes
Green	one hour

It is therefore important to use the adjusted triage system to ensure that patients receive the required service within the aspired PWT to reduce the negative impact of a delay in treatment on prognosis of the patient.

7.2 Determining the sample size for measuring PWT

A representative sample size for use in measuring patient waiting time is informed by daily patient headcount and is pre-determined in the Ideal Health Establishment program as outlined in table 3.

Table 3: Predetermined sample size for use in measuring patient waiting time[12].

Daily headcount	Sample size	Daily headcount	Sample size
10	10	600	234
20	19	700	248
30	28	800	260
50	44	1000	278
75	63	1200	291
100	80	1500	306
150	108	2000	322
200	132	2500	333
250	152	3500	346
300	169	5000	357
400	196	7500	365
500	217	>10000	370

7.3 Data collection

It is required that every staff member who provides health services to patients captures only the service times (commencement and completion) time in data collection form that must be attached to patients' records/files (see Annexure A: Data Collection tool). Consistent capturing will assist to

- prevent possible Hawthorne effect that is common in some observational studies.
- use of objective data that will be obtainable form a sample of patient's records/files per service area.
- reduce the need for additional human resource that will be required to shadow patients then record and later capture all the variables for PWT.
- address individual complaints about PWT.

It is therefore important to institutionalize the completion of data collection tool for all patients visiting health establishment.

7.3.1 Preparation for data collection

Any randomly selected day in a month falling within a financial quarter should be selected[13] for measuring PWT. To ensure proper representation, a sample of files of patients that visited the health establishment during the quarter is randomly selected:

- the sample size is determined by capturing the quarterly headcount of every service area/discipline or OPD clinic in the IHF system. The IHF will automatically project the required sample size.
- using the patient register in every service area/discipline or OPD clinic, randomly select the names of patients that visited the establishment at any day during the financial quarter and collect their respective files from the patient records/filing area.
- the sample size of all the service areas/disciplines or OPD clinics (when added together) should therefore be equal to the given sample size.

7.4 Data capturing

The service times per service area/discipline are transcribed from the Data Collection tool into the data capturing form of the IHF system. The IHF system will perform calculations for all variables related PWT.

7.5 Analysis of results

Analysis of PWT encompasses PWT, time spent receiving healthcare services and time spent in a health establishment by the patient per visit. Once data capturing has been completed, the system automatically projects the results of the three variables of PWT, namely,

7.5.1 time spent providing/receiving services at service areas/points.

7.5.2 PWT per service area.

7.5.3 time spent in a health establishment per patient visit.

The reports are separated according to the patient, service area, clinic, CHC, OPD clinics, sub/district, province and national.

7.6 Presentation of results

The results can be presented in tabular (as depicted in the example in Table 4) and graphical format (as depicted in the example in figure 1). The results will depict:

7.6.1 average time PWT for services as compared to aspired PWT.

7.6.2 average time spent receiving the services. It is acknowledged that the time spent receiving services may not necessarily be standardized due to uniqueness and complexity of every patient's health conditions; however, it has ripple effect on patient waiting time and total

7.6.3 time spent in a health establishment per patient's visit. It is therefore important to utilize this indicator to explore other factors that may assist in service delivery improvement such as workload for staff members, availability of material resources, space for accommodating patients, etc.

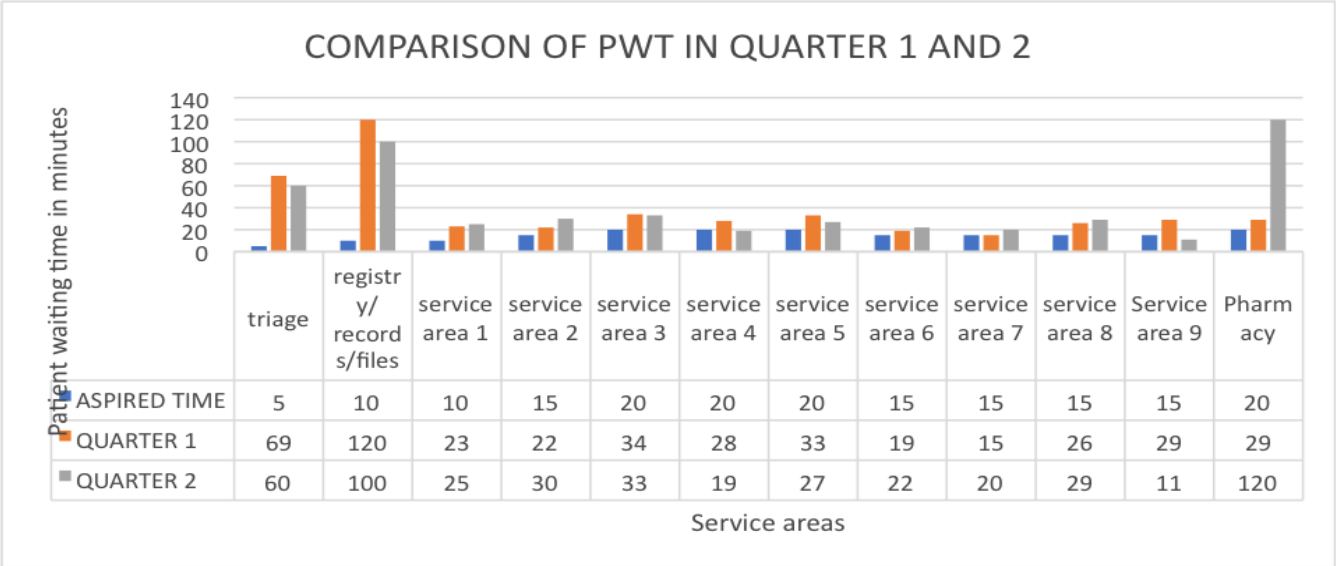
7.6.4 average time spent in a health establishment per visit as compared with the aspired maximum time.

7.6.5 variation between the actual score obtained and the aspired time.

Table 4: Example of results of measurement of PWT.

INDICATOR	DESCRIPTION	Aspired Maximum time	Score obtained	VARIATION= Comparison of Achieved score and aspired maximum time
1. Average service time in minutes	Sum of all time spent receiving services in service areas divided by the number of captured service times	60	35	25
2. Average patient waiting time in minutes	Sum of waiting times in service areas divided by the number of respective service areas.	120	180	-60
3. Average time in minutes spent in the health establishment per patient's visit	Convert % scores of items 2 and 3 into whole numbers, add them together then calculate the average time spent in the health establishment.	180	215	-35

NB! At a health facility level, the three variables of PWT are also separated according to service areas. At sub/district, province and national level, the report focuses only on the three variables. An example of a quarterly facility level PWT versus aspired waiting time per service area are depicted in figure 1.



	triage	registry/ records/files	service area 1	service area 2	service area 3	service area 4	service area 5	service area 6	service area 7	service area 8	Service area 9	Pharmacy
ASPIRED TIME	5	10	10	15	20	20	20	15	15	15	15	20
QUARTER 1	69	120	23	22	34	28	33	19	15	26	29	29
QUARTER 2	60	100	25	30	33	19	27	22	20	29	11	120

Figure 1: Example of results of measurement of PWT

The aspired PWT in this example is 180 minutes. The aspired PWT of every service area is a fraction of the total aspired PWT of 180 minutes per patient visit. All the other variables of PWT can also be depicted likewise. The figure is depicting areas that require urgent attention. Relevant quality improvement models and techniques may be followed to determine the root cause and solutions.

7.7 Alternative systems used to measure patient waiting time

A multifunctional automated system may be utilized to measure patient waiting time, time spent receiving services and time spent per service area and the health establishment. In the automated measurement system

- data collection may be passive, and analysis can be adjusted to be as frequent as the facility may require and produce more objective results.
- can project the results and populate them in line with the available service delivery/quality improvement template (Annexure D). The manager will see, among others, aspect of care delivery that require improvement of patient waiting.
- the results can be aggregated and disaggregated according to various service areas in the health establishment and levels of healthcare, thus reduce the workload related to data capturing and analysis for staff members who must spent their time providing care to patients and implementing required improvements.
- Although the use of a passive automated IT system is helpful in terms of producing reliable results and significantly reducing times spent through manual collection, capturing or analysis of the results, it requires relevant funding, procurement and maintenance procedures.

For further clarity, the alternative multifunctional systems and respective features as described in Annexure E may be explored for automated measurement of PWT, however, for the purpose of this guideline, the IHF system will be used. Should there be a decision to install a fully automated system, it should be ensured that all the required features/portals are linked to the nationally approved system.

SECTION B

8. ADDRESSING FACTORS ASSOCIATED WITH PATIENT WAITING TIME IN CLINICS, CHCs, and OUTPATIENT DEPARTMENTS OF PUBLIC HOSPITALS OF SA.

It is important to focus on the root causes of long PWT and use various quality analysis tools and strategies to institute relevant solutions. The summarized improvement template, which can be used at every service area/point, and or collated at a clinic, CHC or outpatient department of a hospital is described in annexure D.

Improving patient waiting time requires careful analysis of the waiting, service and times spent at various service areas. Other factors which might be confounding factors in PWT should be included to address generic factors that contribute to undesirable patient waiting time. Such factors are classified into:

8.1 Patient factors

Patient factors associated with long patient waiting time are those factors related to care seeking behaviors and use of health establishments and include,

- patients preferring to be seen in hospitals where all medical investigations, diagnosis and treatment are performed by doctors, self-referral to hospitals and in so doing, bypassing health establishment where their respective health conditions must be attended to,
- readily available public transport to hospitals, rather than to clinics and or community health centers,
- booked patients that are stable and who do not need to see a doctor, visiting the establishment to only collect their medications from the pharmacy and,
- patients collecting chronic medication that are not available on the Essential Medicines List (EML) for clinics and CHCs.

To ensure efficient use of health services which will result in shorter patient waiting times, patient should be informed of alternative methods that they can adopt to seek health services which include:

8.1.1 Education of patients to ensure that they have better understanding of their health conditions which will enable them to take necessary precautions without the need to frequently visit health establishments.

8.1.2 Use of local media and various communication platforms such as social media should be followed to provide relevant health education to the public. use of clinics and CHCs committees and hospital boards to inform communities.

8.1.3 Patients whose health conditions are stable and do not require regular observations and examinations in health establishments, should be referred to the local CCMDD points to

8.1.4 receive their chronic medications.

8.1.5 Appointments should be made for patients who require regular follow-up.

8.1.6 The clinician should, with involvement of the patient, determine the next follow-up date and time.

8.1.7 Appointments of patients should be staggered across the entire operation time of the establishment. While honouring of patients' appointments is encouraged, no patients should be turned away without receiving services.

8.1.8 Other methods of reducing the rate of failure to attend (FtA) include the use of (depending on the capacity of the establishment), any of the following:

- Automated reminders in the form of SMS, WhatsApp messaging and electronic mail systems.
- Reminder calls especially to those with high-risk conditions that require close monitoring.
- Telephone or physical notification by the patient to the establishment in case the patient is unable to honour the appointment and therefore the need for alternative appointment.

8.1.9 Taking into consideration the cost implications related to patients who fail to honour their appointments (FtA) due to some reasons, Ward Based Primary Health Care Outreach Teams (WBCHCOT) should be used to make relevant follow-up and where necessary distribute chronic medicines directly to patients in their homes and refer them to a nearby health establishment.

8.2 Service/organizational factors.

Service/organizational factors entail resources, administrative support, communication, and coordination mechanisms that are employed in the health establishment to deliver health services. Some of the examples that demonstrate ineffective / inappropriate systems and processes emanate from the fact that:

- despite knowing that there is an expected high number of patients, the number of staff being allocated to high volume service areas remains constant through-out,
- a lack of co-ordination of activities such as tea and lunch breaks that leads to patients having to wait until staff had returned to their working stations,
- patients are not informed where to queue and only discover later that they are in the wrong queue.
- patients in the Out-patient Department (OPD) assemble rapidly while doctors are still busy with ward rounds. When doctors later start at OPD, the subsequent sudden spill-over of patients to the pharmacy results in long queues and waiting times even after hours,
- the indiscriminate monitoring of vital signs for all patients in OPD, including those that

are coming for counseling and repeats medications and,

- no booking system to limit the number of patients intake per discipline per day,
- provision of batch services and poor patient filing systems and practices.

These factors are indicative of inefficient work processes, delay in commencement of services to patients and contribution to long patient waiting time.

While it should be ensured that most health services are provided throughout the entire operational days and or times of the health establishment, it is important that:

8.2.1 The location of various service areas is visibly sign-posted to ensure better navigation through the health system. A resolute staff member should consistently monitor queues and ensure that patients who need urgent attention are addressed urgently and provide direction to those unsure of the process.

8.2.2 Help / Information desk should be consistently staffed to provide relevant information and guidance to patients.

8.2.3 Patient Records/files of patients who have appointments, complete with relevant test results, must be retrieved and prepared for the patient at least 24 hours before patient's arrival at the establishment and registration desk. Patient records / files must be effectively managed to prevent loss and or physical damage as follows:

8.2.3.1 Redundant patient files must be managed in line with relevant legislation so that space can be created for active files.

8.2.3.2 Every patient, irrespective of having multiple health conditions, must have only one file in the health establishment.

8.2.3.3 Use of Electronic patient record system will expedite retrieval of patients' records at registry and information desk / office; however, this is yet to be applied in public hospitals.

8.2.3.4 One-stop-service must be provided for patients as they present at the counter i.e., patient requests the file (through provision of a card, ID, or other means), pay and or be given the file at once, then proceed to the next service area.

8.2.3.5 Triage area should be consistently staffed by knowledgeable clinicians who will screen and prioritize patients in line with their health conditions to appropriate service areas.

8.2.3.6 In CHCs and clinics patients are classified according to the care streams, namely, acute, chronic, and Maternal and Child health and allied health services. The colour coding for the streams is red, blue, green, and yellow respectively[14]. As the patients enter the PHC, they are triaged then obtain their records and directed to the relevant stream of care.

8.2.3.7 In Accident and Emergencies, the South African triage colour-coding system is the most effective way that is followed to save patients' lives[15]. It is used to allocate specific PWT

according to red, amber, yellow and green. The patients that are assigned to a red colour are addressed immediately as they are emergencies while those that are amber, yellow, and green wait for about ten, thirty and sixty minutes before they are attended. The prioritization ensures that the patients with the most urgent healthcare need are helped first.

8.2.3.8 Capping of the number of patients for appointment.

Every clinical service area to be allowed to provide an appointment for a specified number of patients per date. Instead of being directed to queue at an alternative service area for appointment date, patients should obtain their appointments dates /return dates from the consulting room before leaving the room. At the end of the service, all the appointments should be collected from the consulting rooms and collated according to return dates. This will ensure that proper preparations for the return of such patients are made.

8.3 Staff related factors

In many public health care establishments, staff members, including clinicians, perform functions other than direct patient care. Such functions include, but not limited to attending in-service trainings, meetings, handover reports and preparation of service areas. It is in this regard that as more patients arrive in the morning, there is always no matching staff members to provide required services. It is therefore required that:

8.3.1 Proper matching of capacity of staff with the number of demands for services be introduced. The estimation of the number of patients that do not have appointments and those that have appointment system should be determined and be used to allocate required staff members to serve patients.

8.3.2 Where possible, managers should consider introducing flexible work times of staff members to respond to the numbers of patients. It should further be ensured that patients with chronic and stable health conditions be referred to their accessible CCMDD.

8.3.3 To prevent excessive movement of staff, patients or systems that further elongate patient waiting time for services, and where possible, it should be ensured that one stop services in various clinical service areas are provided to every patient as they present in all service points.

8.3.4 Prioritisation of provision of patient care

- Meetings and in-service trainings should be conducted when the influx of patients is lower; however, urgent notices may be communicated at handing over or
- commencement of duties. This should not take more than quarter of an hour.
- Although doctors usually commence their work with ward rounds it is recommenced that

some doctors be assigned to commence the work in OPDs and Accident Emergency departments in the mornings.

- Tea and lunch breaks must be staggered throughout the day to ensure continuity of services to patients. Cleaning of facilities and other housekeeping duties should be conducted at the end of the day when there are fewer patients in the health establishments. This will prevent interruption of services through cleaning procedures and ensure that health establishment is clean for the next day. The entire day should therefore be dedicated for emptying waste bins, filling up required resources and cleaning areas as the need arise.

8.4 Building Infrastructure factors

Often the frustration with long waiting times is further compounded by building infrastructure which is not fit for the intended purpose and or numbers of patients that visit the establishment on daily basis. It is therefore important that:

8.4.1 the various service areas be located nearer to one another to prevent time wasted through walking distance between service areas.

8.4.2 The building infrastructure design must provide for alignment of service areas with patient flow e.g., from entry/ information desk, triage, patient registration, relevant stream of care/service area, diagnostics, procedure rooms, pharmacy, and departure.

8.4.3 Patient record storage room must be near registry to prevent time lost through walking to a far storage area to retrieve files.

8.4.4 well-organized and comfortable seating arrangements should be in place to allow for smooth movement of patients from one service area to the next.

8.4.5 In pharmacy, storage shelves for frequently dispensed medicines should be erected near the dispensing window to prevent unnecessary and or repeated movement to pick from shelves.

8.4.6 The dispensing shelves should be erected vertical rather than horizontal to dispensing windows to allow for shorter movements for picking of prescriptions.

8.5 Other factors

8.5.1 Standard operating procedures should be developed to ensure that the referring health establishment must first confirm with the receiving health establishment/service area before the patient is referred. This will ensure that on arrival during the agreed upon date and or time, the patient is addressed at once thereby improving patient waiting time.

8.5.2 Health establishments must ensure that they have consistent availability of medication as espoused in the Essential Medicines list (EML). Where there is a need for special medications outside the EML, the prescribing facility must make special arrangements with respective PHC to ensure that the medications are available for patients.

8.5.3 The use of various Quality Improvement Techniques such as process mapping[16] follows the journey of the patient through the health establishments and identifies areas where there are blockages and resolve them at once.

8.5.4 Resolving blockages may follow various steps, however, the focus should be to:

8.5.4.1 Identify non-value-added steps (unnecessary steps/movement) and remove them.

8.5.4.2 Identify where there is waste of time due to repetition of process and collate and or eradicate some activities.

8.5.4.3 Where the patient journey results in patient having to move to multiple service areas to fetch and or undergo multiple diagnostic tests and treatments, re-order and or re-align such movements.

8.5.4.4 Where possible, provide all the services to patients as they present rather than sending the patient to multiple service points. This is more relevant for administrative procedures and in PHCs.

8.5.4.5 minimize hand-offs e.g., instead of physically submitting laboratory results to a service area, they can be electronically sent to the prescribing clinicians to effect swift clinical decision. The duplicate paper copies may be submitted later for filing in patients' records.

8.5.4.6 Identify the biggest delaying service points/areas and determine local ways of speeding up the patients' waiting for services.

SECTION C

9. SERVICE DELIVERY IMPROVEMENT

Successful service delivery improvement should identify service areas where there is a need to improve patient waiting time as would have been depicted by the measurement system. The improvement should utilize relevant quality improvement strategies to determine the root causes of poor performance. Once the root causes have been determined, it is important to organize service delivery improvement.

The tasks that are delegated to respective staff members must be explicitly written in the form of a directive rather than a statement i.e., they must always commence with a “verb” see column 4 in Annexure D. The delegated person’s details must be explicit in terms of name, title, and area of work. The comment section must tell if the delegation was completed or not. Where it was not completed, an accompanying reason and planned corrections, must be written as a form of commitment. This must be done only when the due date in sixth column has passed. The detailed template for service delivery improvement is outlined in Annexure D.

10. KEY MESSAGES FOR SUCCESFUL MANAGEMENT OF PATIENT WAITING TIME IN CLINICS, COMMUNITY HEALTH CENTRES AND OUTPATIENT DEPARTMENTS OF PUBLIC HOSPITALS OF SOUTH AFRICA.

- Improvements in waiting times should be delivered through relevant legislation, policies, guidelines, and standard operating procedures.
- The Patients’ Rights and Batho Pele principles are paramount in improving PWT. Once they are in a health establishment and or service areas, patients should be informed of expected waiting time and be updated on any delay and solutions that are being implemented.
- Capturing of the data collection tool should be institutionalized and be applied to all patients by all staff members.
- Patients should be clearly advised of the implications of failure to comply (FtC) with the agreed upon appointment.
- Patients should be offered care according to clinical priority and within the acceptable and or aspired maximum waiting time.
- Referrals should be clinically appropriate and directed towards the most appropriate service area and or health establishment.
- Factors which influence long patient waiting times should be regularly determined and action taken to resolve them.

11. CONCLUSION

Successful Management of Patient Waiting Time in clinics, Community Health Centers and Outpatient departments of public hospital OPDs is a collective effort from staff members in all service areas. It requires an objective measurement system to guide proper improvements. In many instances, improving PWT may not necessarily require new resources and finances. Improvements ensures that patients have better experience when they seek healthcare in clinics, CHCs and outpatient departments of hospitals of South Africa. It therefore one of the areas of benchmarks for customer care.

11. SECTION D

IMPLEMENTATION PLAN FOR THE NATIONAL GUIDELINE ON MANAGEMENT OF PATIENT WAITING TIME IN CLINICS, COMMUNITY HEALTH CENTERS AND OUTPATIENT DEPARTMENTS OF PUBLIC HOSPITALS OF SOUTH AFRICA.

CONTENTS

1. INTRODUCTION

There are any prevailing factors that negatively affect the delivery of the expected quality health services across the globe. To remedy this, various mechanisms have been recommended and implemented to improve the quality of healthcare services. One such mechanism is through management and rigorous measurement of patient waiting time.

The National Guideline on Management of Patient Waiting Time in Clinics, community health centres and outpatient departments of public hospitals of South Africa describes the factors that are associated with patient waiting time for services, mechanisms that should be followed to improve such factors and measure patient waiting time. The guideline underwent rigorous consultations and piloting in public health establishments.

The provincial health departments and various levels of care will therefore use the guideline as reference to inform service delivery improvements in the respective health facilities which include (i) training staff members on implementing mechanisms for improving patient waiting time, (ii) guidance on conducting quarterly measurement of patient waiting time (iii) presentation and use of results to inform continuous improvement and efficiency in the provision of daily service delivery.

2. PURPOSE

The purpose of this implementation plan is to outline the key areas of implementation and the measurement to inform improvement of service delivery. The guideline will be in effect from the date of approval to five consecutive years, however, should the need arise, mid-term review may be conducted at end of the first 36 months of implementation of the guideline.

3. KEY AREAS OF IMPLEMENTATION

Key areas of implementation of the guideline will be to conduct provincial workshops on improving factors that are associated with patient waiting time, measurement, and use of the results to informs service delivery improvements. The process that will be followed to implement the guideline are:

3.1 Printing and dissemination of the approved guideline

- Printing of six thousand copies of the approved guideline by the directorate: Quality Assurance and Improvement in the National Department of Health. The printed copies will be couriered to the nine provincial Quality Assurance (QA) Manager/Coordinator to disseminate to respective health establishments.
- Additional soft copies will be freely accessible from the website of the department, information hub as well as the World Wide Web.
- Provincial health departments and/or District Offices will be responsible to download and reprint the guideline should additional copies be needed in health establishments.

3.2 Capacity building

- Provincial workshops focusing on empowering QA, Customer Care, and Information officers regarding the content of the guideline will be conducted by the NDOH during the financial quarter of approval of the guideline. The provincial QA, Customer care and Information officers will conduct further workshops and ensuing support to the health establishments during the implementation phase.
- Already, various provincial Quality Assurance staff members have been trained on the measurement and analysis of the Patient waiting time survey using the software of the Ideal Clinic Framework. However, there are adjustment that are effected in the Ideal Health Framework to be aligned to the guideline.
- The respective provincial support staff members of the Ideal Health Facility (IHF) and National Health Quality Improvement Project (NHQIP), as part of the improvement program, will provide further training and support on the guideline throughout the implementation phase.

3.3 Monitoring of implementation

- The guideline will be implemented over a period of 5 years commencing from the date of approval.
- Provincial health departments will provide feedback and highlight any implementation success and or constraints and recommendations for update during the first thirty-six (36) months of implementation of the guideline.
- As the need arise, the use of any of the available automated systems for measurement of patient waiting time may be evaluated and be communicated to inform update of the guideline.

4. MONITORING AND EVALUATION

Consideration must be taken for measuring Patient Waiting Time in all service areas especially in key areas that experience most challenges in public health establishments, namely, the patient file area, Accident and Emergency, Maternal and Obstetric Units, and pharmacy to inform service delivery improvement.

4.1 The NDoH, through the Ideal Health Facility information system, will monitor the following three indicators:

- Average Patient **Waiting** Time for services per patient visit.
- Average **Service** Time per patient visit
- Average **time spent** by patients in a health establishment per visit.

The indicators will be aggregated according to the facility, sub/district, provincial and national level.

4.2 The NDoH will include management of patient waiting time as one of the agenda items in the annual recognition of Quality Month to learn from one another the (a) provincial experiences with the implementation of the guideline, (b) improvement mechanisms and (c) effect of such mechanisms on patient experience of care.

4.3 Results of the first financial year of implementation of the approved guideline will be used as a baseline towards monitoring and evaluation of patient waiting time.

5. CONCLUSION

Successful improvement of Patient Waiting Time must be informed by feedback from the Ideal Health Facility software. The respective staff members responsible for supporting service delivery improvement must facilitate implementation, monitoring, and reporting of the identified indicators.

Dr SSS Buthelezi
Director-General: Health
Date: 14/12/2023

Annexure A

DATA COLLECTION TOOL

INSTRUCTIONS FOR COMPLETION OF THE TOOL

NB! The numbering used in this tool is in line with the generic flow of patient per visit.

1. Please capture relevant information in all grey shaded areas
2. Please circle if the patient had or did not have an appointment.

Patient's folder/file number					
Date of patient's visit					
Has appointment		YES	NO	Yes	No
Date of appointment					
Time of appointment					
Time of arrival[1]					
Triage[2]					
Registry (for a file/records)[3]					
Vital Signs[4]					
Clinical service areas				Return to same service area	
		Service area[5]	Arrival:	Arrival:	
			Departure:	Departure:	
	OR	Service area[6]	Arrival:	Arrival:	
			Departure:	Departure:	
	OR	Service area[7]	Arrival:	Arrival:	
			Departure:	Departure:	
	OR	Service area[8]	Arrival:	Arrival:	
			Departure:	Departure:	
	OR	Service area[9]	Arrival:	Arrival:	
			Departure	Departure	
	OR	Service area[10]	Arrival:	Arrival	
			Arrival:	Departure:	
	OR	Service area[11]	Arrival:	Arrival:	
			Departure	Arrival:	
	OR	Service area[12]	Arrival:	Departure	
			Departure	Arrival:	
	OR	Service area[13]	Arrival:	Departure	
			Departure	Arrival:	
	OR	Departure to Ward/or transfer out[14]	Departure	Departure	
Pharmacy[15]			Arrival:	Arrival:	
			Departure:	Departure	

Annexure B

DATA COLLATION AND REPORTING TOOL FOR PATIENT WAITING TIME (IN MINUTES) IN OPDs OF PUBLIC HOSPITALS

NB! *At health establishment level, the report, which comprise of the three variables of PWT is aggregated according to a health establishment and service areas within the health establishment.

*At sub/district, province and national level, the report, which comprise of the three variables of PWT is only aggregated according to the three variables of PWT.

Hospital name: District: Sub/district: Province:

Financial year: Reporting period: Date of generation of report:

Quarterly head count: Sample size: Number of pt files: Aspired PWT in minutes: Aspired time spent: Aspired service time:

PATIENT WAITING TIME SUMMARY		Hospital summary						Arrival		Vital signs			OPC clinic 1			OPD clinic 2			OPD clinic 3			OPD clinic 4			Pharmacy OPD clinic			Departure to ward/transfer out
		PWT	PWT Variation	Service time	Service time variation	Time spent	Time spent variation	Waiting time at triage	Waiting time at registry	PWT	Service time	Time spent	PWT	Service time	Time spent	PWT	Service time	Time spent	PWT	Service time	Time spent	PWT	Service time	Time spent	PWT	Service time	Time spent	Service Time
Quarter 1	Total time																											
	Average time																											
Quarter 2	Total time																											
	Average time																											
Quarter 3	Total time																											
	Average time																											
Quarter 4	Total time																											
	Average time																											

Annexure C

DATA COLLATION AND REPORTING FORM FOR PATIENT WAITING TIME (IN MINUTES) IN CLINICS AND COMMUNITY HEALTH CENTERS

*At health establishment level, the report is aggregated according to a health establishment and service areas within the health establishment.

*At sub/district, province and national level, the report, is only aggregated according to the three variables of PWT.

Facility name: District : Sub/district: Province:

Financial year: Reporting period: Date of generation of report:

Quarterly head count: Sample size: Number of pt files:

Aspired PWT in minutes: Aspired time spent: Aspired service time:

PHC facility summary Time spent		PHC Summary report						Arrival		Vital signs		Acute services			Chronic services			Maternal and Child service			Health support services			Radiology			Transfer out	Pharmacy			Emergency unit		
		Time spent Variation	PWT	PWT Variation	Service time	Service time Variation	Waiting time at triage	Waiting time at registry	PWT	Service time	Time spent	PWT	Service time	Time spent	PWT	Service time	Time spent	PWT	Service time	Time spent	PWT	Service time	Time spent	PWT	Service time	Time spent	Service time	Service time	Time spent	PWT	Service time	Time spent	PWT
Quarter 1	Total time																																
	Average time																																
Quarter 2	Total time																																
	Average time																																
Quarter 3	Total time																																
	Average time																																
Quarter 4	Total time																																
	Average time																																

Annexure D

Table 5: TEMPLATE FOR IMPROVEMENT OF PATIENT WAITING TIME

SERVICE DELIVERY IMPROVEMENT						
1. **PURPOSE:**						
2. **Service area**	3. **Target/Required average waiting time**	4. **Average waiting time**	5. **Tasks (manager must delegate operational tasks/activities) i.e., the task must commence with a "VERB"**	6. **Person responsible for item (Name and area of work)**	7. **Due date (day, month, and year) for completion of tasks in column 5.**	**8. Comment (to be completed after the date indicated in columns 7.**
Reception[1]						
Patient records area[2]						
Vital signs area[3]						
Service area [4]						
Service area[5]						
Service area[6]						
Service area[7]						
Service area[8]						
Service area[9]						
Service area[10]						
Service area[11]						
Service area[12]						
Service area[13]						
Pharmacy/Dispensary[14]						
Overall patient waiting time in a establishment						

Annexure E

Table 6: Features of multifunctional automated systems for measuring patient waiting time[17]

Options	% Clients covered	Challenges	Benefits	Scalability	Support required	Viability
Check-in and checkout on an HPRS system[18]	Up to 100% of clients where computers are installed at service points	• Requires additional development of the HPRS system (no plans exist for this) • Only possible at sites where computers are installed at service points • Would require healthcare workers to check clients in and out of service points • Would not include capture of actual waiting times in waiting areas	Improved linkage with ePHC project	• High potential for scalability. • dependent upon the rollout of the HPRS System	Development, maintenance, and support by product developers of the HPRS system	Medium
RFID tags on client folders[19]	Up to 100%	• Would need to always have tags available to attach to client files • Would need to change process of setting up client files • Reliance on clients to tag in and out of locations • Fairly complex initial setup	Would be able to track client folders and potentially reduce loss	Low potential, owing to fairly complex clinic setup	Ongoing monthly support from RFID company Additional tags added as required	Low
RFID active tags issued to clients at reception and collect- ed at end of visit[20]	Up to 100%	• Fairly complex initial setup • Would need to change processes to include issue of tags at reception • Would need to ensure that tags are returned	Trace patients and record accurate time spent at an establishment	Low potential, owing to fairly complex clinic setup	Ongoing monthly support from RFID company Additional tags added as required	Low
Wi-Fi-based monitoring[21]	Up to 40%	• Privacy issues for tracking clients' smartphones • May be difficult to identify when a client is at a waiting area as opposed to a service point, making setup complex • Need to remove data generated from staff and other visitors' cell phones	Can potentially assist in collection or dissemination of other data and the immediate publishing of relevant health information to those cellphones	Low potential, owing to fairly complex clinic setup	Ongoing support costs	Low
Beacons at location points[11]	Dependent upon getting applications onto clients' smartphones	• Requires that an application be developed that can interact with the beacons • Requires a method for getting the application onto clients' phones • Would potentially use small amounts of clients' data bundles, which could be viewed negatively	Could send useful information to clients	Medium potential, owing to having only to place beacons at specific locations	Replace beacons every 3 years	Low
Beacons issued to clients at reception and collected at end of visit. Tablets at service points and waiting areas[11].	Up to 100%, but may be cheaper to issue tags to only a percentage of clients	• Fairly complex initial setup • Would need to change processes to include issue of tags at reception • Would need to ensure that tags are returned • Would require mobile network contract or Wi-Fi • Need to monitor that tablet are recording	Could provide useful information to clients	Low potential, owing to fairly complex clinic setup	Monthly support costs to ensure the system is working correctly Mobile network contracts (R500) or Wi-Fi	Low
Fingerprint tracking[22]	Up to 100%	• All challenges applicable to issuing tags and additional challenges with initial setup and recording of fingerprints • May be viewed negatively by clients	An accurate form of identification used as a two-factor authentication with ID and can be used alone in instances where ID card is lost	Low potential, due to complex clinic setup, cost, and privacy concerns.	Monthly support costs to ensure the system is working correctly.	Low
Facial recognition[23]	Up to 100%	• Very complex setup • May be viewed negatively by clients	Can be coupled with other forms of identification, and eliminates chances of fraud	Low potential, due to complex clinic setup, cost, and privacy concerns	Monthly support costs to ensure the system is working correctly	Low

Magnetic positioning[24]	Dependent upon getting a specific application onto clients' smart- phones	• Initial mapping required • Need to have a method for getting the application onto client's phones • Would potentially use small amounts of clients' data bundles, which could be viewed negatively	Can trace the patient throughout the establishment even if the network is a challenge	Medium potential, due to only having to map the clinic	Low	Low
Client-based monitoring using SMS[25]	Less than 10%	• May require that clients use their own airtime • Limited amount of information that will come in an unstructured way • Highly unlikely to produce the required information	It has proven to work in MomConnect[26] program. Can apply to network service providers for exemption	High potential	Monthly costs for short code; reverse-billed SMS costs Human resources to decode messages	Low
Client-based monitoring using Un- structured Supplementary Service Data (USSD)[27]	Up to 30%	• Would need to collect client's cell phone numbers and send them requests to complete a survey on their phones • Follow-up SMSs may be required • Can only collect a small amount of information	It needs consultation with service providers for customized service	Medium potential need to change processes to collect cell phone numbers	Monthly support costs; SMS costs; reverse-billed costs of survey data	Low
Client-based monitoring using a smart- phone application[28]	Dependent upon getting a specific application onto clients' smartphones	• Need to have a method for getting the application onto client's phones • Might use small amounts of clients' data bundles, which could be viewed negatively	Could be used for various types of client interaction including providing information, allowing feedback, and connecting with services. Could have beacon detection built into the application	High potential	Continued development and support for application	Medium

Annexure F

Stakeholder participation and contributions to the guideline

STAKEHOLDERS	DATE OF INPUT RECEIVED	FOCUS AREA OF INPUTS RECEIVED
1. LEAN Institute Africa	03/05/2010	Piloting of techniques for improving patient waiting time and measurement system
2. International Training Program on Public Service Management Professional Management: Sweden	05/11/ 2010	Objective and automated measurement system
3. NDoH: Establishment Improvement Team. Ministerial report	28/02/2013	Measures to improve patient waiting time
4. Operation Phakisa: Health	17/11/2014	Technical content and automated measurement system
5. South Africa President at the launch of Operation Phakisa: Health	18/11/2014	Pronouncement of standard patient waiting time in PHC
6. Operation Phakisa: Lab report	20/11/2014	Determined factors contributing to long PWT and suggested improvements and automated measurement system
7. 40th International Hospital Federation	31/10-03/11/2016	Automated measurement system
8. Measure Evaluation SIFSA	11/2016	Measurement system and a video Public to educate on improvement of PWT
9. Health System Trust	10/08/2017	Assessing patient experiences of care in primary health care facilities in South Africa: suggested the use of “MEDIAN” patient waiting rather than average
10. National QA workshop	07/12/2017	Technical and measurement systems
11. WHO	08/2017	Regulated Norms and Standards applicable to different categories of health establishments: need to have a national guidance on management of patient waiting time
12. School of Public Health: University of the Western Cape.	2017	Gavin Reagon: Conducting and interpreting patient waiting time surveys.
13. Primary Health Care branch	10/2018	Technical content, grammar, and type setting
14. HoD: WC provincial inputs	01/2019	Suggested areas for improvement and clarification of terminology
15. NDHSC	21/02/2019	Technical content and measurement system
16. DG request provincial inputs	15/02/2019	Technical content and measurement system
17. NDoH SMC and EXCO	05/02/2019	Separation of measurement system and improvement of PWT into two documents
18. Individual follow-up inputs from some NDoH SMC committee members	25/03/2019	Technical content
19. International Cooperation and Development Fund (ICDF) Taiwan	26/06/2019	Improving patient waiting time using the electronic record management system
20. International Society for Quality in Health Care (ISQua)	22/10/2019	Paper on Improvement of PWT in S
21. NHISSA	05/02/2020	Indicators and measurement system
22. HISP	21/10/2020	Patient Satisfaction Assessment Status Report including PWT
23. NDoH: SMC and EXCO	23/05/2022	Technical content
24. NDoH: Cluster: Trauma, violence, emergency, and Hospital services	09/06/2022	Structure, technical content, and inclusion of measurement system

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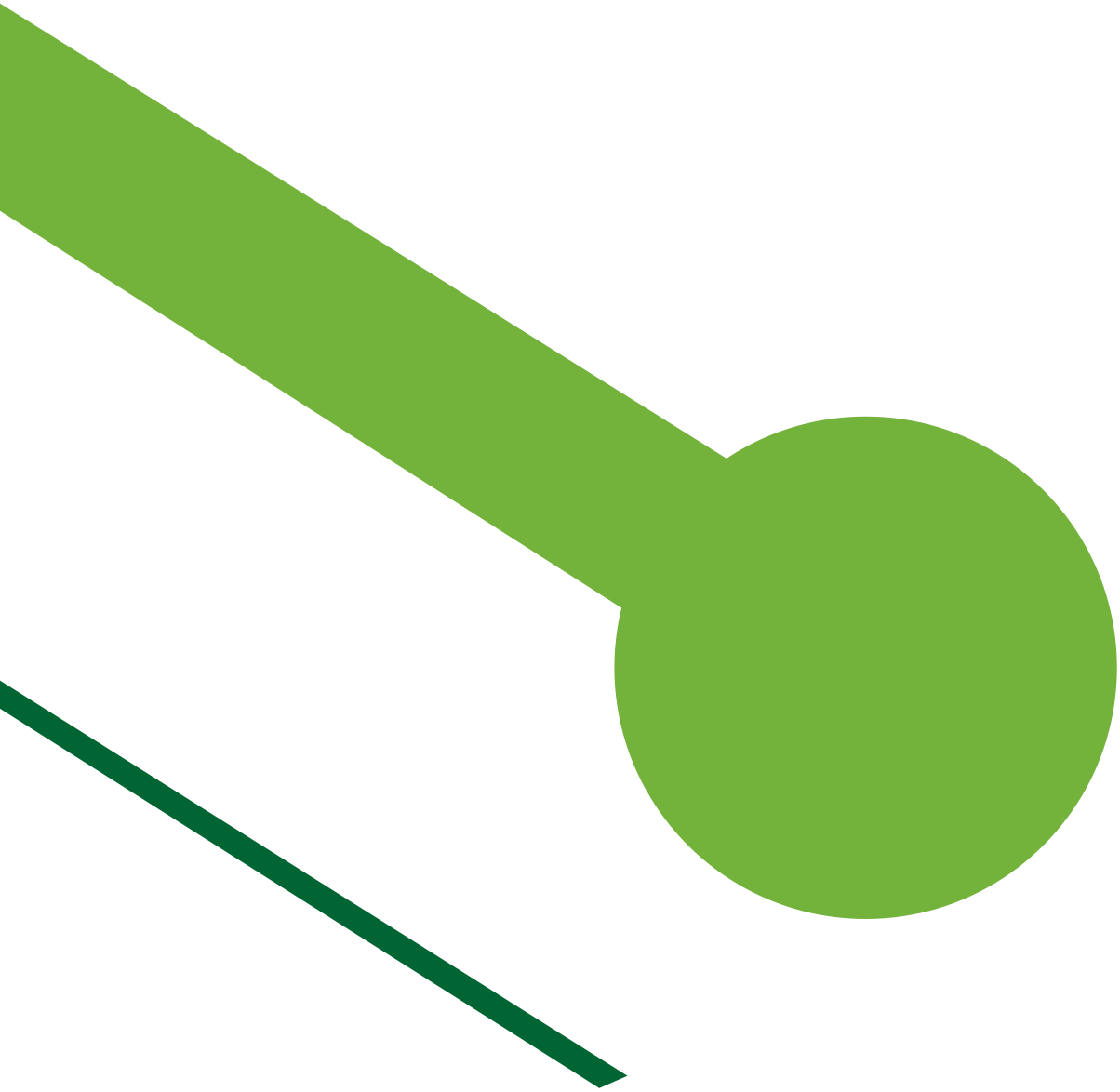
NOTES



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