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Corruption Risks in the Medicines Supply Chain in Zimbabwe's Public Health System

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TI Zimbabwe

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LIST OF ACRONYMS

ART	Anti-retroviral Therapy
CRA	Corruption Risk Assessment
DHIS2	District Health Information System version 2
DMO	District Medical Officer
DPS	Directorate of Pharmacy Services
eLMIS	Electronic Logistics Management Information System
GAC	Global Affairs Canada
FHS	Family Health Services
GAVI	Global Alliance for Vaccines and Immunizations
GDP	Gross domestic product
GFATM	Global Fund to fight AIDS, TB and Malaria
GF-OIG	Global Fund Office of the Inspector General
GGM	Good Governance for Medicines
GGMIF	Good Governance for Medicines Implementation Framework
GHSC-PSM	Global Health Supply Chain Program-Procurement and Supply Management
GoZ	Government of Zimbabwe
HIV	Human Immuno-deficiency Virus
ISDA	Inclusive Service Delivery in Africa
MCAZ	Medicines Control Authority of Zimbabwe
MoHCC	Ministry of Health and Child Care
NAC	National AIDS Council
NHS	National Health Strategy
NATF	National AIDS Transition Fund
NatPharm	National Pharmaceutical Company of Zimbabwe
NMTPZ	National Medicines and Therapeutics Committee of Zimbabwe
PEPFAR	The United States President`s Plan for AIDS Relief
PMD	Provincial Medical Director
PRAZ	Procurement Regulatory Authority of Zimbabwe
SDGs	Sustainable Development Goals
TB	Tuberculosis
TI Z	Transparency International Zimbabwe
UHC	Universal health Coverage
UNAIDS	The Joint United Nations Program on HIV/AIDS
UNDP	United Nations Development Program
UNICEF	United Nations International Children`s Education Fund
VHW	Village Health Worker
WHO	World Health Organization
ZACC	Zimbabwe Anti-corruption Commission
ZAPS	Zimbabwe Assisted Pull System
ZSARA	Zimbabwe Service Availability and Readiness Assessment

EXECUTIVE SUMMARY

Transparency International Zimbabwe (TI-Z) has undertaken a corruption risk assessment of the health sector in Zimbabwe as part of the Inclusive Service Delivery in Africa (ISDA) project. The research, which was a follow-up assessment to the corruption risk assessment in health that was conducted in 2020, studied corruption risks in the medicines supply chain in public health in Zimbabwe. It has identified corruption risks existing at four decision points and given them risk scores based on a combined measure of the likelihood and impact of a risk occurring. The averages of these scores are summarised here:

Priority Area	Average Risk Score (1 is very low, 5 is very high)
Facility medicine inventory management	4.5
Dispensation of medicines	4.5
Evaluation and selection	4.0
Contracting	4.0
Prescribing medicines	4.0

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TABLE 1 KEY POLICY RECOMMENDATIONS

1	**Public-Private Partnership**: Government offices and officers' engagement in corruption risk assessment activities needs to be strengthened
2	**Implementation of electronic Procurement system:** Fast track the implementation of e-procurement which is highlighted under the 2018 Public Procurement Act
3	**Strengthen security systems at all hospitals:** Conduct a security assessment, implement recommendations, CCTV in medicine storerooms, biometric access to all medicine stores for authorised personnel, manned exits and entrances for healthcare staff and clients equipped with digital searching mechanisms such as X-ray scans
4	**Medicines Regulation and Policy:** Empower the medicines regulatory authority (MCAZ) on random audit and monitoring of Pharmacies, Medical rooms, health shops, assessment of the legality of possession of medicines, tracking the procurement supply chain to identify dubious activities in the supply chain.
5	**Law and Policing:** Strengthen the Municipal and National Police surveillance for illegal medicine peddlers and appropriate interventions (arrests, fines, court, and imprisonment).
6	**Empower the Zimbabwe Anti-Corruption Commission:** Institutionalisation of the Anti-Corruption Committees in healthcare institutions, setting up of electronic anonymous corruption tip-off platform.
7	**Electronic Logistics Management System (eLMIS):** Roll out the eLMIS to all health facilities to enable real-time inventory visibility. Reduce discrepancies between online inventory and physical count.
8	**Community Engagement, Human Rights, Gender Equality and Empowerment:** Meaningful engagement of women and girls (Contraceptives available on illicit markets) and other populations, Community consumer education on medicine safety and safe sources, reporting cases of unofficial availability of medicines, Community-Led Monitoring of Medicines supply chain (training, resources).
9	**Medicines Task Force:** Establish a task force to monitor the corruption risks identified under this study and to drive the implementation of the mitigation strategies proposed.
10	**Sale of drugs diverted from the public sector by vendors** - The MCAZ should collaborate with vendor unions and other CSOs to conduct capacity-building initiatives, to empower market traders with knowledge on safe medicine practices, which help them to comply with regulations and protect public health. The regulator should also establish the relevant M&E mechanisms to measure awareness levels and compliance over time.
11	**Out-of-pocket spending for medicines by consumers with limited/no access to medical insurance** - The government must implement policies that enhance the affordability and accessibility of medications for the most vulnerable segments of society, including groups at risk of discrimination.

INTRODUCTION

Transparency International is a global movement working in over 100 countries to end the injustice of corruption. Transparency International is implementing a four-year regional project in five African countries, namely the Democratic Republic of Congo (DRC), Ghana, Madagascar, Rwanda, and Zimbabwe, aimed at improving access to education and healthcare services for women, girls, and other groups at risk of discrimination. TI-Z is managing the project locally in partnership with national chapters in the five countries, with technical expertise and stakeholder engagement support from Transparency International's Global Health Programme and Transparency International's national chapter in Canada. Global Affairs Canada (GAC) and Transparency International Zimbabwe (TI Z) support this work.

The project responds to a core development challenge linked to the impact of corruption and impunity on access to education and healthcare services for groups at risk of discrimination, particularly women and girls in Africa. Transparency International (2009) defines Corruption as the abuse of entrusted power for private gain. Corruption undermines the quality and quantity of public services, fuels inequalities in access to basic services and reduces the resources available for women and groups at risk of discrimination who are more reliant on public services, resulting in heightened poverty for those most marginalised.

To address corruption-related barriers to gender equality in education and healthcare, the project is focusing on three dimensions of change:

1. a performance change of public institutions that have the capacity to ensure that education and healthcare services are provided free of corruption (supply side of services).
2. a behavioural change among citizens, particularly women, girls and those at risk of discrimination, to speak out and report corruption and demand accountable and transparent services; and
3. a practice change among influential intermediaries and stakeholders who engage in coalitions and partnerships to mainstream anti-corruption issues within the education and healthcare agenda and create a supportive environment to reduce corruption-related barriers to gender equality in the education and health sector.

Ultimately, the desired impact is that more women, girls and individuals and groups at risk of discrimination are no longer being left behind because the attention and spotlight of the interwoven nature of corruption and discrimination and how they act as barriers to gender equality in education and health will become mainstreamed and top of mind among public institutions and influential stakeholders in the education and healthcare sector. Not only will they feel like they are no longer left behind, but they will exercise their rights and demand results and accountability from those entrusted to provide these services corruption free. At both the institutional and policy levels, governments that embed policies, procedures and mechanisms of accountability and transparency, will be able to more effectively detect and sanction those that abuse their power and hold to account those that prey on marginalised communities that already deal with other forms of discrimination. This will ultimately help to close loopholes and reduce vulnerabilities that women, girls, and groups at risk of discrimination face, giving them an equal opportunity to access vital basic services to protect and promote their human dignity and collectively, this will contribute to increased citizens' trust and confidence in the institutions that deliver inclusive services as well as reinforce norms, behaviors, and practices that strengthen a gender-sensitive social fabric within communities and contribute towards countries' national development progress to reduce poverty and promote justice in line with the SDGs.

TI Z is the national chapter leading the implementation of the ISDA project in Zimbabwe.

CORRUPTION RISK ASSESSMENT

A corruption risk assessment (CRA) is a diagnostic tool that seeks to identify weaknesses within a system that may present opportunities for corruption to occur (McDevitt, 2011). Several different CRA methodologies have been developed. Most CRAs take an institutional approach. They aim to identify the institutional processes and practices that are vulnerable to corruption, as well as to identify weaknesses in rules and regulations in the institution, sector and/or process under analysis (McDevitt, 2011). They can be applied at all levels from government institutions to donor support programmes and down to sectoral programmes (McDevitt, 2011).

The CRA method used under the ISDA project aims to assess existing policies in the health and education sectors for corruption vulnerabilities and loopholes, and ascertain where specific gaps/loopholes that impact women, girls and groups at risk of discrimination exist. It aims to accomplish this by identifying where, how and why corruption occurs at specific decision points within operational processes, and to identify mitigation strategies to close these loopholes.

For the purposes of the ISDA project, a risk "is an event that might or might not occur during a process, but whose occurrence will affect the result of that process." This definition contains two key variables: the likelihood of the risk occurring and the impact it would have should it occur.

Furthermore, while a corruption risk can affect an entire process, it occurs at a certain point in that process which is called here a ***"decision point"*** **(see Figure 1 below)**. This term reflects that an actor in a position of authority has the responsibility to make a specific decision that is intended to serve a specific purpose. For the health sector, this can, for example, refer to the medical staff's responsibility to make decisions that serve the interests of their patients. However, if the actor acts corruptly at this decision point – that is they abuse their entrusted power for private gain[1]- this will typically lead to a ***"deviated decision"*** which does not result in the intended outcome for beneficiaries.

Tying these aspects together, the ISDA project's operational understanding of corruption risk is "A combined measure of likelihood and impact of the deviation of a decision occurring, where the deviation is caused by corruption."

[1] Transparency International defines corruption as the "abuse of entrusted power for private gain."

IDENTIFICATION OF CORRUPTION RISKS

This study relies on the findings from both secondary and primary research to identify which corruption risks affect which processes and which decision points, as framed around the four priority areas studied.

It is clear from the definition given above that calling something "a corruption risk" is not tantamount to saying that that thing is a widespread problem which has manifested. Along these lines, the approach taken to identifying corruption risks in this study is to identify where and how the evidence suggests corruption *could* arise rather than where and how it definitively arises. Therefore, where the evidence is circumstantial or not fully consistent, it can still serve to identify risks. The main steps under this stage are:

1. Identify key operational processes focused on and map out the decision points within the process.
2. Based on research findings and available data, map out the corruption risks occurring at the decision points.

ANALYTICAL APPROACH

The analytical approach involves assessing the likelihood and impact of corruption occurring at each identified decision point and giving the risk score. The main steps under this stage are:

1. Considering the various corruption risks identified for the decision point, a risk score is calculated for each decision point. The risk score is calculated as a combination of two scores: the ***likelihood*** and ***impact*** of the corruption risk(s) occurring. These scores are calculated on a 1-5 scale (where 1 represents very low and 5 represents very high). The likelihood score is calculated based on the available evidence that indicates how frequently corruption risks manifest at the decision point. The impact score is calculated based on a mixture of available evidence and hypothesising as to what would be the severity of the impact on the access to health (especially for women, girls and groups at risk of

discrimination), were corruption risks to manifest at this decision point. These scores represent the opinions of the research team.

2. The decision points are then placed on a ***risk heat map*** which illustrates where risks within processes are higher and lower, and therefore where prioritized action is needed.

Figure 1 Theoretical Framework

IDENTIFICATION OF MITIGATION STRATEGIES

The prioritized action takes the form of mitigation strategies identified to address one or more decision points. The mitigation strategies were identified by the research team and informed by existing policies and practices in Zimbabwe, proposals made by key health stakeholders via the questionnaire and international best practices. The main steps under this stage are:

1. A ***mitigation strategy*** is identified to eliminate or reduce the corruption risks identified for the decision points.
2. A plan for implementing as well as monitoring the implementation of the mitigation strategies is required. As full elaboration of this plan needs to be taken by the responsible stakeholders in the health sector, it is thus beyond the scope of this study. Nevertheless, a template is provided for under the Monitoring and Evaluation section.

The actors capable of implementing the mitigation strategies differ depending on the proposed measures. Some can be carried out at the peripheral or operational level (i.e. directly by hospital administration themselves) while others would need to be led at the intermediate or national level (e.g. by the Ministry in charge of Public Health).

PRIORITY AREAS

Corruption has been associated with bad governance, weak health systems, violation of human rights and singled out as a major threat for attaining Universal Health Coverage (UHC) (Vian, 2020). The pharmaceutical system is particularly vulnerable to inefficiencies and losses from corruption, which severely compromises access to safe, effective, good-quality medicines and undermines public interest (Paschke A, 2018) (Management Sciences for Health, 2021). The dimensions associated with health governance include participation, rule of law, transparency, accountability, equity, efficiency and effectiveness, responsiveness, consensus orientation, health orientation, and decentralization (Jafari F, 2019). The World Health Organization (WHO) launched the Good Governance for Medicines (GGM) program in 2014 as an innovation aimed at curbing the loss of health resources by promoting transparency and accountability (World Health Organziation, 2014). GGM specifically seeks to safeguard availability of medicines in participating countries by preventing corrupt practices at various levels of the medicines supply chain. By 2015, 38 countries, including Zimbabwe, had adopted the GGM concept.

BACKGROUND

This section provides a background to the health sector in Zimbabwe, analysing how inclusive it is of women, girls and groups at risk of discrimination, and how it is impacted by corruption.

The Health Sector in Zimbabwe

Zimbabwe is situated in Central Southern Africa, between the Limpopo and the Zambezi rivers. It is a landlocked country bounded by Zambia, Mozambique, South Africa and Botswana with a total area of 399,757 sq. km. and a population of 15,178 957 (ZIMSTAT, 2022; ZimStat, 2023). According to an economic analysis from the World Bank (2023), the COVID-19 pandemic and its impacts disrupted livelihoods, expanding the number of extremely poor citizens by 1.3 million, and increasing extreme poverty overall to 49% in 2020 (World Bank, 2023). Zimbabwe's economic development continues to be hampered by price and exchange rate instability, misallocation of productive resources, high levels of informality in the economy, low investment, and limited structural transformation. Economic growth has been volatile over the past decade. High inflation, multiple exchange rates, and unsustainable debt levels have increased the cost of production, reduced incentives for productivity-enhancing investment, and encouraged informality. Real GDP growth is estimated to have slowed to 3.4% in 2022 from 8.5% in 2021 on the back of worsening agriculture conditions and macroeconomic instability.

Due to low rainfall, agricultural output contracted by 14%, after growing at double digits in 2021. Triple-digit inflation constrained private sector demand, while fiscal austerity limited growth of government demand and investment. Mineral exporters benefited from high global prices and, together with tourism, contributed the most to overall economic growth (World Bank, 2022).

Zimbabwe adopted a Primary Healthcare approach at independence in 1980, and its health system is structured accordingly. The system comprises primary, secondary, tertiary (provincial) and quaternary (central) facilities. As per the National Health Strategy (NHS) 2021-2025, there were 1,848 health facilities (Ministry of Health & Child Care Republic of Zimbabwe, 2021) in the country, of which 1,696 were primary health facilities and 152 were higher level hospitals as shown in table 1 below.

The WHO launched the Good Governance for Medicines (GGM) program in 2004 intending to fight the problem of corruption in the pharmaceutical sector. Zimbabwe adopted the GGM program in 2015 and developed its own implementation framework (GGM-IF) in 2017 based on the WHO global guidelines and recommendations (World Health Organziation, 2014). Zimbabwe's GGM-IF emerged from; home-based expertise, extensive local consultations and effective incorporation into existing institutions (Chikwinya T, 2022). The GGM-IF committed to implementing a focused programme over a 5 year period from 2017 to 2022 with the expressed goal of improving transparency and accountability in the pharmaceutical sector as a key enabler to improve access to medicines. Midway through its projected lifespan, some notable achievements materialized attributed to key success drivers, including mutual collaboration with the MoHCC and Child Care's existing Global Fund-supported Quality Assurance Program. Key challenges faced include limited funding for the programme, and a shifting policy environment driven by a political transition and reorientation of priorities in the wake of the COVID-19 pandemic. (Chikwinya T, 2022)

Figure 2 Map of Zimbabwe

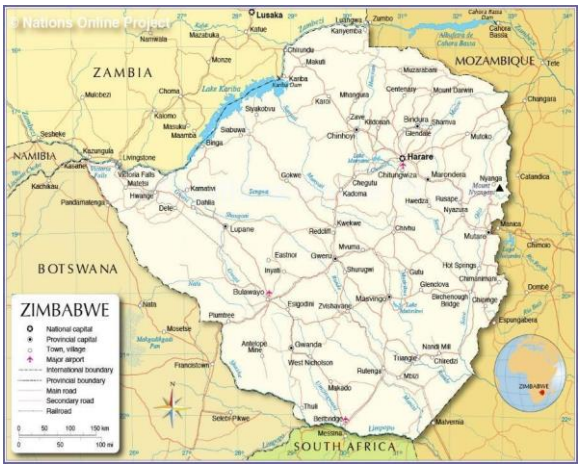


Table 2 Health Facilities courtesy of NHS (2021-2025)

Facility Level	Type and Ownership of Health Facilities	Number of Facilities
Quaternary	Government Central Hospitals	6
Tertiary	Government Provincial Hospitals	8
Secondary	Government District Hospitals	44
	Mission Hospitals	62
	Private Hospitals	32
Primary	Government Rural Hospitals	62
	Municipal Polyclinics	15
	Private Clinics	69
	Local Authority Clinics	1,122
	Urban Council/Municipal Clinics/Family Health Services	96
	Government Rural Health Centre	307
TOTALS		1,848

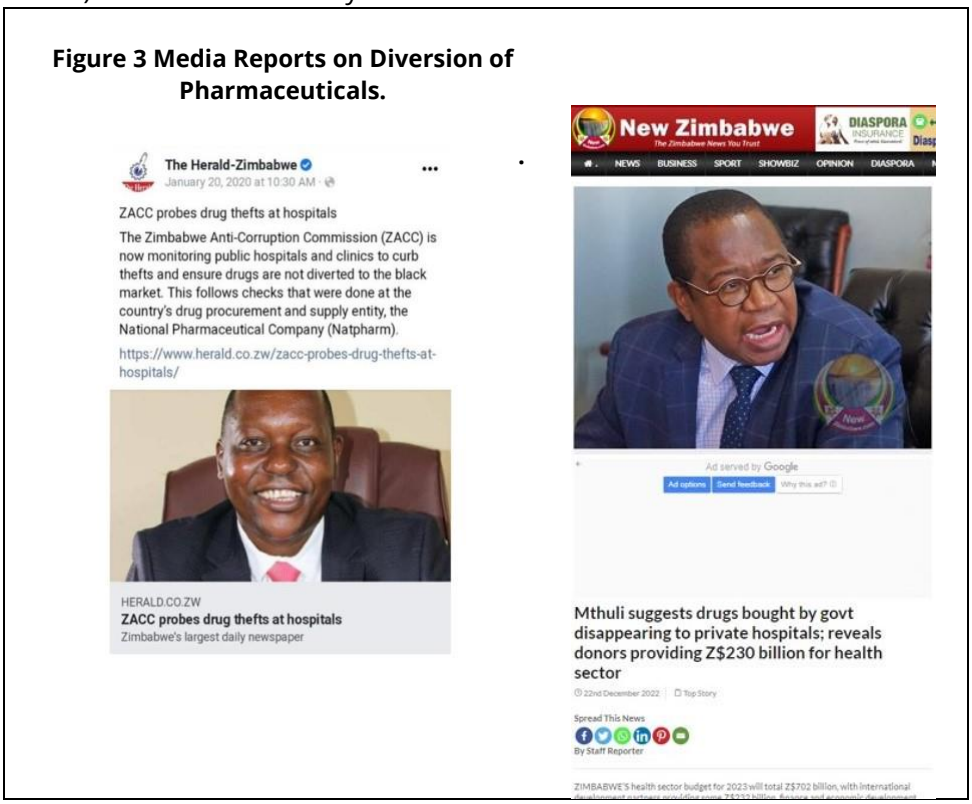
Zimbabwe's public health medicines supply chain constitutes all the healthcare facilities highlighted above. Medicines are procured and distributed to these healthcare facilities from the National Pharmaceutical Company (NatPharm). However, these facilities can also procure their own medicines in line with the country's public procurement legislation. This study sought to ascertain exactly where, in the intricate supply chain for pharmaceuticals, corruption and diversion risks are highest.

Rationale

TI Z, a non- profit, non- partisan, systems-oriented local chapter of the international movement against corruption develops knowledge to combat corruption through its Research and Information Unit (RIU) among other interventions. The organization believes that professionally generated applied research is the basis for knowledge and information management on corruption-related issues including research-based advocacy.

TI Z conducted and published research on corruption in the public health sector in Zimbabwe in 2021 which showed leakages in the handling and management of essential medicines and seeks to deepen analysis of this finding. Among other things, the study highlighted the growth of a parallel health system where users of public healthcare facilities are at times diverted by health practitioners to purchase medicines outside the formal channels (Maguchu, Mundopa, and Tshabangu, 2021). The 2021 study also revealed that Corruption has been normalized in Zimbabwe as evidenced by everyday practices in health-related services which many do not consider as corruption (Maguchu, Mundopa, and Tshabangu, 2021). However, the build-up and acceptance of these practices by various stakeholders has a detrimental cumulative effect on the performance of the public healthcare system. The negative impact of this corruption therefore limits the government's capacity to provide universal access to essential healthcare services and disproportionate impact on marginalised and vulnerable populations. More recent media reports have emerged, suggesting that drugs bought by the government for public hospitals were being diverted and sold to the private sector. (New Zimbabwe, 2022) This signifies the continuation of a challenge which the Zimbabwe Anti-corruption Commission (ZACC) has previously been seized with, having noted challenges in the pharmaceuticals supply

Figure 3 Media Reports on Diversion of Pharmaceuticals.



Media reports show that the diversion of public health goods is not limited to medicines but also other commodities, consumables, and reagents that are used in the continuum of service provision in the health sector - namely, pharmaceutical, laboratory, medical, and surgical. The COVID-19 pandemic in particular exposed vulnerabilities to corruption in the public health sector leading to procurement malpractices, poor supply chain management, human resource recruitment and management malpractices, and diversion of targeted public health emergency grants among other things (Aljazeera, 2020). High-level corruption cases surfaced in the awarding of multi-million-dollar contracts for medical supplies linked to the COVID-19 pandemic (GAGNÉ-ACOULON, 2020).

The 2022 ZimStat Census preliminary report showed Zimbabwe's population at 15,178,957, whereby 52% are female and 61.4% reside in rural areas. Like many countries in Africa, Zimbabwe has a relatively young and rapidly growing population. At the national level, 79% of all households have at least one child under the age of 18, and 50% have at least one child under the age of 5. Among Zimbabwean children, 61% are income-poor and 36% are food-poor, with children living in rural areas experiencing higher poverty. About two-thirds of women report problems in accessing healthcare for their own needs and the number one problem was the availability of money to pay for treatment which was reported by 43% (Zimbabwe National Statistics Agency, 2022). The public health sector provides services to most of the citizens. For example, 62% of women accessed modern contraception from the public sector. Women and children who mainly live in l areas rely solely on public health facilities whilst those in urban areas may also access private health facilities (Zimbabwe National Statistics Agency and UNICEF, 2019).

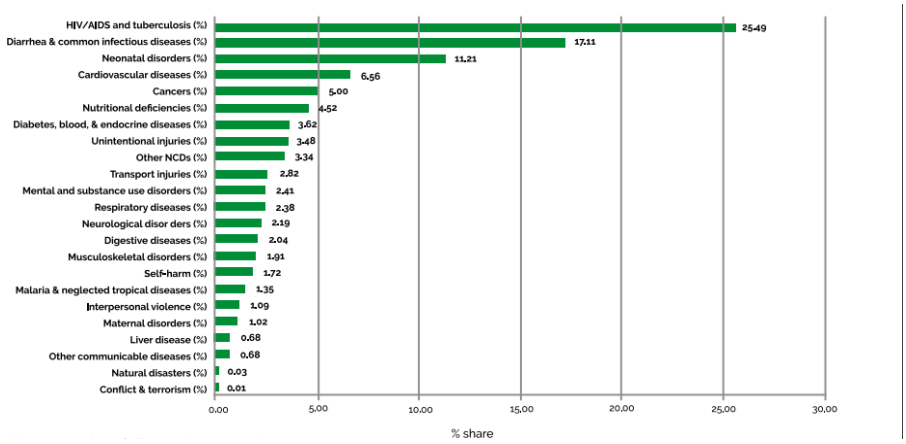
From an epidemiological perspective, Zimbabweans are burdened more with preventable diseases and conditions such as HIV, Tuberculosis (TB), diarrhoea, and common infectious diseases as shown in Figure 5 below. When specific diseases or conditions are considered, it is also apparent that women and children are disproportionately affected. For example, using only one disease for economy of space, out of an estimated 1.3 million people living with HIV are women and young girls (Ministry of Health and Child Care, Republic of Zimbabwe, AIDS and TB Program, 2022). There is also a 50% TB/HIV co-infection rate, and it follows from the data above that women are also disproportionately affected by Tuberculosis (TB) (Ministry of Health and Child Care, Republic of Zimbabwe, AIDS and TB Program, 2022). Since women and children are statistically the major recipients of care in public health facilities therefore, any disruption such as the diversion of medicines through corruption results in limited healthcare access for them especially for those in remote, under-resourced and marginalised areas.

Rural women and children in Zimbabwe rely solely on public health facilities, in contrast to those in urban areas who may access private facilities

The Global Fund, Office of the Inspector General reported that the effectiveness of the supply chain mechanism to store, deliver and account for health commodities to the last mile was partially effective (Global Fund, 2020).

Zimbabwe scored 23/100 in the 2022 Transparency International Corruption Perception Index (CPI), where a score of 0 means 'highly corrupt' and 100 means 'very clean' indicating that there is a high perception of corruption in the public sector Transparency International, 2023). The 2022 score for Zimbabwe fell below the Sub-Saharan Africa (SSA) average of 32/100. In this context, TI Z seeks to understand the corruption risks in a specific area/function (pharmaceutical supply chain and management) of public health, whilst including an underlying focus on disparities experienced by specific segments in accessing public health because of corrupt practices. To this end, the organization saw it fit to engage independent consultants to professionally generate an empirical study on the diversion of medicines in public health institutions

Figure 4 Burden of Disease in Zimbabwe (IHME, 2019)

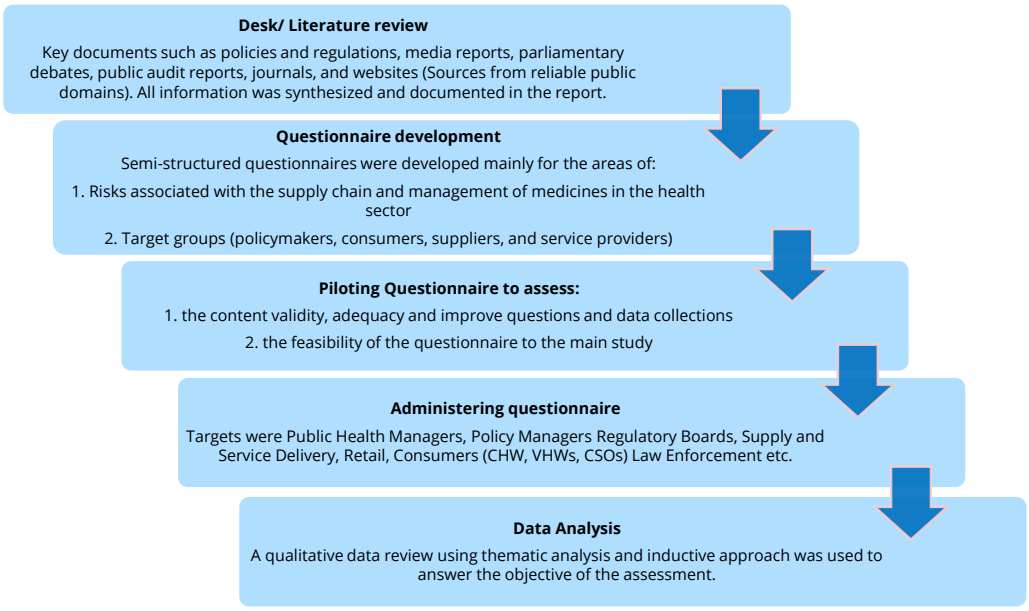


METHODOLOGY

Research Design

The study was exploratory and followed a mixed qualitative and quantitative design. A mixed-method approach was utilised to carry out this corruption risk assessment.

Figure 5 CRA Assessment Approach



Study Population

The primary study population consisted of representatives from the Government of Zimbabwe (GoZ), the public health sector, the private sector (including not-for-profit), funders, and subject matter experts involved in the supply chain of medicines in Zimbabwe and consumers of medicines. The researchers aimed to represent a diversity of views and experiences linked to the topic.

The key informants were selected based on their knowledge and expertise in the following areas:

1. MoHCC
    a) Supply Chain Management (including NatPharm)
    b) Health service delivery
2. Regulatory Board (MCAZ)
3. Retail Pharmacy Association
4. Civil Society Organisations
5. Law Enforcement Agencies
6. Community service
    a) Village Health Workers (VHWs)
    b) Community-Based Organizations (CSOs)
    c) Consumers (Community opinion)
7. Competition and Pricing commission
8. Zimbabwe Anti-Corruption Commission (ZACC)
9. Academics

Sampling Procedures

A stakeholder mapping exercise was done to identify potential key informants involved in the supply chain of medicines in Zimbabwe. It was concluded that key informants should include representation from the Government, the Private sector (pharmacies), funders, and subject matter experts. Purposive sampling was utilized to select key informants.

Sample Size Determination

The sample size was determined based on reaching data saturation by the authors of the study.

Data Collection and Management

The data collection for this project is divided into two major streams – primary and secondary data collection.

1. Primary Data collection
   a) Key Informant Interviews (KIIs)
   b) Online stakeholder questionnaire

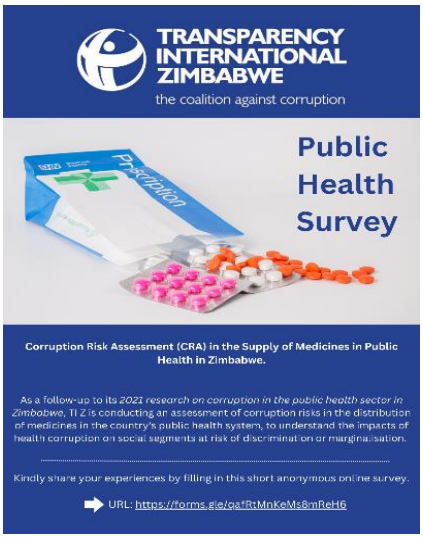
2. Secondary Data collection
   a) Desk review of existing program data, peer-reviewed literature, and grey literature

Primary data collection

Qualitative data collection was conducted through key informant interviews (KIIs). The interviews were guided by a semi-structured questionnaire. Each KII lasted between 40-60 minutes. Due to the nature of the questions being asked, the interview guides were shared with the respondents in advance to ensure that they had time to reflect on their responses and to determine if they had clearly understood the questions. Verbal consents were sought from the respondents before the interview. All in-depth interviews were conducted in Zimbabwe, by either face-to-face or virtually using Microsoft Teams®, Zoom® or any other similar platform, preferred by the respondents.

An online questionnaire for consumers was designed, while WhatsApp, Facebook and Twitter social media platforms were used to market the online questionnaire. The table below summarizes the methodology that was utilized.

Figure 6 Banner Marketing the Questionnaire



Secondary data collection

The secondary research followed a systematic approach using keywords aligned to the study objectives to explore peer-reviewed literature, grey literature, reports from donors, multilateral agencies, and MoHCC implementing agencies, and documentaries. Online literature searches using the keywords “Corruption risk assessment in healthcare in Zimbabwe'' were conducted on Google and PubMed. Hard-copy reviews of reports were also done. PowerPoint presentations from meetings were also reviewed.

Validation of Findings

Before the report was finalised, a peer review of the findings, as well as a validation process was organised to allow stakeholders and experts to check the validity and accuracy of the research process and findings and to discuss the conclusions and interpretations. The researchers presented the findings to a range of stakeholders and experts in an online meeting held on 6 May 2024.

Limitations of the research

Despite the inclusion of representatives from the GoZ, including the medicines supply chain and health service delivery institutions in the study population, the research team could not get written permission to access the MoHCC structures. TI Z wrote a request letter to the Permanent Secretary in the MoHCC which was submitted with the research protocol attached and MoHCC acknowledged receipt of the letter and protocol. Follow-up visits to

the MoHCC were made more than three times but there was no official response. It was desirable to have key informants from such institutions as National AIDS Council (NAC), National Pharmaceutical Company (NatPharm), Provinces and Health Facility. Without the MoHCC approval, the researchers could also not access health facilities, assess the state of medicine stores and follow the flow of medicines. In mitigation, the researchers relied on a literature review and key informants knowledgeable about the market and supply chain to obtain data regarding the MoHCC structures.

DESCRIPTION OF RESULTS

DESCRIPTION OF RESULTS

Profile of Respondents

Table 3 Respondents' Profile[2]

Variable	Total (N=27, including online)	
	n	%
Age groups (in years)		
18-35	2	7.4%
36+	25	92.6%
Sex		
male	19	70.4%
female	8	29.6%
Location		
Urban	26	96.3%
Peri-urban	1	3.7%
*Qualification (N=20, excl online participants)		
None (3 street vendors, 2 civil society reps, 1 transparency organization rep)	6	18.5%
Medical Doctor, MPH	5	25.0%
Pharmacist	3	15.0%
Nurse, MPH	3	15.0%
Monitoring and Evaluation	2	10.0%
Medical Laboratory Scientist	1	5.0%
Years in medical service (N=14)		
Over 10	14	100%
Profession (N=20)		
Public Health Experts	8	40%
Medicine/laboratory supply chain specialists/ Researcher/academic/analyst	4	20%
Transparency/accountability Institution Rep	1	5%
Monitoring and Evaluation/ Representative of a development partner/agency	2	10%
Street vendors	3	15%
Civil society rep	2	10%

[2] All online respondents had tertiary level qualifications; profession was not solicited.

The Public Pharmaceuticals Supply Chain

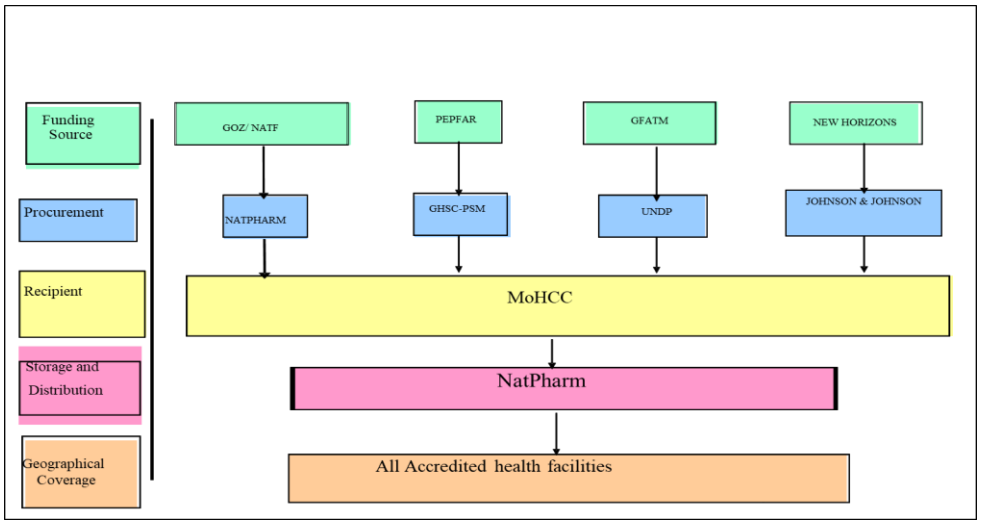
According to key informants and the MoHCC and Child Care (MoHCC) website, the Directorate of Pharmacy Services oversees the medicine supply chain in Zimbabwe (MoHCC, www.mohcc.gov.zw, 2023). The funding landscape for medicines in Zimbabwe is dominated by external funders working together with the Government of Zimbabwe (GoZ), for example, UNICEF and GAVI fund all vaccines and the Global Fund and PEPFAR contribute more than 80% of the budget for ART. There are different procurement teams and processes for medicines depending on the funding organization and MoHCC department. Entities like UNDP, NatPharm, USAID, and CHAI have unique procurement teams and processes.

The National Health Strategy acknowledges that one of the challenges in procurement and supply management is managing multiple procurement systems which creates difficulties with visibility and commodity security (MoHCC, National Health Strategy 2021-2025, 2021). The source of funding determines the organization that will be responsible for the procurement. Some medicines are procured at districts and hospitals. One key informant mentioned that there are limited procurements which can be done at the facility level, however, there was guidance that compels public health facilities to procure all medicines from NatPharm. The funding mechanisms are different across commodities. Figure 8 overleaf shows the supply chain for essential medicines and commodities in Zimbabwe, including antiretroviral medicines.

Key informants highlighted that provinces and districts could procure medicines provided that the amount does not exceed US$10,000. Provinces could procure medicine from any supplier until earlier in 2023 when they were directed to procure from NatPharm only; the research team could not get background information on this directive. According to the National Health Strategy, there is low value for money for medicines and commodities procured through government funds citing lack of foreign currency which result in suppliers changing high prices as they try to cushion themselves from losses due to volatile foreign currency exchange rates. The NHS indicates that facilities using Health Services Fund and Results Based Fund funds were buying medicines and commodities at high prices (MoHCC, National Health Strategy 2021-2025, 2021).

Key informant lack of trust in public procurement of medicines may be attributed to this Discrepancy in procurement prices for commodities between government funds and donor funds may be attributed to the volatile foreign exchange rates whereby the official exchange rates are lower (sometimes way lower) from the black-market rates which most people and companies tend to use. Key informants attribute their lack of trust in public procurement of medicines to the existence of these discrepancies in costs incurred during the public procurement of medicines between donors and government processes. Taking into consideration the reported lack of trust, key informants were sceptical about the directive for provinces and facilities to procure medicines from NatPharm only especially highlighting that some stocks were out of stock at NatPharm.

Figure 7 The Supply Chain for Essential Medicines and Related Commodities in Zimbabwe



Pharmaceutical product and commodity selection is the responsibility of the National Medicines and Therapeutics Policy Advisory Committee (NMTPAC) according to the National Health Strategy 2021-25. The National Pharmaceutical Company distributes medicines to all public health facilities through the Zimbabwe Assisted Pull System (ZAPS), whereby facilities order medicines with assistance from a pharmacist or their representatives to ensure accurate quantifications. Figure 9 below shows the key roles and actors at different stages of the medicine supply chain. Consumers obtain medicines from public and private health facilities and street vendors. Figure 3 shows how commodities and information flows and table 3 shows processes and actors in the medicine supply chain.

Figure 8 ZAPS Pipeline - Flow of Information and Commodities

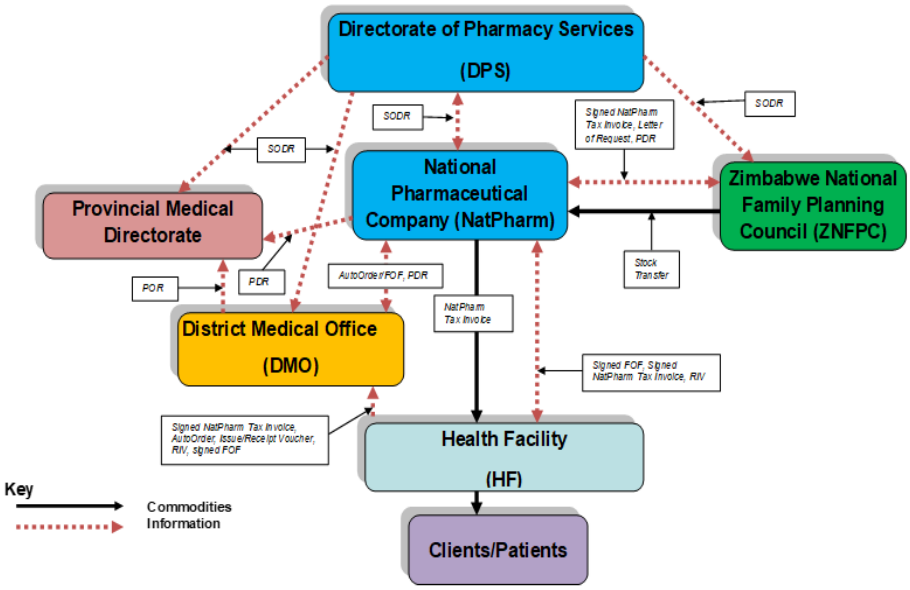


Table 4 Processes and Actors in the Medicine Supply Chain

Process	Actor
Ordering and reporting	Directorate of Pharmacy Services (DPS)
Distribution of medical supplies	District Pharmacy Manager (DPM) and health facility staff
Data Management	National Pharmaceutical Company (NatPharm)
Receiving and Collecting stock	DPS, NatPharm, DPM
Storing and keeping records	NatPharm, health facility staff
Placing Emergency Order	NatPharm, Health Facility Staff
System Performance Monitoring	Health Facility staff
Prescribing	Provincial Medical Director, District Medical Director, DPS, NatPharm, Zimbabwe National Family Planning Council, Implementing Partners
Dispensation	Health facility clinicians
Needs identification: identifying the need for medicine and determining the specific requirements	Public health facility, Private health facility, street vendor
Planning: the procurement plan is developed, which includes determining the quantity and quality of medicine needed, as well as the budget and timeline.	National Medicines and Therapeutics Committee, Program Managers e.g. Malaria, TB, HIV, Chronic Diseases, PMD, DMO
Solicitation: inviting bids or proposals from potential suppliers. This can be done through a formal bidding process or other methods such as direct purchases or emergency tenders	NMTC, Program Managers, Directorate of Pharmacy Services, WHO, Implementing Partners, PEPFAR, GH-PSM, PMD, DMO
Review of bids	Procurement unit, program managers
Selection of bid	Procurement unit, program managers
Approval of Selection	Procurement unit, program managers

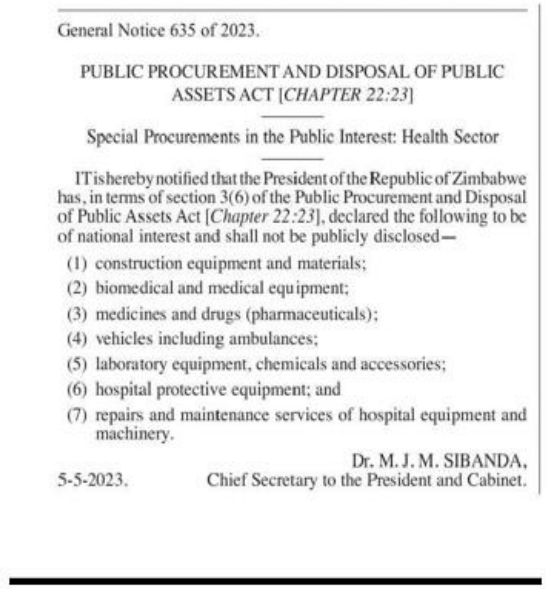
During the study period, there was a circular that communicated that all procurements in the MoHCC were to be classified and kept out of public reach. The MoHCC issued a circular dissociating itself from this document and maintaining that all procurements in the Ministry were public (see Figure 10 below). This development was topical amongst stakeholders and provides important context to the policy debates pointing to possible corruption risks in the pharmaceuticals supply chain, particularly the area of public procurement. Key informants and the public perceived that the gazetted notice purporting to place the procurement of certain goods outside public scrutiny on grounds of “national interest” was from the president's office which however was nullified following the public outcry.

The MoHCC procurement is a sensitive subject in the country. The Global Fund Grant to fight AIDS, TB and Malaria is implemented under The Global Fund Additional Safeguarding Policy which is invoked when a country has prolonged economic and political instability, lack of structures to ensure accountability and sustainability and in challenging operating environments. The purpose of the Additional Safeguarding Policy is to ensure that The Global Fund resources and assets are not misused or sequestrated.

TI Z failed to get permission to include the MoHCC in the current study. The Global Fund Office of the Inspector General reported that the supply chain management system was partially effective and highlighted agreed management actions which included improving accountability at the facility level and reconciling electronic inventory status with

physical inventory status at the facilities (Global Fund, 2020). Lessons learnt from the implementation of Good Governance for Medicines 2017-2022 showed that when initiatives to improve transparency are integrated with ongoing activities, they work much better however not all planned activities were implemented due to resource limitations. The recommendations included allocating a specific budget to good governance of medicines among others.

Figure 9 Circulars Published in the Media During the Study Period



General Notice 635 of 2023.

PUBLIC PROCUREMENT AND DISPOSAL OF PUBLIC ASSETS ACT [*CHAPTER 22:23*]

Special Procurements in the Public Interest: Health Sector

IT is hereby notified that the President of the Republic of Zimbabwe has, in terms of section 3(6) of the Public Procurement and Disposal of Public Assets Act [*Chapter 22:23*], declared the following to be of national interest and shall not be publicly disclosed—

(1) construction equipment and materials;
(2) biomedical and medical equipment;
(3) medicines and drugs (pharmaceuticals);
(4) vehicles including ambulances;
(5) laboratory equipment, chemicals and accessories;
(6) hospital protective equipment; and
(7) repairs and maintenance services of hospital equipment and machinery.

Dr. M. J. M. SIBANDA,
5-5-2023. Chief Secretary to the President and Cabinet.

ZIMBABWE

PRESS STATEMENT

His Excellency the President, Dr ED Mnangagwa, has been made aware of some document gazetted as General Notice 635 of 2023, purporting to place the procurement of certain goods outside public scrutiny, on grounds of "national interest". Upon further investigations, it has come to light that the so-called Government Gazetted Notice is a nullity, having been published without authorisation, and without the signature of the Chief Secretary to the President and Cabinet, as is the norm. While further investigations are underway, Government wishes to advise the public that, on the instruction of His Excellency the President, the document in question has been rescinded as it has no standing at law, in policy and in terms of set Government procedures. It thus should be disregarded.

Government remains committed as ever to managing a transparent public procurement policy and process, as required by the laws of the country.

CHIEF SECRETARY TO THE PRESIDENT AND CABINET
10 MAY 2023
P BAG 7700, CAUSEWAY ZIMBABWE

Dr M.J.M Sibanda, Chief Secretary.
OFFICE OF THE PRESIDENT AND CABINET

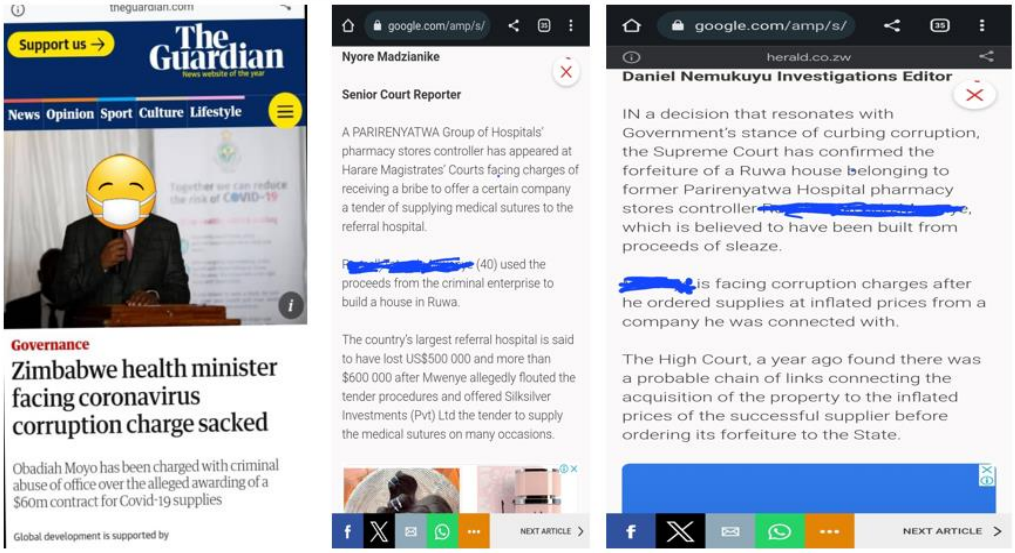
10/05/23

The analysis of primary and secondary data shows that there are leakages and diversion of medicines from the public health sector for private gain. The study found the risk of corruption was highest at facilities/dispensation and at procurement.

CORRUPTION RISKS IN PROCUREMENT

The actors at the procurement level are the Procurement officers and program managers. The drivers of corruption at procurement are weak governance and poor/non-implementation of procurement standard operating procedures. Desk review showed that corruption tends to occur when there is an emergency, and there are higher chances of infidelity to the procurement protocols. During COVID-19, there was a procurement scandal involving US$60 million in which COVID-19 commodities were procured at highly inflated figures (Aljazeera, 2020). At Parirenyatwa Group of Hospitals, there was a case in which a company which had failed to meet tender requirements repeatedly supplied medical commodities with a resultant loss of US$500.000 and more than $600,000 (local currency). The actors involved deliberately waited for stocks to reduce to critical levels creating emergencies during which procurement was then flouted and undeserving companies supplied commodities. The implicated actor was dismissed from his post as stores controller and his house was forfeited to the state (citation). Forfeiture of property and dismissal from posts were stern consequences for corrupt officials and may be a deterrent for potentially corrupt officials. Figure 11 below shows snippets of these cases in the local press. Some key informants mentioned that some suppliers were paid before they delivered and sometimes never delivered the full complement of medicines and commodities.

Figure 10 Snippets from The Guardian and from The Herald



One key informant mentioned that some officials at the Zimbabwe National Family Planning Council hoard contraceptives when stocks are getting low and supply them to the parallel market including to street vendors for their own benefit. The key informant mentioned that in Epworth the pharmacies would be stocked out, but some street vendors would be stocked with cartons of contraceptives.

CORRUPTION RISKS AT THE PUBLIC HEALTH FACILITIES

According to key informants, at public health facilities, the actors are clinicians and other health workers such as general hands and pharmacy technicians. The drivers of corruption at the facility level are low remuneration, partially effective medicine stock management, and high demand against low supply. Medicine stock is managed electronically from the national level up to the district level while at the facility paper-based systems are used. At higher levels, there are qualified designated officials (pharmacists/pharmacy technicians) managing medicines and there is more accountability compared to public health facilities where there are no specific pharmacy personnel, fidelity to stock takes is infrequent and there is no proper handover from person to person which was recently worsened by staff resignations to look for greener pastures.

One key informant reported that at some clinics, nurses were selling medicines to consumers, some of the medicines were reported to be unregistered medicines which are illegally imported from Zambia and there was suspicion that some facility medicines were also being sold. This practice compromises the quality of services provided to consumers as the nurses may be inclined to prescribe only the medicines which they have for sale even when it may not be the best medication for the consumer. According to one consumer, some nurses at Sally Mugabe Hospital, psychiatric unit were allegedly selling medicines which the consumers were supposed to obtain free of charge.

In one group discussion, it was mentioned that some medical doctors keep medicines, especially injectables such as cephtriaxone in their rooms without following proper authorization or registration to dispense medicines with the MCAZ. It was reported in the same group that "sometimes the medicines are supplied by people where the index of suspicion for theft as a source would be high and some of the suppliers were health workers, but no questions are asked." Another key informant reported that "some senior staff divert small amounts of medicines for use by themselves, family and friends and justify this diversion as necessary to compensate for their perceived low remuneration." It was also reported that the senior staff take advantage of the unofficial exemption from being searched when exiting health facilities.

Some key informants perceived corruption at the facilities as mainly petty, but occurrence may be on a large scale with great frequency while perceived corruption at procurement level is huge and

infrequent. The corruption at both levels results in reduced access to medicines for women, children, the vulnerable and the marginalised.

There is a clear policy on anti-corruption, as well as an attempt to provide structures to encourage transparency such as suggestion boxes at the facilities but there is a general lack of knowledge of the National Anti-corruption Strategy (NACS) among health workers. Two representatives of civil society organizations (CSOs) reported that corruption risk assessment is lacking in their programming although they are aware that recipients of care sometimes offer small bribes (such as buying drinks or lunch) to health workers to obtain favours such as skipping queues and accessing treatment when there is high demand for service.

Street medicine vendors confirm the diversion of medicines from the public sector. They get their medicine supplies from Zambia as well as from some health workers who deliver the medicines to them. The health workers are both clinical and non-clinical staff, sometimes the health workers use runners to mask their identities. The street medicine vendors are aware that the medicines they get are diverted from the public health inventories. One street vendor mentioned that some local pharmacies sometimes procure medicines from them. The medicines found in the street include prescription preparation medicines such as antimicrobials (antibacterial, antifungal, antiviral), analgesics, non-steroidal anti-inflammatory medicines, antihistamines, short acting contraceptives (combined oral contraception and the progesterone only pill).

The street vendors highlighted that they are aware of the negative impact of diversion of medicine on women, children, the vulnerable and marginalised but they would prefer the situation to remain as it is, since it is their sole source of livelihood. The street vendors showed concern for youths whose lives are being damaged by the abuse of psychotropic medicines such as benzodiazepines, some of which are diverted from the public sector and distributed through street vendors. Table 4 below shows the buying and selling prices of the street vendors. The high profits available may be attractive to health workers who are driven by perceived poor remuneration to divert medicines. The street vendors are always on high alert for regulatory authorities like the police and the municipal police. Occasionally the street vendors are arrested by police from the drug section and by council police who release them upon payment of a bribe ranging from $2-$5 but those who are caught with large amounts of medicines may be arrested then taken to court. The 2015 Zimbabwe Demographic Health Survey reported that street vendors and relatives/friends distributed the contraceptive pill to small proportions of women in the survey, 0.6 and 0.4 respectively.

Table 5 Street Vendor Medicine Purchase and Resale Price List for Medicines Procured Locally (diverted medicines) and from Zambia

Medicine procured locally	Procurement price (buying price from health workers)	Street Vendor selling price	Medicine procured from Zambia	Procurement Price	Street vendor selling price
Ciprofloxacin	Average $2	$1 for 10 tablets	Ciprofloxacin	$3.5 box of 10*10tablets	$1 for 10 tablets
Azithromycin	$2.5 box of 10*3tablets	$2 for 3tablets	Azithromycin	$3 box of 10*3tablets	$2 for 3 tablets
Combined oral contraceptive	$14 box of 54*	$1 for 3*	Combined oral contraceptive	Table Text	
Progesterone only pill	$8 box of 54*	$1 for 3*	Progesterone only pill		
Erythromycin			Erythromycin		
Doxycycline	$2 for 10*10tablets	$1 for 10tablets	Doxycycline	$3 for 10*10tablets	$1 for 10
Metronidazole	$2 for 10*10tablets	$1 for 10 tablets	Metronidazole	$2 for 10*10tablets	$1 for 10 tablets
Ibuprofen	$10 for 100*10 tablets	$1.4 for 10 tablets	Ibuprofen	$10 for 100*10 tablets	$1.4 for 10 tablets
Diclofenac	$1 for 10*10 tablets	$2 for 10 tablets	Diclofenac	$1 for 10*10 tablets	$2 for 10 tablets
Diazepam					

Psychotropic medicines such as diazepam have a high demand on the market among the youth and health workers were also implicated in the supply of these medicines. Users of the psychotropic medicines openly approach health workers soliciting them to divert these medications into this drug abuse market. Poor remuneration drives health workers to divert medicines from the mainstream public health supply chain.

The street vendors reported that most of them had no medical background and no knowledge of the indications of the medicines they sell nor their possible adverse side effects. Their clients present with specific demands and sometimes with prescriptions. When asked why clients prefer to buy from them, they said that some clients know what they want but do not wish to go through payment of user fees at the health facilities, some do not like the occasional long queues at the public health facilities, cheaper prices, some require the seeming anonymity of purchasing from the street vendors while for some it's the convenience. Figure 12 below shows street medicine vendors' stalls at busy marketplaces. The quality of medicines from street vendors is questionable, the conditions of storage deviated from recommendations.

Figure 11 Street Medicine Vendor Stalls at Busy Marketplaces in Harare

RISK TABLES

RISK TABLES

This section organises the priority areas studied into risk tables and heat maps which identify and analyse the corruption risks.

PRIORITY AREA 1: PROCUREMENT OF MEDICINES

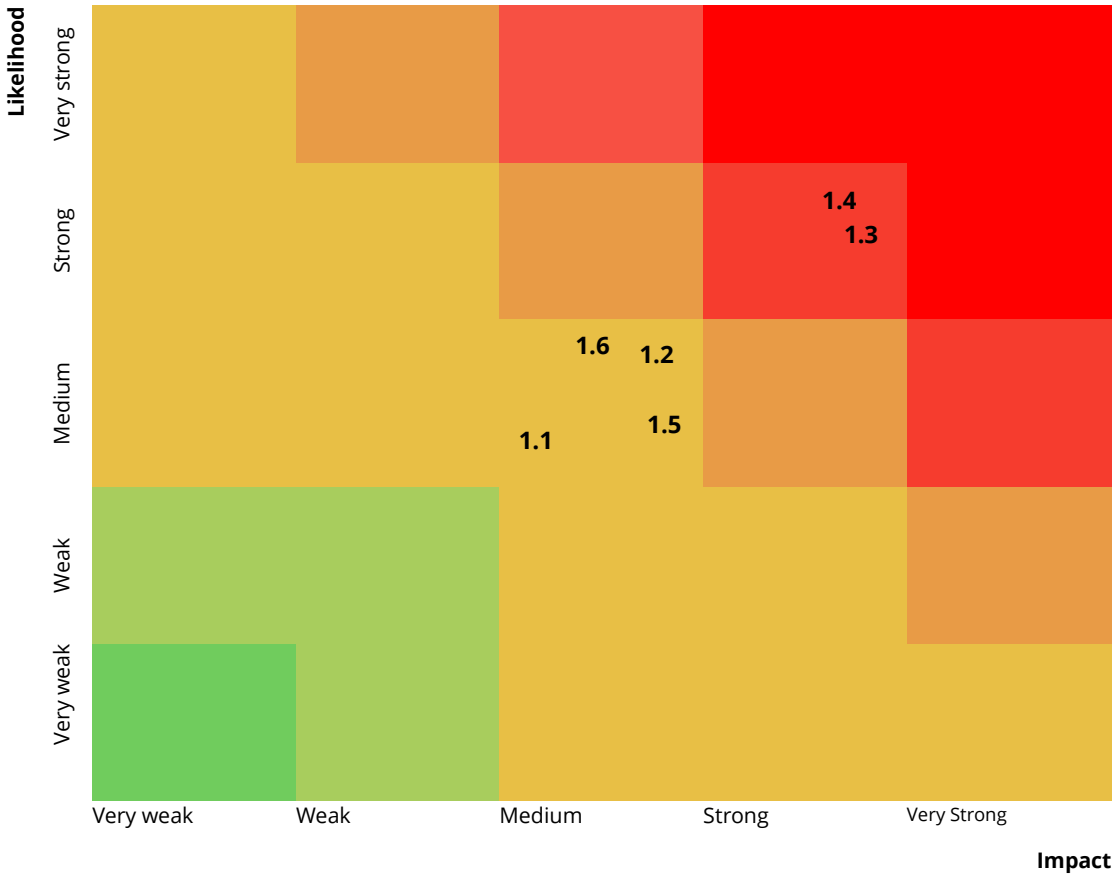
Table 6 Identification of Corruption Risks

Code	Decision point	Potential deviated decisions	How the decision point and deviated decision points were identified
1.1.	Needs assessment and planning	• Actual/perceived favouritism and nepotism in providing information • Patronage, cronyism/political alignment to information • Bribery by potential suppliers.	• Full stakeholder participation • Data-driven decisions
1.2.	Solicitation/public tender	• Actual/perceived favouritism and nepotism in providing information • Patronage, cronyism/political alignment to information • Bribery by potential suppliers	Literature review highlighted transparency gaps with public tenders as well as key informant answers to questionnaires
1.3	Evaluation and selection	• Failure to observe effective evaluation procedures • Favouritism, bribery, • Political muscle influence, • Coercion	Key informant answers to questions and information gathered in media report
1.4.	Contracting	• Bribes for contracts	Key informant answers to questions and information gathered in media report
1.5.	Delivery and receipt	• Incorrect quantities/quality of medicines and supplies • Non-delivery of procured medicines	Key informant answers to questions and information gathered in media report
1.6.	Payment and record keeping	• Favouritism • Nepotism • Coercion • Bribery • Biased payment of suppliers • Other suppliers are prepaid and do not deliver	Key informant answers to questions and information gathered in media report

Table 7 Risk Scoring for Priority Area 1

Decision Point	Likelihood	Justification	Impact	Justification	Risk Score
1.1: Needs assessment and planning	1	Data shows that this stage has full stakeholder engagement, and decisions are data-driven	5	Deviated decisions would result in poor quality medicines hence poor prognosis for the most vulnerable groups namely women, girls and children.	3
1.2. Solicitation/public tender	2	Likelihood of corruption is unlikely; tenders are published in local press and social media although others have access to information before others and prepare in advance.	5	Deviated decisions result in substandard poor-quality medicines.	3.5
1.3. Evaluation and selection	4	Data shows that sometimes companies that were not first preference/disqualified are selected.	4	Low value for money, High prices and substandard goods in lower quantities	4
1.4. Contracting	4	Data shows porous contracts which may omit certain specifications for example time frames.	4	Low value for money when the supply of medicines is not in sync with population's needs for medicines.	4
1.5. Delivery and receipt	3	Data shows non-delivery of supplies or delivery of supplies deviating from specifications.	3	The survey shows that there is substandard service provision resulting in poor prognosis for the vulnerable especially women, girls, and children.	3
1.6. Payment and record keeping	5	The survey showed that turnaround times for suppliers are different due to subjective issues and bribery.	2	Data showed that some suppliers shun dealing with the Ministry, and recipients of care downstream are negatively affected.	3.5

Figure 12 Risk Heat Map for Priority Area 1



PRIORITY AREA 2: FACILITY INVENTORY MANAGEMENT/DISPENSATION

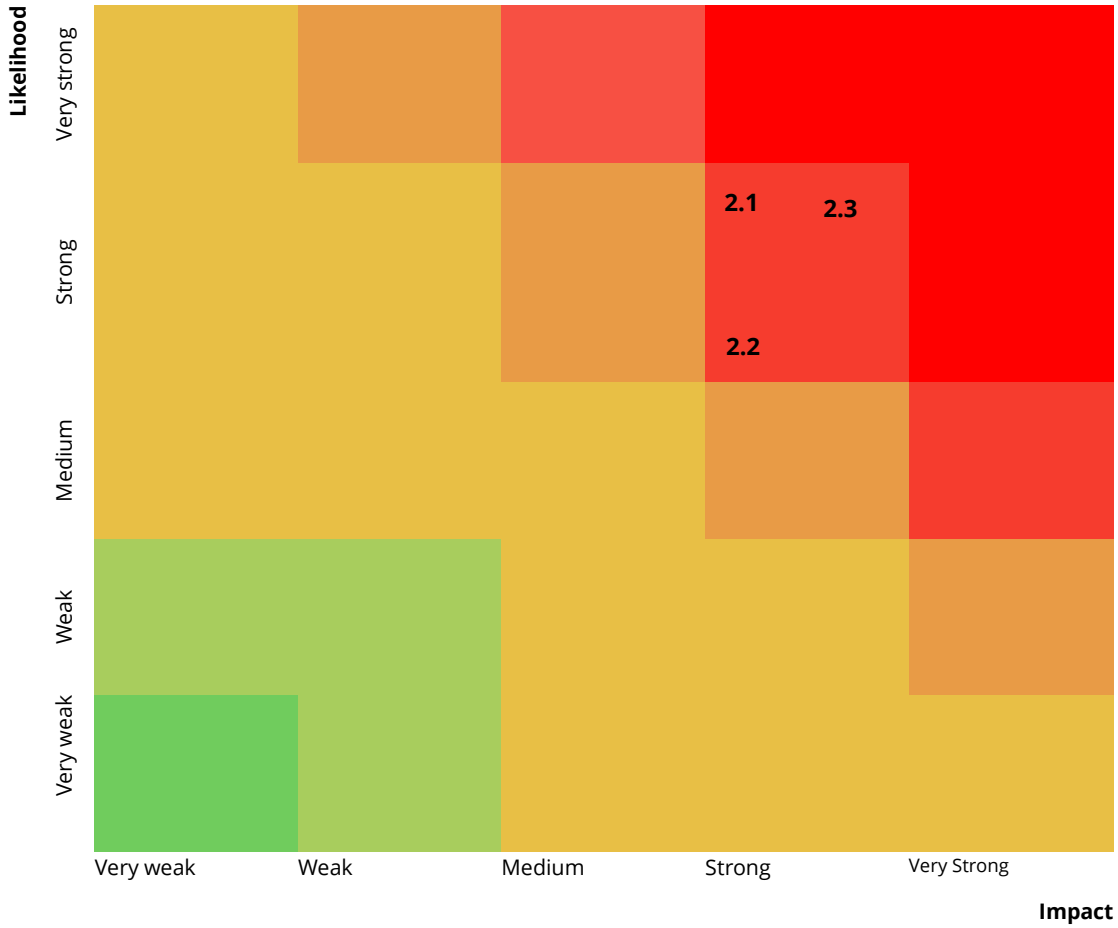
Table 8 Identification of Corruption Risks

Code	Decision point	Potential deviated decisions	How the decision point and deviated decision points were identified
2.1.	Facility Inventory Management	• Diversion of medicines for private gain • Porous safeguarding of medicines • Falsification of documents	Literature review and responses of key informants show that there are corruption risks at this level at the facility, discrepancies between stock status between stock on hand, stock cards and online inventory.
2.2.	Prescribing Medicine	• Deliberate prescribing of unavailable medicines • Irrational prescription of medicine for private gain • Bribes are solicited or offered • Diversion of patients to a private medical supplier	The data shows that some health workers have their own medicines for sale resulting in conflicted prescribing practices, prescriptions based on nepotism/favouritism/private gain.
2.3	Dispensation	• Sextortion • Nepotism/favouritism • Diversion • Unofficial charges • Bribes are solicited or offered • Diversion of patients to private medical supplier	The assessment revealed that there are corruption risks at the point of dispensation

Table 9 Risk Scoring for Priority Area 2

Decision Point	Likelihood	Justification	Impact	Justification	Risk Score
2.1: Facility Inventory Management	5	Reports of health workers selling free medicines health workers supplying street vendors/pharmacies/ medical doctors, Discrepancies in stock at hand vs online inventory.	4	Key informants pointed out that individual cases of corruption are petty, but the cumulative effect of many petty cases results in huge losses of medicines.	4.5
2.2. Prescribing Medicine	4	Reports of deliberate prescription of medicine which is out of stock when suitable alternatives are available so that recipients of care may be directed to purchase from a supplier supposedly linked to health worker.	4	The forms of corruption risks at this decision point such as sextortion can have wide-ranging impacts, especially on women candidates.	4
2.3. Dispensation	5	The survey evidence indicates health workers selling free medicines, Favouritism, nepotism and bribery during dispensation. Other patients get multi-month dispensation whilst others get dispensation for shorter durations such as monthly or fortnightly or lesser or even non-dispensation and they are told that the medicine is stocked out.	4	The evidence suggests that vulnerable populations such as women, girls and children fail to access needed medicines.	4.5

Figure 13 Risk Heat Map for Priority Area 2



The next section will outline the mitigation strategies proposed to tackle the corruption risks identified at the decision points identified for each of the priority areas

MITIGATION TABLES

PRIORITY AREA 1: PROCUREMENT OF MEDICINES

Table 10 Identification of Mitigation Strategies

Order of risk mitigation strategies acc. to prioritisation	Decision point	Risk score	Mitigation Strategy	How the mitigation strategy was identified
1.2.	Solicitation/public tender	3.5	1.2.1 Supplier registration should be on an ongoing basis to accommodate all potential suppliers at any given point	A user-friendly system of supplier registration with essential checks rather than restrictive allows for value for money reducing corruption risks as no suppliers has seemingly easier or favourable registration.
			1.2.2 Strengthen publication of tender in all media platforms and adherence to minimum time required for potential responders to respond	Key informant recommendation
			1.2.3 e-Procurement Incorporating Public Tender	
1.3.	Evaluation and Selection	4.5	1.3.1 Investigate and sanction suspected corruption by procurement staff	Effective sanctions are a best practice in deterring corruption
			1.3.2 Awareness-raising and training of procurement staff on anti-corruption	Key informants showed lack of knowledge on anti-corruption
			1.3.3 Implement the e-Procurement system	An e-Procurement system is transparent and would reduce corruption risk at this level
1.4.	Contracting	4.5	1.4.1 Perform financial and technical checks on Suppliers before Contracts. Reject offers from unacceptable Suppliers. Improve evaluation procedures	Key informant recommendations
			1.4.2 Investigate and sanction corruption	Effective sanctions are a best practice in deterring corruption
			1.4.3 Implement the e-Procurement system	An e-Procurement

				system is transparent and would reduce corruption risk at this level
1.6	Payment and record keeping	3.5	1.6.1 E-procurement integrated with PFMS (payment system) and delivery/receipts reports	Transparent electronic system (blinded for user) reduces risk of corruption

PRIORITY AREA 2: FACILITY INVENTORY MANAGEMENT/DISPENSATION

Table 11 Identification of Mitigation Strategies

Order of risk mitigation strategies acc. to prioritisation	Decision point	Risk score	Mitigation Strategy	How the mitigation strategy was identified
2.1	Facility Inventory Management	4.5	2.1.1 Rollout eLMIS beyond the district level to all facilities	Recommendation from literature ad from key informants allowing for real-time inventory checks
			2.1.2 Integrate the Electronic Health Record with the eLMIS and rollout to all facilities	
			2.1.3 CCTV surveillance for all medicine stores and strict searching and monitoring of all personnel at exits (applicable to bigger institutions)	Respondents to the questionnaire called for the introduction of involvement of external voices in the recruitment process
			2.1.4 Routine audits and spot checks	Literature and key informant recommendation
			2.1.5 Investigate and sanction corruption	Effective sanctions are a best practice in deterring corruption
2.2	Prescribing	4.0	2.2.5 Roll out electronic health record integrated with eLMIS and billing system	Effective sanctions are a best practice in deterring corruption
			2.1.1 Investigate and sanction corruption	Availability medicines would help to reduce corruption at dispensation as prescribers ring fenced limited medicines for themselves and their families/allies It is a best practice to base new positions on objective criteria such as staff-patient ratios and qualifications
2.3	Dispensation		2.3.1 Integrate the electronic Health record with the eLMIS and rollout to all facilities	A transparent system that shows case management including prescribed medicines and dispensed medicines would help to reduce corruption at dispensation

	2.3.1 CCTV surveillance for all medicine stores and strict searching and monitoring of all personnel at exits (applicable to bigger institutions	Essential security infrastructure reduces risk for corruption
	2.3.2 Routine audits and spot checks	Key informant and literature recommendation
	2.3.3 Investigate and sanction corruption	Effective sanctions are a best practice in deterring corruption
	2.3.4 Online anonymous whistle blowing service	Empowered recipients of care can speak out against corruption

MONITORING & EVALUATION

The corruption risk assessment and the identified mitigation strategies are only relevant and sustainable so long as there is follow-up. This section outlines how implementation can be effectively monitored.

TASK FORCE

The corruption risk assessment and mitigation strategies need to be actionable for them to lead to systematic change for the benefit of the DRC citizens using services in the health sector. This requires that relevant health sector actors in the DRC take ownership of the findings and recommendations to address and implement them.

A best practice to achieve this is the establishment of a task force or working group that brings together both the service providers and users to monitor the follow-up to the CRA at regular intervals. At a minimum, the task force should be formed of:

- Representatives from the health authorities at the central, intermediate and operational levels
- Senior hospital management
- Inspectorates
- Civil society and Interest groups representing marginalised communities
- Medical staff unions
- Patients

M&E PLAN

The task force can design and monitor a detailed plan containing clear timelines for the implementation of mitigation strategies. UNODC recommends that "the plan must be detailed, with specific timelines that assign named personnel the responsibility for successfully implementing key actions and should be incorporated into the organization's operational and strategic work plans". While it is beyond the scope of this study to outline such plans, an example is given here for purely indicative purposes.

Table 12 M&E Plan

Mitigation Strategy	Steps	Indicator(s) for evaluation	Timeline	Responsibility	Allocated Resources
1.2.3 Introduce a Four Eyes" oversight check on referrals for procedures	1. Solicit experts' inputs and review best practice policies 2. Draft and adopt policy. 3. Train responsible staff on new policy. 4. Launch implementation of policy. 5. Evaluate policy.	The compliance rate with the Four Eyes principle. Risk score for the decision point	2 years	Senior hospital management	50,000

CONCLUSION

This section provides reflections on the corruption risk assessment and for further actions and research.

Reflections

Overall, the key lesson learnt from the CRA is that a multi-sectoral approach and an appreciation of the critical role that politics plays in public health corruption risk mitigation. As fighting corruption in health systems is increasingly being recognized as an important and attractive investment in the context of Universal Health Coverage and Sustainable Development Goals, an opportunity exists to mobilize and align technical and political resources to bolster the implementation of Good Governance in Public Health Systems. As documented elsewhere, clearer understanding of the political dimensions of health policy by public health professionals in government, advocacy groups, and research organizations is necessary for designing more effective policies and programmes. Key specific lessons learnt include the importance of public-private partnerships, policy consciousness to generate context-specific innovations to mitigate corruption risks in public institutions and the importance of political lobbying to generate attention among national leaders. Such a partnership is not a novel concept, commonly observed in developed countries and has been linked to supporting SDGs, implementation of primary healthcare, effective regulation of medicines and pharmaceutical supply chain management at national and subnational levels.

Limitations and areas for further research

The research team acknowledges that this study faced some research limitations. These include the small sample size achieved for the questionnaire and the exclusive focus on public health facilities in Zimbabwe. This means ascertaining the representativeness of the findings may depend on further similar studies being undertaken.

Indeed, the research team calls for more CRAs to be carried out in the country's health sector in the future, including by covering different regions and priority areas. This will help supplement the findings of this study. For example, this study focused on the priority area of medical supplies in terms of the distribution stage, but it would also be worthwhile to study the procurement stage of medical supplies. Accordingly, the research team hopes that the utility of the corruption risk assessment approach has been demonstrated and calls for it to be further mainstreamed.

Lastly, while the research uncovered some impacts of corruption in the health sector on marginalised groups, it was not always possible to disaggregate the specific forms of impact on specific groups at risk of discrimination. Future studies should rely more on targeted studies of different marginalised groups, for example by interviewing interest groups and individuals representing them.

REFERENCES

Aljazeera Zimbabwe Health Minister Obediah Moyo sacked amid graft scandal [Online] // www.aljazeera.com. - 8 July 2020. - https://www.aljazeera.com/economy/2020/7/8/zimbabwe-health-minister-obediah-moyo-sacked-amid-graft-scandal.

Andy McDevitt Transparency International Gateway Corruption Assessment Toolbox: Corruption Risk Assessment Topic Guide [Book]. - Germany : Transparency International, 2011.

Chikwinya T Hove R, et al Lessons learnt from implementing the Good Governance for Medicines Programme in Zimbabwe [Journal] // BMJ Global Health. - 2022.

GAGNÉ-ACOULON SANDRINE Zimbabwe's Health Minister Charged for Covid-19 Corruption // Zimbabwe's Health Minister Charged for Covid-19 Corruption. - [s.l.] : Organized Crime and corruption reporting project, 23 June 2020.

Global Fund Audit Report: Global Fund Grant in Zimbabwe [Report]. - Geneva : Global Fund, 2020.

Jafari F HajiNabi K, Jahangiri K, et al Good governance in the health system: a qualitative study [Journal] // International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies. - 2019. - pp. 1127–41.

Management Sciences for Health www.msh.org [Online] // www.msh.org. - July 2021.

Ministry of Health & Child Care Republic of Zimbabwe National Health Strategy 2021-2025 [Report]. - Harare : MoHCC, 2021.

Ministry of Health and Child Care, Republic of Zimbabwe, AIDS and TB Program Zimbabwe National and Sub-national HIV Estimates Report: 2022 [Report]. - Harare : MoHCC, 2022.

Munyoro Fidelis ZACC probes drug thefts at hospitals // ZACC probes drug thefts at hospitals. - Harare : The Herald, 20 January 2020.

New Zimbabwe Mthuli suggests drugs bought by govt disappearing to private hospitals; reveals donors providing Z$230 billion for health sector. - 22 December 2022.

Paschke A Dimancesco D, Vian T, et al Increasing transparency and accountability in national pharmaceutical systems [Journal] // Bull World Health Organ. - 2018. - pp. 782-91.

Prosper Maguchu, Muchaneta Mundokwa and Nqobani Tshabangu "A Report on Corruption in the Public Health Sector in Zimbabwe" [Report]. - Harare : Transparency International Zimbabwe, 2021.

Transparency International Transparency International Plain Language Guide [Book]. - Berlin : Transparency International, 2009.

Vian T Anti-corruption, transparency and accountability in health: concepts, frameworks, and approaches [Journal] // Global Health Action. - 2020.

World Bank www.worldbank.org [Online] // www.worldbank.org. - Septemeber 2023.

World Bank Zimbabwe Economic Memmorandum Boosting Productivity and Quality Jobs [Book]. - Washington : World Bank, 2022.

World Health Organziation Good governance for medicines: model framework, updated version 2014 [Report]. - Geneva : World Health Organisation, 2014.

Zimbabwe National Statistics Agency and UNICEF Zimbabwe Multiple Indicator Cluster Survey 2019, Snapshots of Key Findings. [Report]. - Harare : ZIMSTAT and UNICEF., 2019.

Zimbabwe National Statistics Agency The 2022 Population and Housing Census Preliminary Report on Population Figures [Report]. - Harare : Zimbabwe National Statistics Agency, 2022.

Zimbabwe National Statistics Agency www.zimstat.co.zw [Online] // www.zimstat.co.zw. - September 2023.

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