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GLOBAL HEALTH SUPPLY CHAIN PROGRAM – TECHNICAL ASSISTANCE

Year 4 Quarter 1, Quarterly Report

CONTENTS

ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
AMD	Affordable Medicines Directorate
AMR	Antimicrobial Resistance
API	Application Programming Interface
APP	Annual Performance Plan
ARV	Antiretroviral
CCMDD	Central Chronic Medicines Dispensing and Distribution
CHAI	Clinton Health Access Initiative
CHC	Community Health Centre
CMU	Contract Management Unit
CPA	Contract Price Adjustments
CPD	Continuing Professional Development
DO	Development Objective
EC	Eastern Cape
EDP	Essential Drugs Program
EML	Essential Medicines List
FS	Free State
GHSC-TA	Global Health Supply Chain Program – Technical Assistance
GP	Gauteng
HIV	Human Immunodeficiency Virus
HOPS	Heads of Pharmaceutical Services
HTA	Health Technology Assessment
IMAT	Improved Medicine Availability Team
ISP	Information Systems and Projects
IT	Information Technology
KPI	Key Performance Indicator
KZN	KwaZulu-Natal
LP	Limpopo
MAC-AMR	Ministerial Advisory Committee on Antimicrobial Resistance
MHPL	Master Health Product List
MMD	Multi-Month Dispensing
MMDS	Medicine Master Data System
MP	Mpumalanga
MPC	Master Procurement Catalogue
NC	Northern Cape
NDoH	National Department of Health
NEMLC	National Essential Medicines List Committee
NHC-TAC	National Health Council - Technical Advisory Committee
NHI	National Health Insurance
NSC	National Surveillance Centre
NW	North West
PDoH	Provincial Department of Health
PHC	Primary Health Care
POC	Proof of Concept
PSC	Provincial Surveillance Capability
PST	Provincial Support Team

PTC	Pharmaceutical and Therapeutics Committee
PwC	PricewaterhouseCoopers
RMU	Rational Medicine Use
SAPC	South African Pharmacy Council
SIMA	Strategy to Improve Medicine Availability
SLA	Service Level Agreement
SOP	Standard Operating Procedure
SRCC	Special Requirements and Conditions of Contract
STI	Sexually Transmitted Infection
STG	Standard Treatment Guideline
SVS	Stock Visibility System
TA	Technical Assistance
TB	Tuberculosis
TEE	Tenofovir/Emtricitabine/Efavirenz
TLART	Third Line ARV Therapy
TLD	Tenofovir/Lamivudine/Dolutegravir
TOR	Terms of Reference
USAID	United States Agency for International Development
WC	Western Cape
WMS	Warehouse Management System

EXECUTIVE SUMMARY

INTRODUCTION

South Africa remains at the centre of the global AIDS epidemic and has one of the highest burdens of tuberculosis (TB) in the world. An efficient and effective health supply chain that improves medicine availability is critical to addressing that disease burden. With this in mind, the United States Agency for International Development (USAID) launched the Global Health Supply Chain Program – Technical Assistance (GHSC-TA) in South Africa in September 2016. The program provides technical assistance to the South African government to strengthen public health systems and supply chains to advance an AIDS-free generation and contribute to the achievement of universal health coverage.

Medicine availability is one of the main challenges, which must be addressed, as it has a direct impact on improving health outcomes for the South African people. Sometimes, health establishments do not have adequate medicine stock on hand to meet patient needs. When this happens, patients must return to the health establishment, at considerable personal expense and inconvenience, to collect their medicine. In response, addressing constraints and improving medicine availability is a core objective of South Africa's National Department of Health (NDoH). GHSC-TA works with the NDoH to design and implement innovative solutions to transform the South African health supply chain. Simultaneously, the program is working with provincial departments of health (PDoHs) to increase medicine availability countrywide. By improving health supply chain visibility, the program also supports public health establishments' efforts to anticipate patients' needs more accurately and position sufficient stocks of medicines where and when they are needed.

GHSC-TA provides technical assistance (TA) directly to the Affordable Medicines Directorate (AMD) of the NDoH, as well as to the pharmaceutical services directorates of the PDoHs. The overall aim of the program is to assist the government in improving access to, and availability of, the medicines and related commodities needed to prevent and treat HIV/AIDS, TB, and associated conditions and disorders. Activities undertaken during the base period of the program focused on providing support to AMD in building the foundational elements required at a national level to improve medicine availability. In the option years, the depth and breadth of the support is being expanded to include implementation in the provinces.

PURPOSES OF THIS DOCUMENT

This quarterly report details GHSC-TA program activities and achievements by objective and provides results for each of the six objectives against key performance indicators (KPIs), where possible.

ACTIVITIES AND ACHIEVEMENTS

The activities under the period of review were largely focused on strengthening the health supply chain from a national perspective, as well as introducing the provincial support team (PST). These activities, segmented into 12 main projects, represent capacity building interventions across multiple areas. The projects described were underpinned, as required, by the following enabling functions: stakeholder engagement, communication, workforce management, change management, and training and development. A high-level overview of project activities and accomplishments for each objective follows:

OBJECTIVE 1: IMPROVE SELECTION AND USE OF MEDICINES

GHSC-TA continued to work with the AMD to strengthen medicine selection and rational medicine use (RMU) in efforts to provide an accountable mechanism to support decision-making related to the funding, cost, and use of medicines, medical devices, and technologies in South Africa. Improved decision-making is key to determining the medicines and other health technologies that will be funded under National Health Insurance (NHI). Specifically, GHSC-TA assisted in building the foundation of a

framework to conduct health technology assessments (HTAs); worked with AMD to finalize the National Pharmaceutical and Therapeutics Committee (PTC) guideline, develop the draft plan for implementation of the guideline; and provided TA in the development of sections of the *Antimicrobial Use Surveillance Report for 2019*.

OBJECTIVE 2: SUPPORT OPTIMIZATION OF THE SUPPLY CHAIN

Building on the work completed in Year 3, GHSC-TA successfully proposed ring-fenced budgets for medicine in all nine provinces, using demand forecasting techniques. During the first quarter of Year 4, seven provincial ring-fenced budgets were compiled, reviewed, and signed-off by seven provinces: Gauteng (GP), KwaZulu-Natal (KZN), Limpopo (LP), Eastern Cape (EC), Mpumalanga (MP), Free State (FS), and Northern Cape (NC). GHSC-TA further initiated the demand planning process in the FS and Western Cape (WC) and completed the supply planning Proof of Concept (POC) in North West (NW), where the methodology and tools were tested at four sites. In addition, GHSC-TA assisted with the launch of the new antiretroviral (ARV) fixed dose combination Tenofovir/Lamivudine/Dolutegravir (TLD) at Turton Community Health Centre (CHC) in the Ugu District in KZN.

Seven of the nine provinces have reviewed and approved ring-fenced budgets.

OBJECTIVE 3: STRENGTHEN GOVERNANCE

GHSC-TA has continued to assist the AMD and provincial pharmaceutical services in improving governance by strengthening the policy and legislative framework, establishing appropriate governance structures, and building capacity to provide the necessary oversight. In this quarter, GHSC-TA activities focused largely, on the development and revision of regulations, policies and guidelines as an enabler for medicine availability, and on providing support to AMD with the administration and management of the tendering process. Technical assistance was also provided to the FS in the revision of the service level agreement between the depot and demanders.

OBJECTIVE 4: IMPROVE WORKFORCE MANAGEMENT

GHSC-TA continued to provide ongoing performance monitoring and support to the Information Systems and Projects (ISP) team, through ongoing huddles, trainings, and coaching sessions. GHSC-TA facilitated twelve knowledge sharing sessions with the ISP, based on the Project Management playbook, for seven project managers. The GHSC-TA team finalized the ISP transition and handover plan and presented to the relevant AMD Project Manager; the plan will be implemented in the next quarter.

OBJECTIVE 5: STRENGTHEN INFORMATION SYSTEMS AND INFORMATION MANAGEMENT

As an extension of Year 3 activities, GSHC-TA continued to support the development of the Medicine Master Data System (MMDS) to centralize the structuring and management of medicine descriptions, transversal and other contract data, and provincial and health establishment formularies into a single repository. GHSC-TA also developed three new National Surveillance Centre (NSC) reports and seven new NSC dashboard views, including a view tailor-made for use on mobile phones. As a result of ongoing activities under this objective, 193 sites across seven provinces—FS, MP, LP, GP, EC, NW, and KZN—established connections to the NSC via an application programming interface (API). This number represents 36% of all current RxSolution sites and 71% of potential sites, based on known current connectivity and access to a provincial server.

193 sites across seven provinces have established a connection to API reporting.

OBJECTIVE 6: IMPROVE FINANCIAL MANAGEMENT

GHSC-TA supported and provided guidance to the NDoH in its aim to improve the medicine budget forecasting process and develop a tool to assist in ongoing budget monitoring and quality improvements in financial management and reporting.

INTRODUCTION

South Africa remains at the center of the worldwide AIDS epidemic, with an estimated 7.9 million[1] people living with the disease. In addition, the country has the third-highest burden of TB internationally.[2] An efficient and effective health supply chain that improves medicine availability is critical to addressing that disease burden. With this in mind, USAID launched GHSC-TA in South Africa in September 2016. The program provides technical assistance to the South African government to strengthen public health systems and supply chains to advance an AIDS-free generation and contribute to the achievement of universal health coverage.

GHSC-TA provides technical assistance directly to the AMD of the NDoH, as well as to the pharmaceutical services directorates of the PDoHs. The overall aim of the program is to assist the government in improving access to, and availability of, the medicines and related commodities needed to prevent and treat HIV/AIDS, TB, and associated conditions and disorders.

The GHSC-TA implementing team, led by Guidehouse LLP (formerly PricewaterhouseCooper (PwC) Public Sector LLP),includes PwC South Africa, Resolve, 4Africa Abaluleki (Pty) Ltd, and Banyan Global.

PROGRAM OBJECTIVES

To this end, the program is tasked with the following six objectives:

- Objective 1: Improve Selection and Use of Medicines
- Objective 2: Support Optimization of the Supply Chain
- Objective 3: Strengthen Governance
- Objective 4: Improve Workforce Management
- Objective 5: Strengthen Information Systems and Information Management
- Objective 6: Improve Financial Management

In addition, GHSC-TA assists AMD in implementing the Strategy for Improved Medicine Availability (SIMA) (2016-2021), which encompasses five core functions: selection of medicine and health technologies, contracting of suppliers, management of the supply chain, contract management in accordance with the applicable conditions of contract, and the promotion of rational medicine use. These functions are supported by five enabling functions: governance, workforce management, information systems and management, financial management, and education and research. Interventions are aimed at strengthening both core and enabling functions with a view to continuous improvement. This work directly supports the USAID/South Africa Country Development Cooperation Strategy results framework by supporting Development Objective (DO) 1- Health outcomes for South Africans improved, as well as the NDoH SIMA and the NDoH Annual Performance Plans (APPs).

YEAR 4 QUARTER 1 OVERVIEW

GHSC-TA activities in Year 4 Quarter 1 were largely focused on strengthening the health supply chain from a national perspective as well as the introduction of the PST, which will facilitate implementation and institutionalization of supply chain reforms at lower levels of the supply chain. The activities segmented into 12 main projects, represent capacity building interventions across multiple functional areas:

1. **Medicine Master Data**. Assist AMD in defining the MMDS in collaboration with the contracted service provider responsible for development. This system incorporates the Master Health Product List (MHPL), location hierarchy, and formulary management tool.

2. **National Surveillance Centre.** Support the operationalisation and optimization of the NSC and Provincial Surveillance Capability (PSC) at national and provincial levels to improve performance visibility of the supply chain and strengthen analytics to inform decision-making processes.

3. **Supply Chain Systems.** Design, implement, transition, and promote provincial, district, and site level utilization of supply chain systems and applications.

    - **SVS Development.** Support implementation of the Stock Visibility System (SVS) and the development of enhancements to the system.

    - **RxSolution Maintenance and Re-platform**. Provide technical assistance related to the functionality and architecture of RxSolution being undertaken by the Council for Scientific and Industrial Research.

4. **Demand and Supply Planning.** Develop and implement appropriate processes and human resource capabilities at the national, provincial, and district levels and recommend appropriate technologies to support demand, supply, and distribution planning.

5. **Workforce Management.** Strengthen, improve, and equip the AMD to effectively and efficiently respond to the demands imposed by the roll out of strategic interventions in a timely manner.

6. **Strengthening Medicine Selection and Use.** Develop and implement policies, guidelines, tools, and approaches to support evidence-based selection and rational use of medicine.

7. **Governance.** Provide technical assistance in the implementation of relevant structures and processes within the AMD and PDoHs to improve governance, including the development of policy and legislation.

8. **TLD Transition.** Provide supply chain related support for the transition of eligible first line patients living with HIV from the current combination of antiretroviral medicines used to treat the disease, Tenofovir/Emtricitabine/Efavirenz (TEE), to a new, more effective and affordable treatment option, TLD.

9. **Contracting and Contract Management.** Provide technical assistance to AMD relating to contracting and contract management functions.

10. **Budgeting and Financial Management.** Strengthen both national and provincial structures and processes for budgeting and financial reporting for medicines.

11. **Provincial Support.** Support supply chain optimization at the provincial level through the implementation and institutionalization of supply chain reforms in the provinces.

12. **Warehouse Management System.** Provide technical assistance to develop norms and standards for Warehouse Management Systems (WMSs) and develop provincial risk mitigation plans to manage or avoid operational interruptions.

YEAR 4 QUARTER 1 ACHIEVEMENTS

Table 1 provides a high-level overview of Year 4 Quarter 1 projects and their key achievements by objective.

Table 1: Year 4 Quarter 1 Key Achievements

OBJECTIVE 1: IMPROVE SELECTION AND USE OF MEDICINES
1. Following the presentation of the PTC Guideline to the National Health Council - Sub-Committee - Pharmaceutical Services (NHC-SC-PS), the PTC Guideline was finalized and approved for publication.
2. Developed the draft National PTC Guideline Implementation Plan.
3. Developed seven National Essential Medicines List Committee (NEMLC) summary reports for the adult hospital level Standard Treatment Guidelines (STGs) and Essential Medicine List (EML).
OBJECTIVE 2: SUPPORT OPTIMIZATION OF THE SUPPLY CHAIN
4. Compiled and reviewed ring-fenced budgets for nine provinces and received sign-off from seven provinces.
5. Completed the supply planning POC in NW.
6. Initiated the demand planning process in the FS and WC.
7. Completed the tender forecast for the small biological products contract (HP10).
8. Assisted with the launch of TLD at Turton CHC in Ugu District in KZN.
OBJECTIVE 3: STRENGTHEN GOVERNANCE
9. Supported AMD in reviewing and updating the *Guideline for issuing of permits issued in terms of Section 22A(15) of the Medicines Act to professional nurses* with representatives of the South African Pharmacy Council (SAPC).
10. Completed the draft ePrescribing policy.
11. Provided technical assistance in the review of the FS service level agreement (SLA) between the medical depot and demanders.
OBJECTIVE 4: IMPROVE WORKFORCE MANAGEMENT
12. Finalized the Information Systems and Projects (ISP) transition and handover plan.
13. Completed 12 knowledge sharing sessions with the ISP.
14. Provided support with the development of job descriptions for AMD, including the Central Chronic Medicines Dispensing and Distribution (CCMDD) and contracting units.
OBJECTIVE 5: STRENGTHEN INFORMATION TECHNOLOGY SYSTEMS AND INFORMATION MANAGEMENT
15. Completed detailed process mapping for contracting and medicine management processes as a basis for standard operating procedure (SOP) development for the MMDS.
16. Developed seven new dashboard views and three new NSC reports, including the user activity, health establishment reporting compliance, and medicine availability at facilities reports.
17. Established connections to the reporting middleware to automate reporting to the NSC at 193 sites across seven provinces (MP, LP, GP, EC, NW, KZN, and FS).
OBJECTIVE 6: IMPROVE FINANCIAL MANAGEMENT
18. Developed comprehensive process maps detailing specific actions executed by various members at the NDoH and PDoH throughout the budget lifecycle.

PROGRESS TOWARDS GOAL - INCREASED MEDICINE AVAILABILITY

As described above, improving health supply chain performance is critical to driving increased medicine availability—a key enabler of improved health outcomes for the South African people. To monitor progress towards the program's overarching goal, GHSC-TA measures the percentage availability of medicines, which appear on the NDoH Master Procurement Catalogue (MPC) at health establishments. During the reporting period, health establishments achieved overall medicine availability of 87% shown in Figure 1. While overall medicine availability remains steady as compared to Year 3 performance, it falls below the established target of 95%.

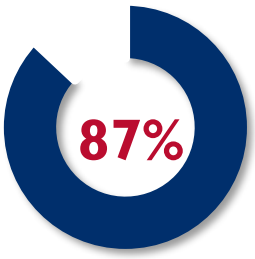


Figure 1: Overall Medicine Availability

KPI 1. PERCENTAGE AVAILABILITY OF MEDICINES AT HEALTH ESTABLISHMENTS

Medicine availability at primary health care (PHC) clinics, however, improved slightly, from 88% in Year 3 (Y3) to 89% in Y4 Q1 as shown in Figure 2.

Figure 2 Percentage availability of Master Procurement Catalogue items at health establishments - Primary Health Care Clinics

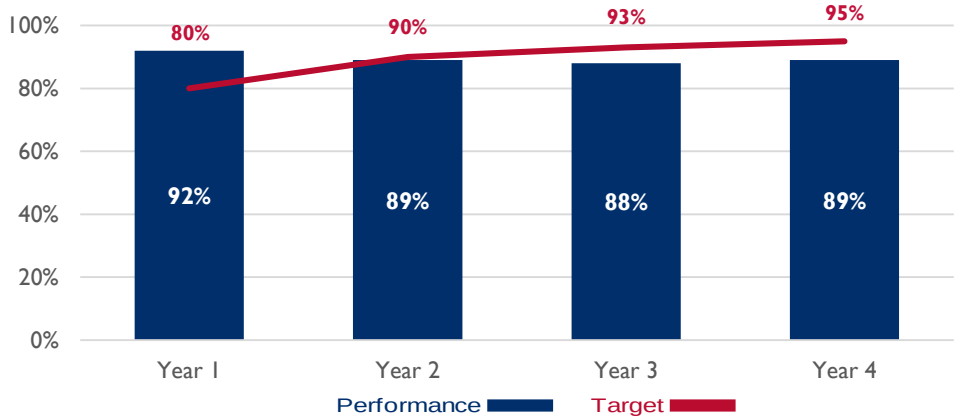
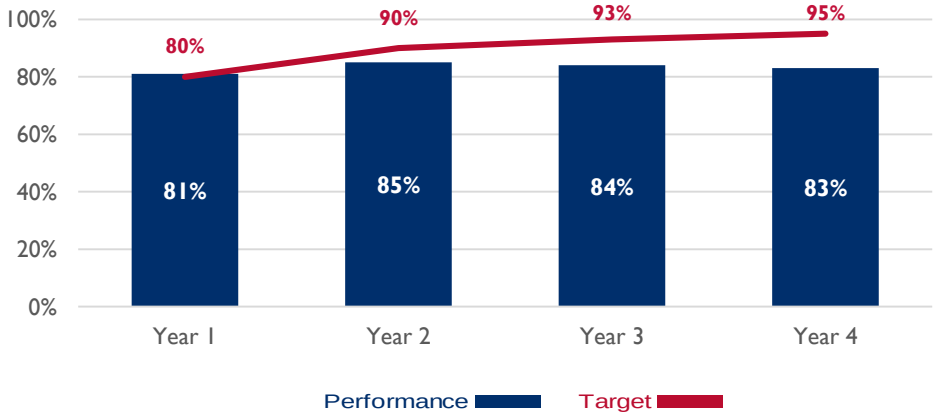


Figure 3 shows that hospital medicine availability during Y4 Q1 fell slightly to 83% compared to the previous quarter's 84%.

Figure 3: Percentage availability of Master Procurement Catalogue items at health establishment - Hospitals



The previously reported challenges around the availability of several medicine lines still remain, with many items affected by supplier related constraints, particularly vaccines, certain ARV therapies, anti-TB therapy, and various other medicine categories. In response, NDoH, in collaboration with the GHSC-TA team, is consolidating efforts to manage these challenges. Approaches include providing technical assistance relating to the Improved Medicine Availability Team (IMAT) processes, and placing greater emphasis on monitoring availability of medicines with supply challenges at health establishments.

IMPROVE SELECTION AND USE OF MEDICINES

South Africa's unique disease burden shapes the country's national health priorities, health system design, and health funding structures. As with most health care systems globally, the country has limited funds available for servicing the health care needs of the population, including for medicines and other health technologies. Limited funds must be allocated according to an evidence-based approach in order to provide quality health care to all South Africans.

In addition, it is important that South Africa's public health care system matches medicines available to patients' needs. Many South Africans who require care and treatment for HIV/AIDS, TB, and other diseases look to public health care facilities to provide the medicines they need. The AMD, through the relevant governance bodies, is responsible for supporting the selection of medicines for patients nationally, as well as making sure these medicines are accessible and available when and where they are required.

ACTIVITIES AND ACHIEVEMENTS

STRENGTHEN MEDICINE SELECTION AND USE

In Y4 Q1, GHSC-TA continued to work with the AMD to strengthen medicine selection and rational medicine use in efforts to provide an accountable mechanism to support decision making related to the funding, cost, and use of medicines and health technologies in South Africa. Improved decision making is key to determining the medicines and other health technologies that will be funded under NHI. Specifically, GHSC-TA assisted AMD in preparing for the development of a framework to conduct HTAs, finalizing the National PTC Guideline, and developing a draft plan for implementation thereof, as well as providing input into the *Antimicrobial Use Surveillance Report for 2019*.

Health Technology Assessment Framework. In efforts to prepare for the establishment of a framework and foundation to conduct HTAs, GHSC-TA supported key AMD initiatives to prepare for selection processes under NHI.

GHSC-TA assisted with outlining the scopes of work for activities to be contracted out, including Terms of Reference (TOR) for conducting HTAs by contracted suppliers. In addition, GHSC-TA drafted TOR for a Bid Specifications and Bid Evaluation Committee to support good governance of the contracting of suppliers for these activities by the NDoH.

GHSC-TA assisted AMD's Essential Drugs Program (EDP) to issue a call to clinical societies country-wide to nominate stakeholders to support strengthening and broadening the current standard treatment guidelines (STGs). The purpose of this activity is to prepare and expand the STGs as the base of the national health benefits that will be funded under NHI by including more detailed clinical guidance related to disease presentation and diagnosis (pathology and radiology). As of December 2019, more than 90 nominations had been received from the societies contacted.

GHSC-TA also provided assistance for activities related to the current STGs and the EML, including development of the foreword, introduction, and therapeutic class database of the Adult Hospital Level STGs. Following the Minister of Health's approval, these will be published and disseminated to stakeholders. In addition, GHSC-TA provided technical assistance in strengthening governance, including processes to manage actual and potential conflicts of interest, with the declaration of interest form for the conflict of interest policy finalized.

National Pharmaceutical and Therapeutics Committee Guideline and Implementation Plan. To enable cascading of improved selection and use of medicine in provinces, districts, and health establishments, the development and implementation of the National PTC Guideline continued during the quarter. The guideline was presented to the PHC-SC-PS in November and finalized and approved for publication in December. The guideline assists in promoting good governance in the functioning of

these bodies, with standardized functions, roles, and objectives, as well as supporting an outcomes-based approach to the selection and use of medicines.

Spotlight on Success:
Many of the Provincial Heads of Pharmaceutical Services requested assistance to improve the functioning of their PTCs, particularly around formulary management, showing evidence of success of AMD's communication initiatives relating to the National PTC Guideline and National Formulary Guideline.

During the quarter, GHSC-TA commenced developing the **draft National PTC Guideline Implementation Plan** to enable implementation of the guideline at provincial, district, and health establishment levels across the provinces. Training materials for the formulary management part of the PTC Guideline were finalized for review by the AMD.

Stakeholder engagement. Effective communi-cation initiatives and knowledge sharing are critical elements to ensure that key stakeholders across all relevant sectors in South Africa are engaged in and educated on the importance of the provision of quality pharmaceutical services under NHI. GHSC-TA supported the AMD to develop communication materials tailored to the audiences at four conferences, attended three conferences and workshops alongside the AMD, and presented at one event. Of strategic importance, GHSC-TA attended the 3rd National South African Pharmacy Conference and supported AMD engagement with stakeholders on the role of the pharmacist in NHI. Additionally, GHSC-TA participated in the Pharmacy Month 2020 campaign, with the purpose of improving communication between patients and pharmacists, as well as promoting the role of pharmacies in the provision of primary health care services under NHI.

GHSC-TA team members and Affordable Medicines Directorate staff at the National Department of Health stand at the Third National Pharmacy Conference.

During Y4 Q1, GHSC-TA redesigned the HTA stakeholder database as a smart Excel tool with relevant filters and user explanations to make the tool more user-friendly and facilitate the involvement of relevant stakeholders. The program also developed an AMD stakeholder management tool to capture and archive stakeholder information to assist routine communications, thereby promoting greater awareness of AMD activities.

Antimicrobial Use Surveillance Report for 2019. Antimicrobial resistance (AMR), and its linkages to irrational use of medicines, is a growing public health concern in South Africa and the world. GHSC-TA assisted the AMD in its role as the secretariat of the Ministerial Advisory Committee on Antimicrobial Resistance (MAC-AMR) during the quarter. This involved developing the draft TOR of two sub-committees of the MAC-AMR, namely the One Health Technical Working Group, which focuses on an approach to tackle AMR that includes the human health, animal health, and environmental sectors, and the Educational Technical Working Group, which aims to provide recommendations on the incorporation of AMR strategies into medical, veterinary, agriculture, and environmental health curricula as well as continuing professional development (CPD) programs.

GHSC-TA also developed content for a CPD AMR awareness module, aimed at institutionalizing the AMR strategy in clinical practice.

Additionally, GHSC-TA assisted with various activities to enhance the systems for detection and eradication of AMR, including the development of the *Antimicrobial Use Surveillance Report for 2019*. Together with the consolidation and analysis of data obtained from the South African Revenue Service relating to the importation of APIs for manufacture of antibiotics (2017 and 2018), GHSC-TA authored the draft methods section of the surveillance report. An antimicrobial use analysis was performed on provincial depot data, including defined daily dose as the medicine utilization tool. In addition, a comparison of ARV data from RSA Pharma and provincial depot data from June 2017 to December 2018 at the national and provincial levels was conducted to determine the most appropriate data sources for the report.

GHSC-TA aided with the processing of applications for Third Line ARV Therapy (TLART) for patients, as well as assisted in streamlining the TLART post-application process by creating SOPs.

GHSC-TA also provided assistance in the development of the business case for multi-month dispensing (MMD) of ARVs in South Africa. This work included a situational analysis, options analysis, and recommendations on a proposed way forward to introduce MMD of ARVs.

OUTCOME LEVEL RESULTS

The program's theory of change hypothesizes that by supporting AMD efforts to perform HTAs and leverage their outputs, the Government of South Africa will demonstrate improvements in the selection and use of medicines. In efforts to test these assumptions, GHSC-TA monitors two KPIs. This section provides an overview of the progress and results observed against these KPIs through the end of Year 4 Quarter 1.

KPI 2. NUMBER OF MEDICINE SELECTION DECISIONS MADE UTILIZING HEALTH TECHNOLOGY ASSESSMENTS PROCESSES

The program seeks to measure the number of decisions made by the National Essential Medicines List Committee (NEMLC) and other relevant committees using HTA processes to inform decision making. During the quarter, no medicine selection was done utilizing HTAs and performance remains at four. Further groundwork on the development of an HTA strategy and framework was, however, undertaken. A meeting with the Acting Director General is scheduled to take place in the coming quarter to discuss the future of HTAs in alignment with the NHI Bill published in July 2019.

KPI 3. PERCENTAGE OF ASSISTED PHARMACEUTICAL AND THERAPEUTICS COMMITTEES WITH IMPROVED OPERATIONAL CAPACITY

KPI 3 measures improvement in operational capacity of PTCs assisted by GHSC-TA. Informed by the approved National PTC Guideline, the draft implementation plan outlines the activities designed to institutionalize the guideline. Priority activities, including mentorship, training, and assistance with formulary development, have been identified and engagements with the provinces have commenced. GHSC-TA anticipates conducting a baseline assessment of PTC capacity and commencing training of priority PTCs in the coming quarter.

SUPPORT OPTIMIZATION OF THE SUPPLY CHAIN

The South African health supply chain, specifically the procurement and distribution of medicines, has relied on outdated and inefficient systems and processes. Procurement and distribution of medicine have been challenged by limited linkages and coordination of efforts between the national and provincial levels. Given the current and expected medicine expenditures and 95-95-95 targets, the need to generate efficiencies and savings within the procurement and distribution functions of the supply chain are increasingly important. Through strengthening the NDoH's capabilities and

introducing efficient and uniform processes across all levels of the medicine supply chain, GHSC-TA supports supply chain optimization, improved planning processes, and end-to-end visibility, thus enabling better oversight and decision making.

ACTIVITIES AND ACHIEVEMENTS

DEMAND AND SUPPLY PLANNING

Demand Planning. Demand planning involves combining statistical forecasting techniques and judgment to construct demand estimates for medicines to fulfil forecasted patient needs. Accurate demand planning has a profound impact on health outcomes, quality of life, and the nation's economy. It improves medicine availability, budget planning, reduces the cost of inventory and distribution, and improves supplier engagement, among other benefits. In South Africa, demand planning will fundamentally improve the availability of medicines used to fight HIV/AIDS, TB, and other diseases.

- **Implementation of demand planning activities at the provincial level** aims to establish reliable projections for each product at each health establishment in a province. The demand planning process, as designed and documented by GHSC-TA, has been implemented in four provinces: EC, NW, GP, and KZN. In each of these provinces, an implementation approach was followed by collecting and cleansing historical data, conducting baseline forecasts with a statistical forecasting tool (Forecast Pro), enriching the information with inputs from multiple stakeholders, and then finalizing the forecast. The forecast is cashed up (i.e. converting a volume forecast into a value forecast) and is then signed-off at the demand review meeting. Provincial demand planning was further entrenched in the provinces, with a focus on getting the demand review process established with appropriate stakeholders signing-off the forecast during the demand review meeting. A standard template for the demand review presentation has been developed and the same contracts, including those for ARVs, TB, medicines, and vaccines, have been reviewed across all four provinces.

- During the first quarter of Year 4, GHSC-TA also initiated the **demand planning process in two additional provinces**, the FS and WC, where the leadership teams were briefed on the process and the implementation plan was discussed and agreed upon.

- At a national level, the demand planning effort has been to establish the tender forecasting process, to create enrichment reference guides, and establish in-contract demand planning.

- The **tender forecasting process** is designed to allow NDoH to create more accurate medium- to long-term forecasts for upcoming tenders. This will result in improved supplier efficiency, more informed procurement processes, and, ultimately, improved stock availability. During Q1, the tender forecasting process, previously performed by GHSC-TA, was documented and handed over to NDoH for implementation. GHSC-TA will continue to monitor the process and provide support and guidance where needed.

- GHSC-TA created an **enrichment reference guide** per contract to consolidate any insights that could influence the demand forecast and that should be included as part of the data enrichment process. Inputs informing the guides were provided by the EDP and Contract Management Unit (CMU) of AMD, the NDoH Treatment Programs, and NDOH support partners, including the Clinton Health Access Initiative (CHAI). Following circulation, these enrichment reference guides are used by the demand planning team to inform and adjust the forecasts as needed. As these are evolving documents, the maintenance of enrichment references guides will be transitioned to the AMD in the next quarter.

- The **in-contract demand plans** have been created to support the CMU in their engagements with suppliers. The CMU will receive information comparing actual volumes and future forecasts per contract against the original contract award volume for that supplier. This will enable suppliers to gain insight into future volume requirements and commit to the

adjusted volumes moving forward. Provinces can also be held accountable for usage and any variance from the original contracted volumes.

- GHSC-TA provided further assistance by designing a central demand planning team, which will be responsible for generating the forecasts on behalf of the provinces, work with the provinces to enrich the forecasts, and obtain necessary approvals during provincial demand review meetings. This unit will only come into effect once the relevant staff appointments have been made by the NDoH. In this quarter, GHSC-TA developed interview guides and a case study for potential candidate, to support the recruitment process.

Another significant intervention in Q1 was work relating to the **ring-fencing of provincial medicine budgets**. The current processes for supplier payments, budget forecasting, and budget allocations and the fact that the medicine budget is not ring-fenced adversely impact medicine availability. These current processes negatively affect the provinces' ability to pay suppliers within the prescribed period of 30 days as required by the Public Finance Management Act. Furthermore, the lack of clear, adequate, and continuous budget monitoring, reporting, and accountability for the medicine budget means that provincial departments cannot proactively and effectively address existing budget gaps or review cost drivers and trends that may impact future budget allocations. To address these challenges, the Presidential Health Summit, from October 2018, proposed to:

> *"Ring-fence pharmaceutical budgets and insulate them from being overridden to avoid budgets being redirected for nonmedical expenditure which results in stock outs."*

GHSC-TA was thus asked to assist in generating a budget for medicines for Financial Year 2020/2021 for all provinces based on accurate demand forecasts. An agreement was then gained at the National Heath Council - Technical Advisory Committee (NHC-TAC) and accepted by the Heads of Pharmaceutical Services (HOPS) to ring-fence the medicine budget and adopt the demand planning process as the source for provincial budgets. GHSC-TA has successfully worked with each of the nine provinces to generate a budget forecast and ring-fenced budget. During the first quarter of Year 4, nine provincial ring-fenced budgets were compiled and reviewed, of which seven were signed-off by the following provinces: GP, KZN, LP, EC, MP, FS, and NC.

Supply Planning. The key purpose of supply planning is to get the right product to the right place at the right time in the right quantity at the lowest cost. Supply planning also seeks to ensure sufficient buffer or safety stock is held at health establishments, in order to respond to and manage variability in demand and supply. GHSC-TA has designed a process that would move the replenishment ordering from a cumbersome, time-consuming, and manual process to an automated process driven by informed minimum/maximum levels and use of existing stock capture and inventory management systems. This new process is based on an "Informed Push" model and should enable provinces to free up valuable time for front line health care providers and reduce stock holding whilst driving an increase in medicine availability.

In NW during the previous quarter, a supply planning POC tested the methodology and tools at four sites, including two using RxSolution and two using SVS. The aim of the POC was to increase stock availability whilst reducing the workload on health establishment staff by automating the ordering process. The results of the POC were largely positive and will inform the future roll out of supply planning processes to other provinces. One of the goals of the new, informed push approach to supply planning and replenishment is to increase the amount of stock on hand within the ideal "cycle stock" range. Figure 4 shows the improvement in ideal "cycle stock" levels at all four sites and the reduction in "at risk" stock at all sites except Blydeville. The increase in "at risk" stock at Blydeville was largely due to the absence of a pharmacist's assistant on site. One of the lessons learned from the POC was to ensure that facilities where RxSolution is to be implemented have the necessary staff to use the

tool. A POC report detailing lessons learned and providing recommendations for expansion of supply planning has been drafted and is undergoing final review.

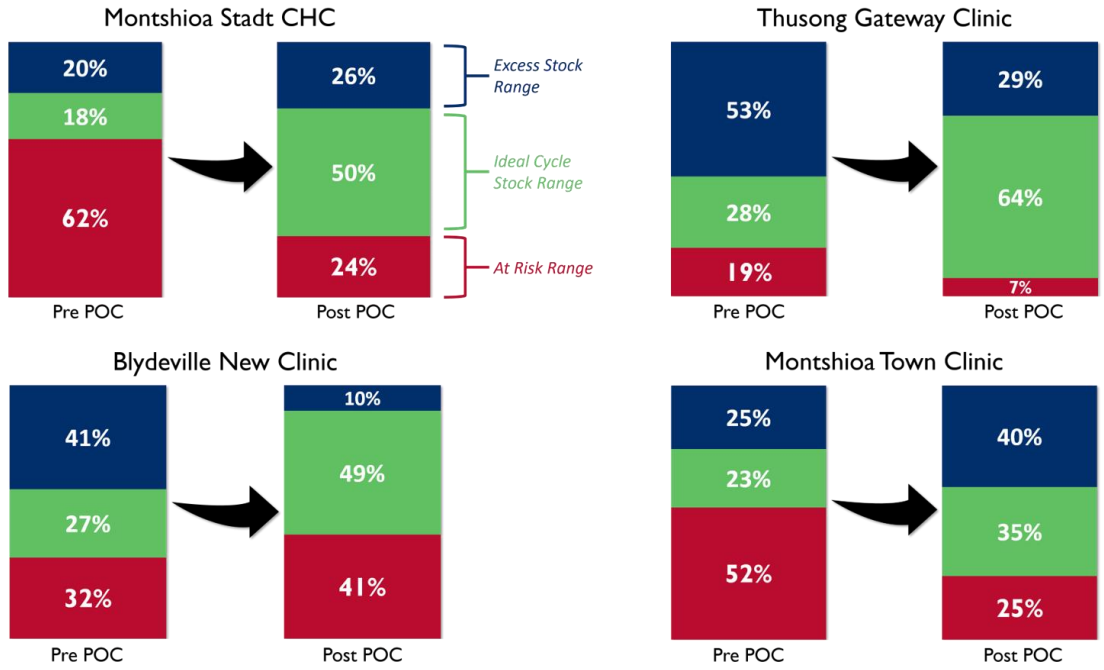


Figure 4: Improvement in Ideal Cycle Stock Levels during NW Supply Planning POC

PROVINCIAL SUPPORT TEAM

While the GHSC-TA program has shown marked progress and success in the development and implementation of supply chain reforms at the national and provincial levels, the general consensus is that more effort is required to strengthen implementation of these reforms at provincial and district and, where possible, health establishment level. In response, GHSC-TA proposed the concept of a **Provincial Support Team** to the NDoH and provincial stakeholders. This team will facilitate implementation and institutionalization of supply chain reforms included in GHSC-TA at lower levels of the supply chain, primarily through the provision of ongoing direct support to provincial pharmaceutical services implementing teams. Upon approval, GHSC-TA undertook a recruitment process in October 2019 to establish the PST. By the end of December 2019, nine individuals had been identified and selected to comprise the team, including seven provincial-specific resources (resident in EC, FS, KZN and GP), an operational support resource, and the team lead. The PST was formally introduced to the provinces by way of letters addressed to the provincial Heads of Health from the Director-General of the NDoH. During the period, the PST underwent a five-day induction process where they were familiarized with GHSC-TA and their specific areas of support.

TLD TRANSITION

GHSC-TA is assisting the NDoH with the roll out of TLD in South Africa, with the aim of transitioning eligible first line patients from their existing treatments to TLD. This requires successful demand and supply planning to accurately forecast ARVs required country-wide. The new ART guidelines were approved in October 2019 by the National Health Council (NHC) and the Minister of Health, and the national launch was held on 27 November 2019. Following the development of plans tailored to each province's unique requirements, provinces will begin to transition patients to TLD.

GHSC-TA worked with CHAI and the Africa Resource Center ARC to develop models to inform the development of the **National Demand and Supply Plans** to assist provinces in transitioning eligible patients from TEE to TLD. The national demand plan uses a statistical baseline forecast, informed by the use of epidemiological data, the ART Guideline, the number and location of facilities, and planned

campaigns to introduce TLD, and predicts the future quantities of medicine required to meet patient demand. The national supply plan builds on the demand plan to inform suppliers of the estimated stock requirements and quantify product replenishment cycles so that they have sufficient stock available to satisfy demand.

In Y4 Q1, GHSC-TA participated in the sixth round of provincial TLD steering committee meetings in all provinces to discuss the transition plan, finalize the provincial demand forecast, and discuss the plan for the TLD launch. The final provincial forecast, projecting patient needs down to health establishment level, was completed and submitted for final approval to the HOPs and the Acting Director of the Strategic Health Program.

GHSC-TA developed the TLD dashboard to assist the transition task team and provinces in tracking provincial transition targets and medicine availability of all items related to the transition, including TB preventative treatment and contraceptives.

The National Supply Plan, including revised estimates for TEE and TLD, was shared with suppliers. Weekly dial-in meetings are underway to monitor if suppliers have sufficient stock available for all items related to the transition. The monthly updated supply plan is communicated to all stakeholders and any changes or potential supply issues on TLD or TEE communicated to the provinces and the CMU. GHSC-TA assisted provinces with the planning and implementation of the revised CCMDD transition algorithm, the communication plan, and the management of pharmacovigilance in each province.

A banner outside Turton CHC congratulates Ugu district on achieving 90-90-90 targets.

GHSC-TA, together with other stakeholders, assisted with the successful launch of TLD by the Minister of Health Dr. Zweli Mkize, at Turton CHC in Ugu District in KZN in November.

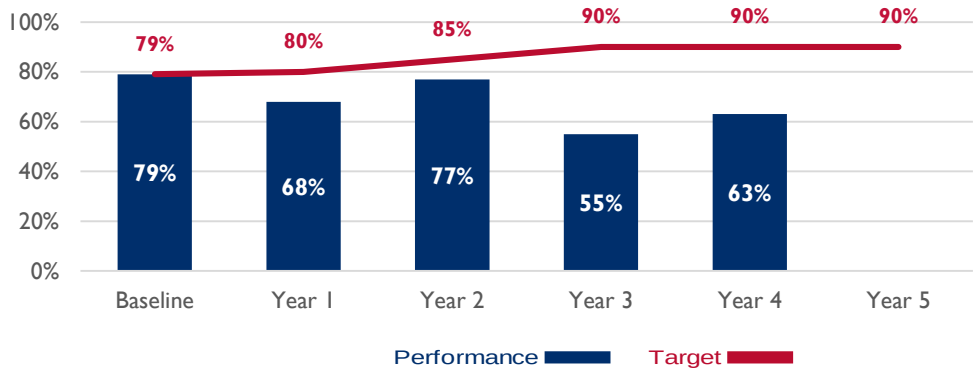
OUTCOME LEVEL RESULTS

GHSC-TA hypothesizes that by supporting activities to improve contract and supplier performance management, as well as working with AMD to improve visibility and analytics to strengthen planning processes, the Government of South Africa will demonstrate improvements in the security of medicine supply and the strengthening of demand planning, supply planning, and inventory management. In efforts to test these underlying assumptions, GHSC-TA identified and routinely monitors eight performance indicators. This section provides an overview of the progress and results observed against these KPIs through the end of Y4 Q1.

KPI 4. PERCENTAGE OF ANTIRETROVIRAL UNITS DELIVERED BY SUPPLIERS WITHIN CONTRACTUAL LEAD-TIME (SUPPLIER PERFORMANCE RELIABILITY – ON TIME)

Figure 5 shows that 63% of ARVs were delivered by suppliers within the contractual lead-time, demonstrating an 8% increase in performance from the Year 3 figure of 55%. Moreover, the average lead time on ARV units improved from 35 to 25 days in the reporting period. Despite these gains, overall performance remained below the established target of 90% due in part to six of 12 suppliers having lead times between 16 to 59 days. In addition, by December 2019, TLD deliveries had achieved 79% on time delivery whereas TEE deliveries over the quarter averaged only 40% on time per month.

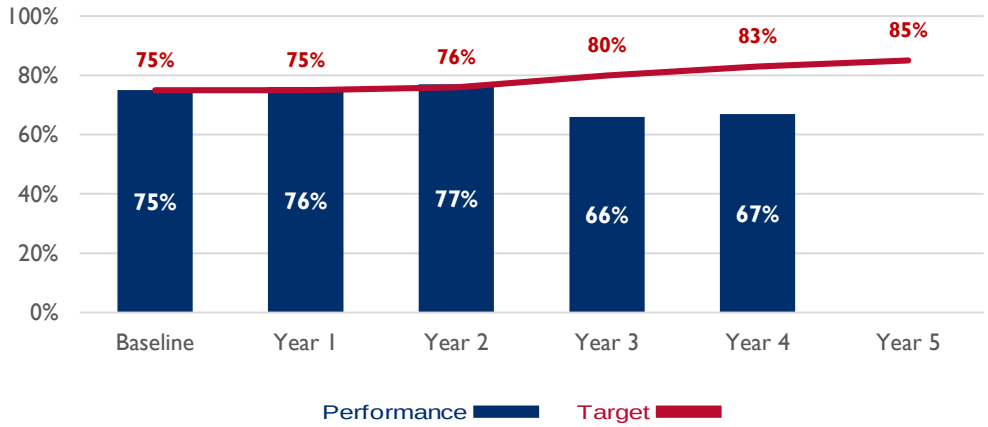
Figure 5: Percentage of Antiretroviral Units Delivered by Suppliers within Contractual Lead-Time (Supplier Performance Reliability – On Time)



KPI 5. PERCENTAGE OF MASTER HEALTH PRODUCT LIST ITEMS ON TRANSVERSAL CONTRACTS EXCLUDING ANTIRETROVIRAL UNITS DELIVERED BY SUPPLIERS WITHIN CONTRACTUAL LEAD-TIME (SUPPLIER PERFORMANCE RELIABILITY – ON TIME)

Figure 6 shows KPI 5 performance remained relatively stable at 67%, just over the Year 3 performance of 66%. While performance remained stable, it continues to fall below the established target of 83%.

Figure 6: Percentage of Master Health Product List Items on Transversal Contracts Excluding Antiretroviral Units Delivered by Suppliers within Contractual Lead-Time (Supplier Performance Reliability – On Time)

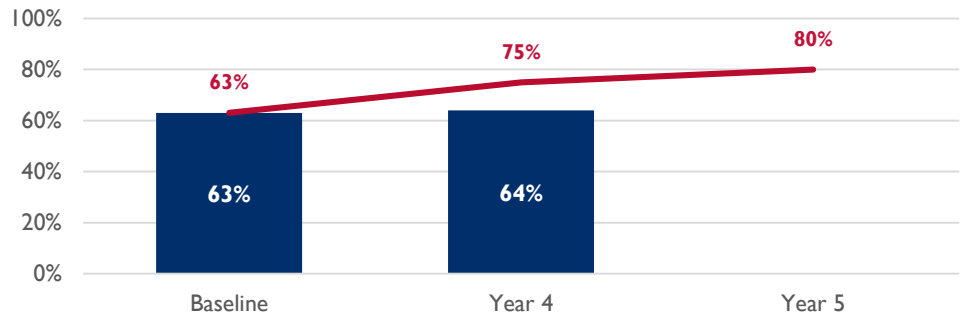


There was a significant change in contractual lead time for non-ARV units, measured at 23 days during the quarter. This demonstrated an increase of four days against Year 3 performance of 19 days, limiting improvements in performance. In addition, a quarter of the major suppliers delivered products beyond the standard 14 days' contractual lead time.

KPI 6. SUPPLIER PERFORMANCE RELIABILITY – PERFECT ORDER FULFILMENT FOR ORDERS PLACED ON SUPPLIERS (IN-FULL)

Supplier performance reliability was reported at 64% during Y4 Q1, demonstrating stability against the baseline value of 63% collected during Year 3, as shown in Figure 7. The performance against KPI 6 is directly related to the lead time. Unfortunately, supplier issues continue to result in longer lead times (24 days) for both ARVs and non-ARVs, which adversely affect order fulfilment. Provinces do have the ability to impose penalties on suppliers for late deliveries—provisions for which should potentially be considered in the future.

Figure 7: Supplier Performance Reliability – Perfect Order Fulfilment for Orders Place on Suppliers (In-Full).



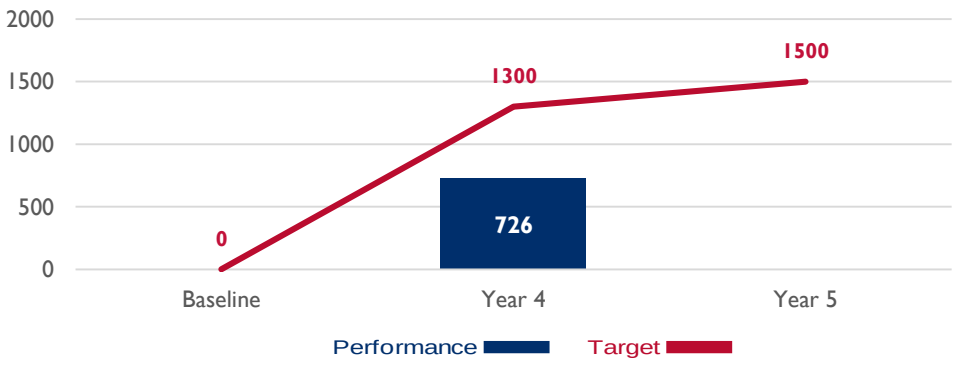
KPI 7: PERCENTAGE OF MASTER HEALTH PRODUCT LIST ITEMS ON TRANSVERSAL CONTRACT DELIVERED VIA DIRECT DELIVERY TO THE HOSPITALS DESIGNATED BY THE PROVINCE TO RECEIVE DIRECT DELIVERY ORDERS

There is currently no system in place to provide the data required to report on this KPI. GHSC-TA is exploring ways to access the data needed, using existing WMS systems and medicine master data profiles per province.

KPI 8. MIN/MAX LEVEL REPORTING – NUMBER OF HEALTH ESTABLISHMENTS AND WAREHOUSES WITH CONFIGURED MINIMUM AND MAXIMUM (MIN/MAX) STOCK LEVELS FOR STOCKED MEDICINES BEING REPORTED TO THE NSC

This KPI measures the number of health establishments and warehouses with configured minimum and maximum (min/max) stock levels for stocked medicines being reported to the NSC on a monthly basis. GHSC-TA established a target of 1,300 sites for Year 4 performance. Figure 8 shows that, by the end of Y4 Q1, GHSC-TA observed 726 health establishments with configured min/max stock levels, the majority of which were PHC clinics and hospitals. With enhancements to the functionality of SVS, sites adopting the functionality will be required to have updated the min/max levels loaded on the application, which will help to increase this number in line with the target for Year 4.

Figure 8: Min/Max Level Reporting – Number of Health Establishments and Warehouses with Configured Minimum and Maximum (Min/Max) Stock Levels for Stocked Medicines Being Reported to the NSC.



KPI 9: DEMAND FORECAST ACCURACY FOR PROVINCES USING THE DEMAND FORECASTING PROCESS

This KPI measures the accuracy of forecasted demand relative to actual demand. It is critical to have high forecast accuracy to avoid stock outs and maintain appropriate levels of inventory. Forecast accuracy is measured based on absolute percentage error, which is an absolute variance between

forecasted demand and actuals expressed as a percentage of actuals. Unfortunately, due to data extraction challenges, GHSC-TA was unable to get updated data from all provinces to compare with the forecasted figures.

The forecast accuracy is measured for ARVs, TB medicines, and vaccines. Data was only available for KZN and NW. The overall forecast accuracy for the two provinces is 52 percent, with ARVs performing best at 55 percent. The monthly review of the forecast accuracy also revealed poor forecast accuracy of 23 percent in November for ARVs, largely driven by the uncertainty around the launch of TLD. The December forecasts for vaccines and TB medicines were poor, indicating that the effect of seasonality on the forecast needs further attention.

KPI 10: FORECAST BIAS FOR PHARMACEUTICAL FORECASTS IN PROVINCES USING THE DEMAND FORECASTING PROCESS

Forecast bias measures the tendency for actuals to be over or under forecast on a consistent basis. Presence of a tendency in either direction would require root cause investigation and corrective action. Forecast bias is measured as a variance between forecasted demand and actuals, either positive or negative, expressed as a percentage of actuals over a series of consecutive time periods. As was the case with KPI 9, forecast bias data was not fully available to inform performance across all provinces. For EC and GP there is currently a problem with the data extraction to get an update on the actual data to compare to the forecast. This challenge is being addressed with NDoH and SITA.

The forecast bias presented is for ARVs, TB medicines, and vaccines. Uncertainty surrounding the launch of TLD and the ability to forecast seasonal variances is believed to have an effect on performance. The forecast bias for the period is 9.8 percent, which is within the 10 percent target range.

KPI 11: PERCENTAGE OF ELIGIBLE PATIENTS TRANSITIONED FROM TENOFOVIR/EMTRICITABINE/ EFAVIRENZ TO TENOFOVIR/LAMIVUDINE/ DOLUTEGRAVIR

This indicator monitors GHSC-TA's demand and supply planning support as part of the TLD transition to support the phase-out of TEE and roll out of TLD. Measurement of this KPI is expected to begin on 1 February 2020. GHSC-TA is working closely with the NDoH team, the district support partners, and provincial HIV and AIDS, STI, and TB programs to find a suitable reporting platform for all facilities to use, as various platforms are currently being utilized, e.g., KZN is using Vantage (a Broadreach system) to track the transition KPIs and the other provinces are reporting manually.

STRENGTHEN GOVERNANCE

One of the functions of the AMD is to provide oversight and set policy with respect to pharmaceutical services provided in South Africa. Support provided by GHSC-TA includes assisting the AMD and provincial pharmaceutical services in improving governance by strengthening the policy and legislative framework, establishing appropriate governance structures, and building capacity to provide the necessary oversight. As policies are the mechanism by which the SIMA is translated into action and reforms institutionalized, a key role of GHSC-TA is to provide TA in the development of relevant policies and legislation necessary for implementation of strategic priorities and interventions.

ACTIVITIES AND ACHIEVEMENTS

GOVERNANCE

GHSC-TA continued to assist the AMD and provincial pharmaceutical services in improving governance by strengthening the policy and legislative framework, establishing appropriate governance structures, and building capacity to provide the necessary oversight. In this quarter, several activities were undertaken to support the development and revision of legislation and policies as an enabler for medicine availability including guidelines relating to Section 22A(15) permits, the e-Prescribing and medicine availability monitoring policies, and the TOR for the RxSolution steering committee.

- GHSC-TA continued to provide technical assistance to AMD in addressing various concerns raised by the SAPC regarding the issuing and management of **Section 22A(15) permits** enabling nurses to supply certain medicines to patients. The revised application form and guideline was reviewed by the task team comprised of AMD, GHSC-TA, SAPC, and a representative of the Chief Nursing Officer of NDOH. This work is ongoing and includes the development of guidelines for the designation of organisations providing a health service in terms of the Nursing Act.

- GHSC-TA drafted the first version of the **Medicine Availability Monitoring** policy. The objective of the policy is to facilitate visualization, analytics, and monitoring of medicine availability to support the use of a fact-based approach by stakeholders at all levels of government to improve supply chain responsiveness and reliability.

- GHSC-TA supported AMD with the development of the draft **e-Prescribing policy**. The objective of the policy is to define the concept of electronic prescribing, outline the business rules, and allocate the expected roles and responsibilities of the various health care professionals involved. The policy will support implementation of the e-Prescribing system.

- The **National RxSolution Steering Committee** is being constituted by the AMD to oversee the implementation and support of RxSolution and define high-level principles and priorities for the re-platforming of RxSolution. GHSC-TA drafted the TOR for the steering committee.

In addition, the FS requested support from GHSC-TA in reviewing the SLA between the provincial depot and demanders (health establishments), which lapsed in December 2019. The SLA outlines the high-level principles related to various supply chain activities, as well as the roles of responsibilities of the role players involved. GHSC-TA facilitated two workshops with stakeholders from the medical depot and district pharmacists to review and update the SLA.

GHSC also provided support to AMD and SAPC in the review of the draft regulations relating to specialties in pharmacy to be published in terms of the Pharmacy Act. The specialties will be aligned to the pharmaceutical needs of the country, taking the implementation of NHI into consideration.

CONTRACTING AND CONTRACT MANAGEMENT

The NDoH procures medicines using a competitive tendering process, enabling the NDoH to take advantage of economies of scale, promote security of supply, and obtain the best possible price for medicines. Provinces then procure off these contracts, which are extremely important to support medicine availability. Efficient contracting and contract management processes are essential to ensure availability of medicines. It is critical that contracts are specified correctly, evaluated according to defined criteria, and awarded in time. Similarly, contracts must be managed so that any medicine availability challenges are identified timeously, managed proactively, and that strategies are developed to mitigate future challenges. During the period under review, GHSC-TA led the development of process maps, worked with AMD to update the Special Requirements and Conditions of Contract, and reviewed the citizen stock out reporting proposal.

Process Maps - Contracting. In Y4 Q1, GHSC-TA commenced drafting high-level process maps for the six stages of contracting shown in Figure 9

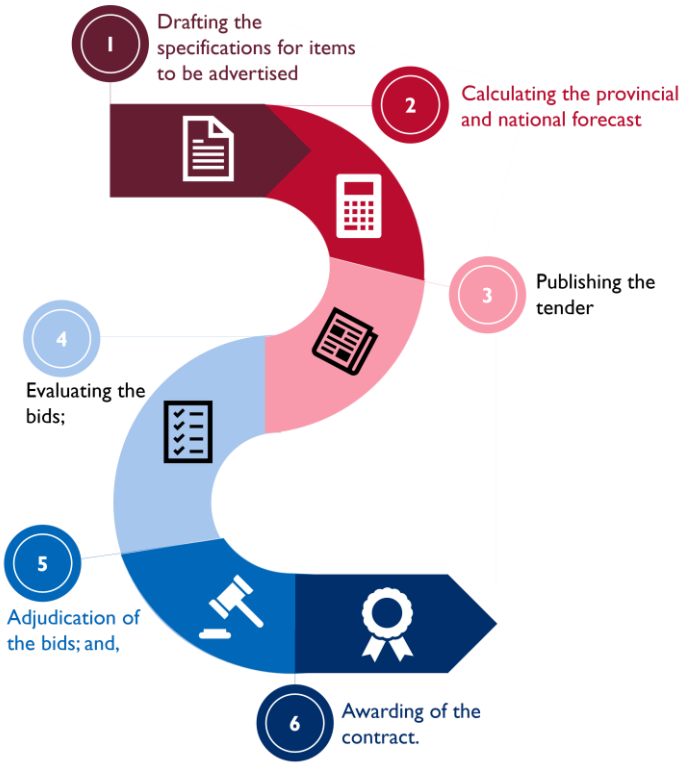


Figure 9: Six Stages of the Contracting Process

The development of process maps was undertaken to ensure that the contracting process is seamless and that all activities are completed within reasonable timelines. The process maps will also assist in determining the level of effort required to carry out the entire process of contracting and will inform the development of the corresponding SOPs. The maps will also contribute to the development of the requirement specifications for the contracting data to be included in the MMDS. GHSC-TA also assisted in expanding the tendering project plan to include milestones and activities for each tendering stage and formulas to auto-calculate duration of each activity to enable better planning. Once the tender is advertised, a minimum of a one-month period is provided to suppliers to submit bids; in this period suppliers are allowed to raise any queries regarding the advertised tender. GHSC-TA supported AMD with responding to these queries and general medicine availability media questions.

In the previous year, a governance structure, IMAT, was established by AMD. IMAT includes members of the AMD team and provincial stakeholders responsible for managing medicine availability in their provinces. The purpose of IMAT is to support the establishment and review of medicine availability

escalation protocols at national and provincial levels. This work is done in collaboration with the NSC, with lists of medicines which are at risk of supply challenges being compiled and remedial action implemented to mitigate the impact of supply constraints. In this quarter, work commenced on drafting process maps for IMAT, based on the terms of reference. The process maps have been discussed and agreed upon with AMD. The criteria for decision making regarding inclusion and removal of items on the monitoring and hot lists has also been reviewed and updated. GHSC-TA continued to support AMD with managing supplier performance and mitigating stock-out challenges.

Updating the Special Requirements and Conditions of Contract. GHSC-TA provided support to AMD with administration and management of the tender process. The support included the review and updating of the Special Requirements and Conditions of Contract (SRCC), a document published with each tender detailing the legislative compliance requirements of the bid, the evaluation criteria to be applied, and the award and contract management conditions. The team assisted with bid closure activities and preparations for the bid evaluation committee meeting.

Citizen stock out reporting proposal. As part of the Minister of Health's first 100-day plan, a call centre is to be established to provide a mechanism for all South Africans to report on medicine availability challenges encountered at public health establishments throughout the country. In so doing, the NDoH intends to improve service delivery by ensuring that the loop is closed on medicine availability monitoring through citizen reporting, while simultaneously ensuring that citizens' challenges with accessing medicines are captured and managed until resolved. GHSC-TA was requested to support AMD in drafting the concept note which provides an overview of the proposed Citizen Stock-out Reporting Mobile App and Call Centre. The concept paper served as the basis to build a business case used to secure proposals from prospective service providers to support the provision of the call centre service. The team reviewed and provided input into the proposal prepared by the prospective service provider. The mobile application has been developed by the service provider and further input was provided on the demonstration application.

OUTCOME LEVEL RESULTS

GHSC-TA hypothesizes that through increasing the capacity of the AMD to develop and institutionalize policies and legislation and implement good governance practices in coordination and engagement with key stakeholders, the AMD will demonstrate an increased application of good governance principles embodied in policies, implementation plans, processes, and SOPs There are no outcome level KPIs reported on under this objective.

IMPROVE WORKFORCE MANAGEMENT

To strengthen the workforce and organizational structures within AMD to perform the functions necessary to improve medicine availability and support implementation of the SIMA, GHSC-TA assisted the AMD in developing a revised organizational structure aligned to the future implementation of NHI. GHSC-TA also supported the development of job descriptions, performance management documents, and interaction models for both interim and final structures.

ACTIVITIES AND ACHIEVEMENTS

WORKFORCE MANAGEMENT INTERVENTIONS

GHSC-TA continued to provide ongoing performance monitoring and support to the ISP team through ongoing huddles, training, and coaching sessions. Additionally, GHSC-TA supported the finalization of the ISP transition and handover plan for implementation in the next quarter. Ongoing workforce strengthening activities for AMD also took place, which included the development of additional job descriptions and Performance Management and Development System (PMDS) documents.

Information Systems and Projects. This unit manages projects on behalf of the AMD. GHSC-TA assisted with workforce strengthening through various support functions, including project plans, presentations, and meeting management in order to equip the unit to effectively manage all projects.

During the quarter under review, the **Project Management Playbook** was completed. The playbook features processes and templates to be used for project management together with roles and responsibilities of project managers. The playbook and associated tools form the basis for knowledge sharing and more consistent application of project management principles by project managers. GHSC-TA concluded a series of 12 knowledge sharing sessions with the ISP project managers. During these sessions, GHSC-TA showcased practical examples of how project management has been applied previously and provided project managers with the opportunity to apply tools and templates to their own projects.

GHSC-TA conducted individual coaching sessions with ISP PMs on their new roles and responsibilities.

In order to measure improvement of activities implemented, KPIs for the unit have been tracked in the past quarter through the huddle sessions and depicted in the **ISP impact assessment**. The first quarterly impact assessment was presented to the ISP team. The second and third quarterly impact assessment presentations were delayed, but the impact assessment presentations were submitted to the Director: AMD for review.

Affordable Medicines Directorate. GHSC-TA provided ad hoc support to the Director: AMD on the development of job descriptions for AMD units, including CCMDD and the interim AMD structure, including the contracting unit.

OUTCOME LEVEL RESULTS

GHSC-TA hypothesizes that by supporting the AMD to develop a set of standardized structures, roles, competencies, and performance management, together with institutionalization of a change management program and upskilling and mentoring of staff, the AMD will foster enhanced leadership, management, and technical skills. There are no outcome level KPIs to be reported on under this objective

STRENGTHEN INFORMATION SYSTEMS AND INFORMATION MANAGEMENT

Information systems are critical to support the AMD strategy to improve evidence-based decision making to support improved medicine availability. Beyond organizational governance, GHSC-TA supports data governance and management of master data elements that are crucial to the vision of the AMD and allowing interoperability of information systems. Furthermore, the team continues to support and recommend enhancement to existing systems, analytical processes, and dashboards used by AMD and provincial pharmaceutical services for daily transactions and informing decision making and continuous improvement.

ACTIVITIES AND ACHIEVEMENTS

MASTER MEDICINE DATA SYSTEM

The MMDS is the tool that will centralize management of medicine descriptions and structuring, transversal and other contract data, and formularies into a single repository with adequate process and system controls to support data quality and promote interoperability across systems.

Development. The development of this system, by the AMD contracted service provider, is taking place in phases where the functionality relating to medicines and contracts have been completed. The location management and formulary management modules are currently in progress. Over the course of this quarter, GHSC-TA completed the revisions of the requirements specification for the formulary management tool and reviewed the specification with AMD. Additionally, the program completed internal testing of the Location Master Tool and change requests relating to the MHPL component. The location tool was presented to AMD on November 7, 2019.

Data Entry. GHSC-TA provides technical assistance on MMDS development by assisting with scoping, high level requirements and design, especially with regard to data structures. While initial phases of the master data project have promoted the MMDS functionality to the live environment (medicine and contract), the system is not yet fully populated. GHSC-TA is assisting AMD to enter data to populate MMDS. Once this data is fully loaded and signed off, the environment will transition to using the MMDS as the source of live master data for medicines and contracts. During the period under review, GHSC-TA restructured the existing medicines data to align with the systems functionality improvements and the latest version of the medicine business rules document.

Standard Operating Procedures. Engagements with stakeholders took place in order to agree on processes, roles, and detailed steps to formalize the SOPs. The SOPs are "living" documents that require continuous amendments as processes change and while the system is being enhanced. GHSC-TA completed process mapping to serve as the basis for MMDS contracting and medicine management processes SOP development which is underway.

Master Data Business Rules. Master data business rules for the structuring of medicines on the system complements SOPs and are required to ensure consistency in the way that medicines are structured. The work on business rule development has been around medicine structuring but will be extended to other parts of the system and will require ongoing review as the system is expanded and enhanced.

Integration Plan. The objective of the MMDS is to share centralized master data across the many different IT systems and processes in the national health space, be that in a semi-manual fashion (by use of spreadsheets) or, preferably, via system-to-system integrations. The purpose of the MMDS integration planning is therefore to engage with IT system stakeholders in the broader medicine supply chain to expose them to the requirements for integration, assist them to plan for this integration, and then document high level timelines for integration and create an integration document with an integration roadmap.

NATIONAL SURVEILLANCE CENTRE

To improve the visibility of the performance of the supply chain and to strengthen analytics to facilitate decision making, GHSC-TA seeks to build the governance and information management capacity of the NSC and PSC. Additionally, the program seeks to increase the reporting of medicine availability to the NSC, improve data quality, strengthen oversight at national and provincial levels, and improve information systems and information management. Throughout the period under review, NSC activities largely focused on enriching and enhancing data informing the NSC and institutionalizing the use thereof.

Data Enrichment and Enhancement. Acknowledging that the NSC is only as strong as the data informing the system, GHSC-TA focused on updating the NSC with newly available data on medicine availability and incorporating additional sources of medicine data to enhance visibility. Triangulation of medicine availability data with patient related data was a key activity, with dashboards being developed that visualize stock-on-hand information and minimum and maximum stock utilities using patient numbers at health establishments to determine whether stock-on-hand is adequate to service the expected number of patients. This development has been completed using some of the data received via the RxSolution API. Scaling up of this view is, however, dependent on access to additional data, as well as health establishments using the systems correctly and populating the respective data fields accurately. RxSolution API data auto-refresh has been established to update medicine information at health establishments using RxSolution to the NSC on a daily basis, as opposed to the weekly updates currently taking place. This applies to the 193 facilities connected via the API.

Enhancement of the NSC dashboards progressed well during the quarter and included developing new and updated dashboards aligned with AMD requirements and priorities. Seven new dashboard views were developed during this reporting period along with additional reports and views to ensure users had access to the most current information, including:

- **Integrated View Dashboard** which was completed, approved, and published at national and provincial levels during the quarter.
- The **NSC Mobile Dashboard** was developed and made available to the Minister of Health, Deputy Minister of Health, and the Members of the Executive Committee for Health and HODs of all provinces.
- A dedicated **TEE/TLD Transition Dashboard** was created and published to support the TLD transition team. Enhancements to this dashboard included the integration of contraceptives medicines to the dashboard, as well as the addition of Dolutegravir 50mg.
- **APP Reporting Target Dashboard** was created to track reporting against the NDoH APP targets.
- **NSC User Activity Dashboard** was created to track user activity, including number of logins, reports and views used, and the level of detail interrogated by individual users of the NSC.
- The **Stock on Hand Versus Min/Max Stock Utilities Dashboard** was developed, which visualizes stock on hand against minimum and maximum stock utilities to determine if stock on hand is sufficient to service the demand.
- The **Global Fund on Shelf Availability Dashboard** was redeveloped as per the requirements of the Global Fund.
- The **Items-Out-of-Stock Report** was integrated with Pipeline Analysis Tool (PAT) Status sourced from suppliers.

- A **Supplier Information Report** was developed which links to the Items-Out-of-Stock Report.

Enhancement work also focused on streamlining and cleaning the NSC server and database files by reducing file sizes, automating workflows for data consolidation, increasing data field requirements to support required data, and maintaining the NSC server. All of this work contributes to an NSC that runs smoothly and reliably at an acceptable speed.

In efforts to increase utilization, GHSC-TA explored the opportunity to gain access to additional information sources, specifically as it pertains to patient numbers per facility and patient numbers per medicine regimen with the AMD and NDoH. GHSC-TA also requested a meeting with the Deputy Director General in charge of programs at NDoH to discuss what the NSC is, how program staff could benefit from using the NSC, and access to additional information from programs to further develop the NSC by enriching and expanding on available information sources. The meeting is scheduled to take place in January 2020.

Institutionalization of the National and Provincial Surveillance Centre. Activities promoting the institutionalization of the NSC focused on the use of the NSC, the interpretation of information available on the NSC, and using the information to inform decision-making processes to address medicine availability challenges at a national level, in addition to proactively managing problematic medicine lines and implementing measures and communication strategies to address and mitigate for these challenges. In the first quarter of Year 4, GHSC-TA developed reports on the NSC user activity, health establishment reporting compliance, and medicine availability at facilities. These reports have been submitted to AMD as well as to the PST. Additionally, the report summary could be used as supporting information to supplement the considerations used by the IMAT team in reviewing and creating the medicine availability hotlist.

A key focus of this quarter was on **strengthening provincial capacity** to use and interpret information to inform decision-making processes. GHSC-TA designed a training program complemented by coaching sessions to support Provincial Departments of Health in their journey to integrating the NSC into their systems and culture. The training program and corresponding coaching sessions are facilitated in collaboration with the AMD NSC project manager. In efforts to promote sustainability, GHSC-TA continued handing over responsibilities of core training functions to the AMD. with the following responsibilities being handed over and managed by AMD.

As of December 2019, PSC training has been facilitated across six provinces, with five provinces having completed the full training program: WC, FS, NW, KZN, and MP. Trainings in the EC and NC are ongoing and are anticipated to be completed by the end of the next quarter.

GHSC-TA further supported AMD by reviewing the EDP and CMU operational plans for alignment with the national KPIs and the SIMA in order to confirm that activities identified in these operational plans support the KPIs measured on the NSC.

SUPPLY CHAIN SYSTEMS

Stock Visibility System. SVS is a mobile and web-based application used to report medicine availability at the PHC level. With the visibility functionality in use, the NDoH decided to expand the functionality of SVS to enable it to be used to place orders and confirm receipt of stock electronically. These enhancements to the functionality will assist in improving demand planning and forecasting and supporting the implementation of the informed push replenishment model in a paperless, networked, or cloud-based environment. This system would ideally be integrated with the various electronic systems operational at the various levels within the supply chain, exchanging pertinent supply chain transactional data. Figure 10 illustrates the NDoH's initial vision of the desired future state.

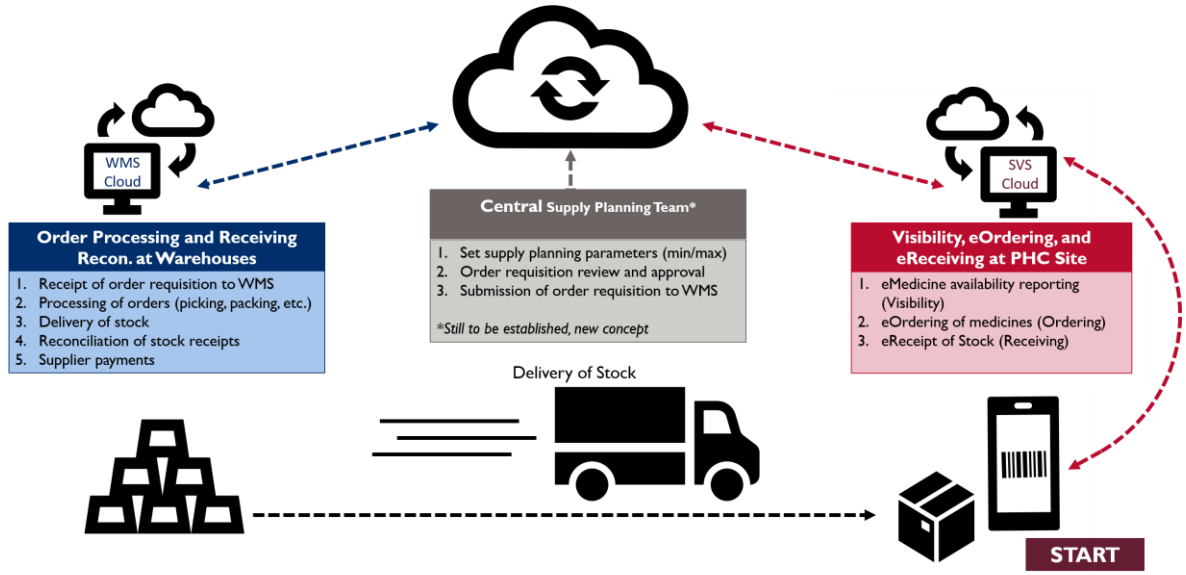


Figure 10: Desired future state: Informed Push Replenishment Management

Although there were significant delays, mostly on the service provider side, which impacted the completion timelines of the development work, the minimum viable product aligned with the NDoH's requirements was delivered in December 2019. This was the delivery of a mobile and web-based app that is able to provide visibility of stock on hand data and enable health establishment staff to place orders and confirm delivery of stock. To align with the initial requirement for the application to integrate with other upstream electronic systems used in the public health space, this capability will be investigated as the app is tested and deployed across the various provinces in the next few quarters.

Ongoing technical support for SVS was also provided over the quarter to guide the development of the new mobile and web application as well as to review and test the functionality at each development cycle. Additional support was also provided towards the development of relevant governance documents to be used to support the testing and deployment of the new functionality, including the user acceptance testing plan, standard operating procedures, and the proof of concept implementation plan, which includes a stakeholder communication and engagement plan.

RxSolution Maintenance and Replatform. This comprises three areas of activity and support, namely, completion and ongoing support of the reporting API, maintaining stock-related aspects of the current version of RxSolution in the interests of data quality and reporting effectiveness, and assisting the AMD-appointed contractors with the rebuilding of RxSolution onto a new technology platform ("re-platforming"), which includes the ePrescribing system.

Reporting Middleware API. The "Reporting Middleware API" is an application and database, instances of which are usually installed on centralized servers per province or per district. The purpose is to automate collection of NSC reporting data by this application, contacting each RxSolution installation where this is possible (i.e. for which network connectivity is sufficient to support connection and data transfer), and manage transfer of reporting data, storing it in the associated database. The system pushes this data from the provincial or district server to the NSC Reporting Database. GHSC-TA estimates that approximately half of all RxSolution installations will have enough connectivity to support the system (approximately 270). The remaining RxSolution instances will still need to submit data manually to the NSC.

During the period under review, GHSC-TA performed various on-site visits and repeat visits to provide reporting API support in the EC and LP as well as Ekurhuleni Metro. Activities were focused

on facilitating connection of new sites to the reporting API middleware. As a result, a total of 193 sites are now connected across seven provinces, including FS, MP, NW, KZN, LP, GP, and EC.

e-Prescribing. GHSC-TA has previously assisted with specifications for and testing of the ePrescribing solution built by the AMD contracted developer. Over the course of this quarter, GHSC-TA's focus was on the implementation and roll out of the application. However, due to concerns over the solution coverage that the contractor was able to achieve and to allow time to review the relationship of this software to other ePrescribing solutions, the implementation and roll out has been postponed.

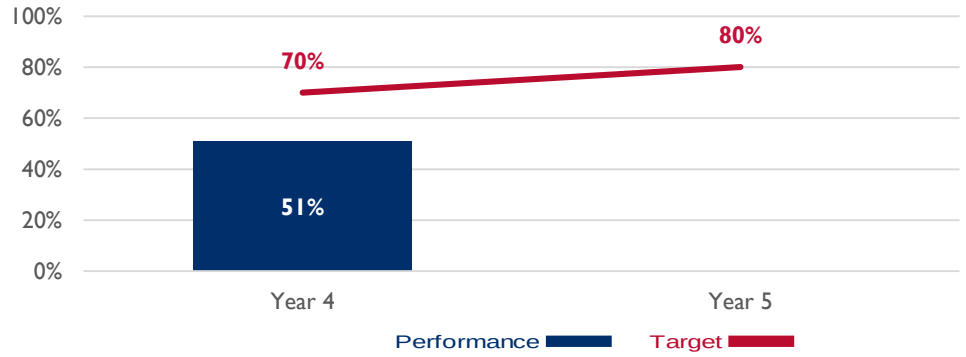
OUTCOME LEVEL RESULTS

GHSC-TA hypothesizes that by helping to create an IT system landscape and supporting the AMD in the design and implementation of IT systems and the NSC, the AMD will be empowered to more effectively deploy systems that support AMD strategy and enable evidence-based decision making, which will lead to improved medicine availability.

KPI 12. PERCENTAGE OF USERS UTILIZING THE NATIONAL SURVEILLANCE CENTRE TO REVIEW MEDICINE AVAILABILITY TRENDS AND REPORTS

During Y4 Q1, GHSC-TA observed NSC utilization rates of 51 percent, as shown in Figure 11. The GHSC-TA team will continue to support NDOH in improving performance of this KPI by providing dashboard trainings and encourage additional uptake through the PST.

Figure 11: Percentage of Users Utilizing the National Surveillance Centre to Review Medicine Availability Trends and Reports



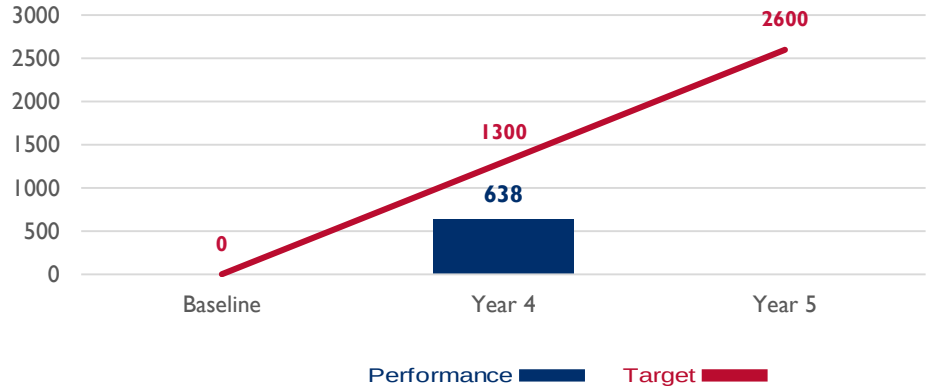
KPI 13. NUMBER OF HEALTH ESTABLISHMENTS AND WAREHOUSES UTILIZING MEDICINE MASTER DATA SYSTEM AS A SOURCE OF MASTER DATA

Work is underway to support the MMDS developers to integrate medicine data from the MMDS into SVS via system-to-system integration, while GHSC-TA is extending RxSolution to draw medicine master data from the MMDS via system-to-system calls. This metric will be tracked when these integrations go live. SVS-MMDS integration is tentatively set to go live by the end of April 2020 and completion of system changes for RxSolution is set for the end of September.

KPI 14. NUMBER OF HEALTH ESTABLISHMENTS USING CORE SUPPLY CHAIN INFORMATION SYSTEMS TO ORDER AND/OR RECEIVE STOCK.

The core supply chain systems that GHSC-TA is supporting for ordering and receiving stock are SVS and RxSolution. Figure 12 shows NSC currently receives stock reporting data from 638 sites utilizing an ESMS, which includes RxSolution and JAC. GHSC-TA is currently supporting the contractor with performing user acceptance testing of SVS ordering and receiving functionality with a pilot roll out plan to follow at end March 2020.

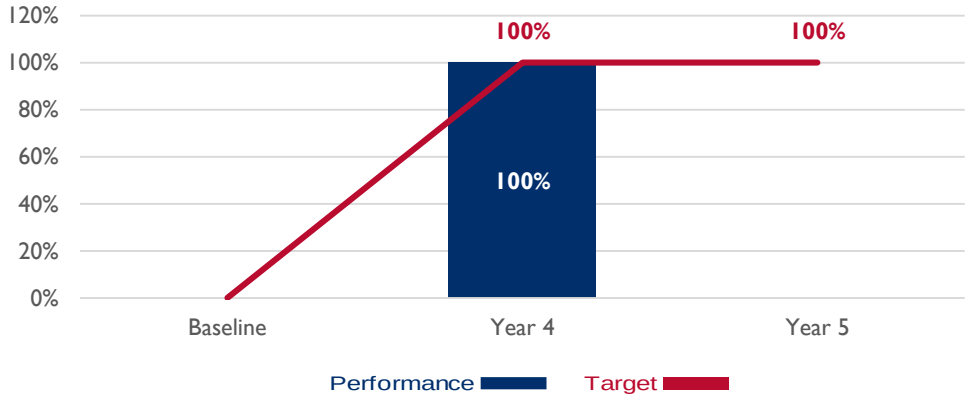
Figure 12: Number of Health Establishments using Core Supply Chain Information Systems to Order and/or Receive Stock.



KPI 15. REPORTING COMPLIANCE – PERCENTAGE OF HEALTH ESTABLISHMENTS REPORTING STOCK AVAILABILITY TO THE NSC

The reporting compliance KPI measures the percentage of health establishments reporting stock availability to the NSC. This indicator is aligned to the Department's KPI tracking levels of NSC reporting, according to the annual performance plan. The target for number of health establishments reporting to the NSC was 3,682 and that 3,697 sites actually reported—a performance in excess of 100% shown in Figure 13.

Figure 13: Percentage of Health Establishments Reporting Stock Availability to the National Surveillance Centre.



IMPROVE FINANCIAL MANAGEMENT

Strong financial management processes as they relate to medicine procurement are essential for a consistent and uninterrupted supply of medicine. Through more streamlined payment tracking and financial reporting processes, the AMD and provincial pharmaceutical services can better monitor and manage the payment of suppliers. Improved demand forecasting and planning processes allow for a more effective manner of calculating medicine budgets and monitoring financial management.

ACTIVITIES AND ACHIEVEMENTS

BUDGETING AND FINANCIAL MANAGEMENT

In overall health budgets, the resources allocated to procure medicines often competes with other line items, and at times is under resourced. This results in a build-up of unpaid supplier accounts that contribute to large accruals at the end of the financial year. The situation is further compounded by re-prioritization of funds at times to cover unfunded activities and other liabilities. Adequate financial management promotes uniform, evidence-based processes to forecast budget requirements and allocate budgets appropriately.

GHSC-TA supported and provided guidance to the NDoH on its mission to improve the medicine budget forecasting process and to develop a tool to assist in ongoing budget monitoring and quality improvements in financial management and reporting.

Although budget guidelines are issued by Treasury, the GHSC-TA supported NDoH to document clear procedures on inputs and participation by the relevant stakeholders in the budget cycle with focus on streamlining the budget planning process and strengthening the monitoring of actual expenditure against budget. With these guidelines, NDoH plans to develop a medicine budgeting tool kit that would:

- Promote standardization in the budgeting methodology and process nationally.
- Define the appropriate level of detail in budgets and define uniform terminology and concepts to ensure the same understanding across budgeting participants.
- Improve decision-making capabilities.
- Improve accountability and transparency.

In Year 4 Quarter 1, several engagements with various stakeholders were held to obtain buy-in and to support the concept of a ring-fenced medicine budget (as described above) supported by standardized and streamlined budget planning and budget processes. This included submissions to the NHC-TAC, the NDoH Chief Financial Officers forum, the NSC-SC-PS, and half-day sessions with provinces, specifically the EC, FS, GP, KZN, LP, MP, and the NC. During these sessions, inputs and explanations were sought on the rationale and methodology used to develop the medicine budget forecast. These sessions were also used to get input on operationalization of the ring-fenced budget and get agreement on key activities in the four phases of the medicine budget cycle, i.e., from preparation, approval, implementation, and evaluation.

From these engagements, GHSC-TA drafted the Budget Planning and Financial Management guideline that clearly defines and provides guidance for the medicine budgeting and financial management process. The guideline outlines the processes and the principles which should be followed in preparing and managing the annual medicine budget. The document outlines the following:

- Stakeholders responsibilities and the interaction models in compiling, managing, and monitoring the annual budget.
- Procedures to ensure adherence to Treasury Regulations as well as the National Treasury review and budget processes.

- Key metrics, tools, and processes to monitor and evaluate budget spending during the budget implementation phase.

Feedback received from the consultative forums and discussions with provinces on best practice have been incorporated into the draft guideline document.

Following these consultations, a task team was formed, which included representatives from all provinces (apart from the Western Cape). This was to review feedback from the various stakeholder forums, review the draft Budget Planning and Financial Management guideline, and brainstorm thinking on how to operationalize the ring-fenced budget, including key success factors to make the transition a success.

OUTCOME LEVEL RESULTS

GHSC-TA hypothesizes that building the capacity of the AMD and provincial pharmaceutical services to strengthen financial management will improve use of forecasting and budget information, accounting processes, and financial monitoring and reporting. It is expected that prudent financial management processes will support improved medicine availability.

KPI 16. NUMBER OF PROVINCES WHO REVIEW THEIR BUDGET VS. ACTUAL AS DEFINED IN THE NEW BUDGETING PROCESS TO SUPPORT THE RING-FENCED BUDGET

Efforts are underway to develop monitoring tools that will support the provinces in developing links between budget forecasting and expenditure reporting. Once these tools are developed, performance will be measured to inform KPI 16.

KPI 17. PERCENTAGE OF EXPENDITURES ON NON-ESSENTIAL MEDICINE LIST ITEMS

Historically, the data informing KPI 17 on percentage of expenditure on non- EML items was uploaded by provinces onto the Pharmaceutical Services Dashboard. Unfortunately, the Pharmaceutical Services Dashboard has not been operational for over two years. NDoH is exploring alternate arrangements for the hosting of the dashboard. There are no plans to revitalize this system at this time. In the meantime, however, GHSC-TA is investigating alternative data sources to inform this indicator.

LESSONS LEARNED

The Importance of Policy in Stakeholder Engagement. Engagements with diverse stakeholders across the country-demonstrated the criticality of having clear, unambiguous, agreed-upon policies in order for successful adoption of new processes and changes to the public health supply chain. Policies with their underlying guiding principles should be co-developed with intensive communication and input from stakeholders and later documented and communicated as part of a focused change management approach. Throughout numerous interventions, continuous, clear communication of AMD policies improved stakeholder receptiveness, engagement, and collaboration resulting in higher quality outputs and more rapid acceptance and institutionalization of change.

Targeting the Right Stakeholders and Decision Bodies Despite there being no data-driven, "scientific method" of calculating demand plans to inform past budgeting activities, the new demand planning process was not immediately accepted. However, targeted outreach and change management efforts including critically important presentations to the right fora such as the CFO Council and NHC-SC-PS changed perceptions about the role of demand planning in budgeting which was ultimately accepted and adopted.

Digitization and Resistance to Change. While health supply chain operations will inexorably digitize over time, a greater level of change management and outreach activities may be required to facilitate adoption of even the most innocuous, time savings technological advancements. In POCs and

system updates GHSC-TA found it critical to engage users and explain and demonstrate the value to those users with respect to reduced time, elimination of paper processes, and freeing time for patient care. In each situation, stakeholder definition of value varies and for interventions to be successful, teams must quickly and accurately identify stakeholder or end user pain points and tailor their new polices, processes, and or tools to address them.

FINANCIAL STATUS OF THE TASK ORDER

ANNEX 1. PROGRESS SUMMARY

INDICATOR	REPORTING YEAR	BASELINE VALUE	YEAR 4 PROPOSED TARGET	YEAR 4, QUARTER 1 ACHIEVEMENT	% YEAR 4 ACHIEVEMENT
PROJECT PURPOSE – STRENGTHEN THE CAPACITY OF THE AFFORDABLE MEDICINE DIRECTORATE AND PROVINCIAL PHARMACEUTICAL SERVICES ACROSS THE MEDICINES SUPPLY VALUE CHAIN TO RESULT IN IMPROVED MEDICINE AVAILABILITY					
Key Performance Indicator 1: Percentage availability of medicines at health establishments	FY20	78%	95%	87%	92%
OBJECTIVE 1 – IMPROVE SELECTION AND USE OF MEDICINE					
Key Performance Indicator 2: Number of medicine selection decisions made utilizing health technology assessments	FY20	0	2	0	0%
Key Performance Indicator 3: Percentage of assisted Pharmaceutical and Therapeutics Committees with improved operational capacity.	FY20	N/A	25%	N/A	N/A
OBJECTIVE 2- SUPPORT OPTIMIZATION OF THE SUPPLY CHAIN					
Key Performance Indicator 4: Percentage of antiretroviral units delivered by suppliers within contractual lead-time (supplier performance reliability – on time).	FY20	79%	90%	63%	70%
Key Performance Indicator 5: Percentage of Master Health Produce List items on transversal contracts excluding antiretroviral units delivered by suppliers within contractual lead-time (supplier performance reliability – on time).	FY20	75%	83%	67%	81%
Key Performance Indicator 6: Supplier performance reliability – Perfect order fulfilment for orders placed on suppliers (in-full).	FY20	73%	75%	64%	85%
Key Performance Indicator 7: Percentage of master health product list items on transversal contracts delivered via direct delivery to the hospitals designed by the provinces to receive direct delivery.	FY20	N/A	70%	N/A	N/A
Key Performance Indicator 8: Min/Max level reporting – Number of health establishments and warehouses with configured minimum and maximum (min/max) stock levels for stocked medicines being reported to the National Surveillance Centre.	FY20	0`	1,300	726	56%
Key Performance Indicator 9: Demand forecast accuracy for provinces using the demand forecasting process.	FY20	N/A	45%	52%[1]	115%

[1] *Year 4 Quarter 1 performance against KPI 9 accounts for only two of the nine provinces, Kwa-Zulu-Natal and the North West province.*

Key Performance Indicator 10: Forecast bias for pharmaceutical forecasts in provinces using the demand forecasting process.[2]	FY20	9.8%	0-10%	9.8%	100%
Key Performance Indicator 11: Percentage of eligible patients transitioned from Tenofovir/Emtricitabine/Efavirenz to Tenofovir/Lamivudine/Dolutegravir.	FY20	0%	70%	N/A	N/A
OBJECTIVE 3 – STRENGTHEN GOVERNANCE					
No KPIs scheduled to be reported quarterly.					
OBJECTIVE 4 – IMPROVE WORKFORCE MANAGEMENT					
No KPIs scheduled to be reported quarterly.					
OBJECTIVE 5 – STRENGTHEN INFORMATION SYSTEMS AND INFORMATION MANAGEMENT					
Key Performance Indicator 12: Percentage of users utilizing the National Surveillance Centre to review medicine availability trends and reports.	FY20	N/A	70%	51%	73%
Key Performance Indicator 13: Number of health establishments and warehouses utilizing the Medicine Master Data Systems as a source of master data.	FY20	0	3,000	N/A	N/A
Key Performance Indicator 14: Number of health establishments using core supply chain information systems to order and/or receive stock.	FY20	0	1,300	638	49%
Key Performance Indicator 15: Reporting compliance – Percentage of health establishments reporting stock availability to the National Surveillance Centre	FY20	N/A	100%	100%	100%
OBJECTIVE 6 – IMPROVE FINANCIAL MANAGEMENT					
Key Performance Indicator 16: Number of provinces who review their budget vs. actual as defined in the new budgeting process to support the ring-fenced budget.	FY20	0	2	N/A	N/A
Key Performance Indicator 17: Percentage of expenditures on non-Essential Medicine List items.	FY20	1.60%	<10%	N/A	N/A

[2] *Baseline and Year 4 Quarter 1 values reflect performance across two of the nine provinces, KZN and NW*