# SWASTHA: Revolutionizing Medical Supply Management in Sri Lankan Healthcare

Attanayake H<sup>+</sup>, Rambukwelle I.W.Y.K.C Ministry of Health, Sri Lanka

### Introduction

SWASTHA is the Ministry of Health's initiative to automate medical supply management. It operates as comprehensive medical supplies information management system, fully functional in a virtual platform. Being webbased, it eliminates the need for costly infrastructure installation. The only installation requirement for any given institution is internet connectivity.

The SWASTHA system is modular. It covers the entire spectrum of medical supply management, connecting its key stakeholders such as and National Medicinal Regulatory Authority, State Pharmaceuticals Corporation, Medical Supplies Division, Regional Medical Supplies Divisions, Hospitals, and Medical Officer of Health Offices.

SWASTHA was officially launched in June 2023.

#### **Objective**

This study aimed to describe the key functions, project reach, and initial challenges encountered in implementing SWASTHA.

# Methodology

Key informant interviews were conducted with relevant stakeholders of the SWASTHA project, including regulators, implementors, and end users. In addition, direct observations were made during onsite visits. The study duration was 15.11.2023- 14.01.2024.

#### Results

## **Key Functions**

One of the primary functions of SWASTHA is to electronically generate annual estimates for medical supplies.

In general, annual estimations are projected using two methods namely,

- 1. adjusted consumption method and
- 2. projection according to standard treatment and morbidity pattern.

The latter promotes standardized estimation of medical supplies for procurement derived from real-time drug consumption data. 1,2,3 SWASTHA aims to promote this method of estimation. The patient data needs to be fed to the system electronically to generate such output. The system streamlines processes from estimation to delivery including ordering, scheduling, store management, distribution, quality control, quality assurance, and verification.

# **Implementation**

The system is presently implemented in 1089 hospitals, 340 Medical Officer of Health Offices, and 641 other institutions (Including Dental Clinics. Sexually Clinics, Transmitted Diseases Prison Hospitals, Regional Medical Supply Divisions, and other stores). Table 01 shows the implementation success of SWASTHA as of 04.12.2023 in hospitals.

SWASTHA has reached a remarkable implementation success of 93.8% in hospitals within six months following the

Table 1: Initial implementation success of SWASTHA as of 04.12.2023 in hospitals

Level of care	Institution type	Number of hospitals	Number of implemented hospitals	Percentage of initial implementation
Tertiary	National Hospitals	2	2	100.00%
	Teaching Hospitals (including Specialized Teaching Hospitals)	18	18	100.00%
	District General Hospitals	20	20	100.00%
	Other Specialized Hospitals	13	13	100.00%
Secondary	Base Hospital Type A	35	35	100.00%
	Base Hospital Type B	45	45	100.00%
Primary	Divisional Hospital Type A	67	67	100.00%
	Divisional Hospital Type B	147	146	99.32%
	Divisional Hospital Type C	270	261	96.67%
	Primary Medical Care Units	544	482	88.60%
Total		1161	1089	93.80%

rollout. It has achieved comprehensive coverage (>88%) across all hospital categories and levels of care. The

corresponding project reach is shown in Figure 01.

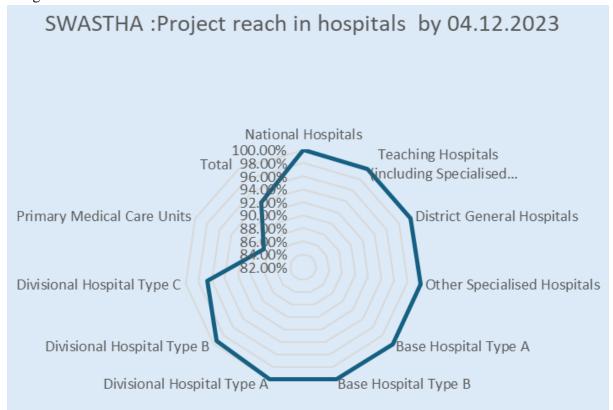


Figure 1: SWASTHA: Project reach in hospitals as of 04.12.2023

SWASTHA aims to replace the existing system MSMIS as early as possible: nevertheless, this initiative still has its limitations, especially in areas such as local purchase and inter-institution stock exchange. Store management is the key area of implementation by far.

The following operational issues were detected at the institutional level in the early transformation period.

- 1. Incorrect quantities and unit prices were displayed.
- 2. Estimation produced by the facility for the calendar year and distant drug store allocation for the facility were not shown.

Both issues have been rectified now.

# Challenges at the implementation

SWASTHA encounters a range of challenges, including inconsistent connectivity across facilities, the absence of standardized operating procedures, resistance from trade unions, the absence of defined job descriptions for essential roles, bureaucratic inflexibility, and difficulties in managing change.

# Insights unveiled

SWASTHA represents an economically efficient and user-friendly system. It provides additional features such as enabling real-time report generation during spot checks and the identification of subpar drug quality once compared with the previous system. Furthermore, it actively fosters transparency and accountability.

#### Conclusion

SWASTHA is a transformative initiative in the field of medical supply management, with the potential to greatly enhance efficiency and transparency in the Sri Lankan healthcare sector. However, addressing the identified challenges will be crucial to realizing its full potential.

## References

- 1. MINISTRY OF HEALTH CARE & NUTRITION, GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF, & SRI LANKA. (2008).MANUAL ON **MANAGEMENT** OF **DRUGS** SECOND **REVISION** 2008. MINISTRY OF HEALTH CARE & NUTRITION GOVERNMENT OF THE DEMOCRATIC SOCIALIST REPUBLIC OF SRI LANKA.
- 2. Wijayasiriwardhana, J. (n.d.). STUDY ON ISSUES OF DRUG AVAILABILITY AND RECOMMENDATIONS OF IMPROVING THE AVAILABILITY IN HEALTH CARE INSTITUTIONS OF SRI LANKA. World Journal of Pharmaceutical Research.
- Management Sciences for Health [Internet]. [cited 2024 Mar 15]. MDS-3: Managing Access to Medicines and Health Technologies. Available from: https://msh.org/resources/mds-3-managing-access-to-medicines-and-health-technologies/