Drug pilferage has been considered as one of the contributing factors behind drug shortage not only in Malawi, but also in other African countries. The pilferage is through illegal diversion from manufacturers, stealing from the warehouses or during transportation to the health facilities and from the pharmacies and drug stores within health facilities. Malawi loses about 30% of the national drug budget to theft. Much of this theft is often well coordinated by health workers.

Factors that contribute to drug pilferage in public hospitals include corruption, weak regulatory and enforcement capacity, weaker inventory systems, and low salaries among of health workers.

To reduce pilferage, there is need to strengthen the supply chain management system to easily track the drugs, advocate for political will in order to stiffen penalties, improve security at storage facilities, and improve welfare of the health workers.

Key Messages

- Drug pilferage has been considered as one of the contributing factors behind drug shortage not only in Malawi, but also in other African countries.
- The pilferage is through illegal diversion from manufactures, stealing from the warehouses or during transportation to the health facilities and from the pharmacies and drug stores within health facilities.
- Malawi loses about 30% of the national drug budget to theft. Much of this theft is often well coordinated by health workers.
- Factors that contribute to drug pilferage in public hospitals include corruption, weak regulatory and enforcement capacity, weaker inventory systems, and low salaries among of health workers.
- To reduce pilferage, there is need to strengthen the supply chain management system to easily track the drugs, advocate for political will in order to stiffen penalties, improve security at storage facilities, and improve welfare of the health workers.

Drug pilferage is rampant in Malawi and contributes significantly to drug stock outs in most public hospitals (Muula et al. 2005). There have been a lot of media reports on drug theft. A report on the Voice of America quoted the Principal Secretary for Health who mentioned that there are some health workers who collude with business people to sell medicines from the public health system (Lameck et al, 2013). In the same report, the police reported the arrest of two officials at Central Medical Stores for allegedly misappropriating drugs for Salima District Hospital and a Pharmacy Technician at Chiradzulu Hospital for allegedly forging documents and misappropriating drugs worth thousands of dollars. Furthermore, the Minister of Health, Dr. Kumpalume, disclosed that Malawi loses about MK5 billion (about USD7 million) of the MK17
billion (about USD24 million) drug budget to theft (Nkhata, 2015).

Although drug pilferage might happen through theft, several reports showed that health workers are usually involved in the act. In some cases, health workers, especially pharmacy assistants and technicians, have been implicated in taking part or facilitating the stealing of drugs and selling them to vendors or private clinics (Yiwombe et al, 2004). The few common scams committed by pharmacy staff in order to conceal their theft: include:

• Unauthorised early refills
• Filling prescriptions for deceased patients
• Filling phony written or called-in prescriptions
• Short filling prescriptions and pocketing medication
• Taking tablets from bottles, then replacing with “lookalike” tablets
• Opening bottles or packages, removing tablets, then replacing and gluing the seal (Ferrinho et al, 2004)

The immediate consequence of drug pilferage is drug stock-outs, which ultimately contributes to worsening the disease burden and adverse health outcomes experienced in the country.

“The Minister of Health, Dr Kumpalume, disclosed that Malawi loses about MK5 billion (about USD7 million) of the MK17 billion (about USD24 million) drug budget to theft.”

Factors contributing to drug pilferage
Some of the factors contributing to drug pilferage include corruption among people involved in pharmaceutical supply chain management, weak regulatory and enforcement capacity (PMI, 2012). Furthermore, lack of financial, technical and other resources in developing countries to ensure the security of drug supply chains also creates loopholes for drug pilferage. At facility level, especially at public institutions, medical supplies in Africa are particularly vulnerable to theft or loss, due to weaker systems of inventory, internal controls, management information systems, and low salaries among the health workers as well as transport workers (PMI, 2012).

Methodology
This policy brief is based on a comprehensive review of existing literature. The literature reviewed included scientific papers, research reports and government policy documents.

Discussion of Policy Options
The following policy options are complementary to each other and can be implemented together.

Strengthening the Supply Chain Management System
There is a need to strengthen the supply chain management (SCM) system at all levels. The strategies which can be used include mobilisation of funds to strengthen country-level supply chain functions such as forecasting, construction of ware houses that are locked and not easily accessible by unauthorised personnel, and inventory system in each service delivery points (PMI, 2012).

There is also need to strengthen the monitoring and evaluation tools in order to improve the quality of data and its utilisation. This can be achieved by computerisation of the SCM system, initially targeting tertiary and central levels. This will reduce the paper-based approach, which is prone to abuse. The tools will enable managers to easily monitor the quantity of the commodities that are available in the warehouses and pharmacies. The frequent exercise of conducting inventory checks can also help those in charge of pharmacies to note any missing items.

To strengthen the system, a separate unit can be formed with a special interest of monitoring the pharmaceutical supply chain management (Carmago, 2012). For example, Uganda created a new and powerful agency: the Medicines and Health Service Delivery Monitoring Unit (MHSDMU). Though more is needed to know about the MHSDMU’s performance, anecdotal evidence from civil
Furthermore, in order to improve tracking of the drugs, the government can start labelling the drugs with unique features. This approach will enable patients to recognise if they have been sold drugs that are supposed to be provided for free in public health facilities, and therefore report the vendors of the drugs to the relevant authorities.

In addition, there is need to develop a supply chain internal control assessment (SLICE) to help assess control systems especially financial and commodity recipient’s government supply chains. This tool will help to determine where there are control weaknesses that need to better secure commodities, improve supply chain record keeping and predict diversion of drugs.

Furthermore, in order to improve tracking of the drugs, the government can start labelling the drugs with unique features. This approach might help increase the reporting rate of vendors selling drugs stolen from public facilities to the authorities. If the illegal vendors are caught, the labelled drugs can also act as evidence court. In addition, it will be beneficial to install tracking system in the delivery vehicles to enable under-surveillance tracking of all drug delivery vans at all times. There is need to conduct reviews for the distribution of products at country level including at the primary level health care. The activities that will be used to monitor the distribution include health facility assessment, monitoring requisition and receipt documentation which can be done through supervision.

Advocating for political will
There is a need for strong political will to act on reports of drug pilferage. This can be achieved with assistance from partners. For example, the USAID upon having substantial evidence on United States Government (USG) commodity diversion suggested that all commodities should be distributed through a non-governmental, parallel system pending critical reforms at the Central Medical Stores in Angola and Malawi (PMI, 2012).

In addition, there is need to revise and enforce laws pertaining to drug pilferage. According to the report by the Pharmacy Medicine and Poisons Board, Malawi recorded 28 cases of theft of government drugs between January and September 2015 (Mwale, 2015). Unfortunately, only four of the cases were concluded by the courts and only one person was sentenced to jail without an option of a fine while the others only paid small amounts of money as fines. This laxity in the legal system makes illegal vendors bolder at stealing and selling stolen drugs. Therefore, there is need to stiffen the punishment given to offenders. There is also need to amend the Pharmacy, Medicine and Poisons Act (1988) in order to strengthen the legal framework for those who steal government drugs.

Improving the welfare of health workers
There is need to improve the welfare of health workers in order to reduce pilferage of drugs. As reported by Ferrinho and colleagues, most health workers steal drugs to sell to private clinics and pharmacies in order to boost their incomes (Ferrinho et al, 2014). Literature review suggests that paying competitive salaries and incentives and benefits would result

“Furthermore, in order to improve tracking of the drugs, the government can start labelling the drugs with unique features. This approach will enable patients to recognise if they have been sold drugs that are supposed to be provided for free in public health facilities, and therefore report the vendors of the drugs to the relevant authorities.”
in reduction of theft by employees (Ronald, 2009). Therefore, improving the living standards of health workers through provision of incentives might reduce the drug pilferage.

**Improving the infrastructure system**

There is need to improve the infrastructure and design of pharmacies and warehouses. In some of the health facilities, there is a challenge of storage space, and as such most drugs are stored in rooms, which are not designated as drug stores or even in the corridors. These drugs are prone to theft due to lack of security. Therefore, in order to reduce drug pilferage in public hospitals, there is need to construct or expand pharmacies. It will also be very important to upgrade the available pharmacies so that they have the necessary equipment that will reduce pilferage.

Pharmacies need to have locking devices preferably the three-lock system and the person in charge of the facility, pharmacy and nursing become keepers of one of the keys. There should also be limited issuance of the keys to other workers and no duplication of the keys. The pharmacy should also have physical barriers such as burglar bars, interior safe with limited accessibility for valuable commodities and installation of CCTV (Pharmacy Security Checklist, 2006). The stock cards in the pharmacy need to be well updated for easy monitoring of the flow of commodities.

**Recommendations**

i. The Supply Chain Management (SCM) system should be strengthened.

ii. Laws relating to drug pilferage should be strengthened and enforced.

iii. The welfare of health workers should be improved as a way of reducing the temptation to get involved in drug pilferage.

iv. The infrastructure for drug storage should be improved to deter drug theft.

v. In order to address the issue of drug pilferage, there is a need of collaboration of stakeholders including donors, MoH, police, judiciary and the pharmaceutical regulatory bodies. This is an important issue affecting the health system and it requires a multi-sectoral approach in addressing it.

**References**


Thengo, Kavinya. Opinions on the suggestion that Malawians should start paying for health services in a bid to improve health care in the country. Malawi Medical Journal, 2013.

US President’s Malaria Initiative. A report on the U.S. President’s Malaria Initiative (PMI) 2012. Approach and Steps to counter theft and diversion of medicine.


This Policy Brief was developed and published as part of the Strengthening Capacity to Use Research Evidence in Health Policy (SECURE Health) Programme. The SECURE Health Programme is funded by UK’s Department for International Development (DFID), and implemented by a consortium of five organisations led by the African Institute for Development Policy (AFIDEP).