Western Australian Auditor General’s Report

Consumable Stock Management in Hospitals

Report 2: February 2016
Office of the Auditor General
Western Australia

7th Floor Albert Facey House
469 Wellington Street, Perth

Mail to:
Perth BC, PO Box 8489
PERTH WA 6849

T: 08 6557 7500
F: 08 6557 7600
E: info@audit.wa.gov.au
W: www.audit.wa.gov.au

National Relay Service TTY: 13 36 77
(to assist people with hearing and voice impairment)

We can deliver this report in an alternative format for those with visual impairment.

© 2016 Office of the Auditor General Western Australia. All rights reserved. This material may be reproduced in whole or in part provided the source is acknowledged.

ISSN 2200-1913 (Print)
ISSN 2200-1921 (Online)
Consumable Stock Management in Hospitals
CONSUMABLE STOCK MANAGEMENT IN HOSPITALS

This report has been prepared for submission to Parliament under the provisions of section 25 of the Auditor General Act 2006.

Performance audits are an integral part of the overall audit program. They seek to provide Parliament with assessments of the effectiveness and efficiency of public sector programs and activities, and identify opportunities for improved performance.

The report presents to Parliament the results of a preliminary audit of the efficiency and effectiveness of consumable stock management in public hospitals. The preliminary audit found no material evidence that hospital consumable stock is not managed appropriately. On that basis I chose not to expand the scope of my audit to a ‘reasonable assurance engagement’ and have issued this ‘limited assurance’ report.

I wish to acknowledge the staff at the Department of Health, State Distribution Centre and hospitals we visited, for their cooperation with this audit.

COLIN MURPHY
AUDITOR GENERAL
24 February 2016
Contents

Consumable Stock Management in Hospitals ............................................. 4

Introduction ........................................................................................................ 4
Background ........................................................................................................ 4
Audit conclusion ................................................................................................ 4
What we did ....................................................................................................... 4

What we found .................................................................................................... 5

An imprest system is used to manage stock in WA hospitals ......................... 5
Health has robust processes for selecting suitable consumable products .......... 6
Appropriate stock levels are maintained ....................................................... 6
Sound stock management practices exist in distribution centres ...................... 7
Actual use, and consequently waste, is not monitored ..................................... 7
Most consumables are purchased through common use agreements and whole-of-
Health contracts ............................................................................................... 8
Recommendation ............................................................................................... 8
Response from Department of Health ............................................................. 8
Consumable Stock Management in Hospitals

Introduction

The audit involved a preliminary assessment of the efficiency and effectiveness of consumable stock management in public hospitals. Under our process, potentially significant issues identified during a preliminary audit will lead us to undertake a full audit to substantiate those issues.

Background

Consumable hospital stock refers to items used in hospitals that do not return to the store room once they have been dispensed. Examples of consumables include dressings, syringes and gloves. In Western Australia, over $200 million is spent each year on consumable stock in public hospitals.

Good inventory practices of consumable hospital stock ensures the right items, in the correct quantities, are purchased and stored appropriately until they are used or expired items are discarded. A balance is maintained between having stock levels as low as possible, without having an unacceptable risk of running out of stock.

Audit conclusion

This preliminary audit found no material evidence that hospital consumable stock is not managed in a way that ensures it is suitably purchased and stored, and then delivered to where and when it is needed, in the quantities that are needed.

What we did

Our lines of inquiry for this preliminary audit were:

1. Does the Department of Health (Health) select the right products, in the correct quantities to ensure an appropriate supply of consumable medical supplies are maintained?

2. Are inventory management practices providing accurate and timely information on stock levels, status and location?

3. Are consumable stock items generally purchased through the centralised system to ensure value for money?

We visited Royal Perth Hospital, Bunbury Regional Hospital and the State Distribution Centre to determine the processes used to manage consumable stock. We also analysed policy and process documents, interviewed staff and analysed data from Health’s procurement system to assess purchasing patterns for consumables across the state.

This is a limited assurance report of an audit conducted under section 18 of the Auditor General Act 2006 and in accordance with Australian Auditing and Assurance Standards. The audit cost was around $85,000.
What we found

An imprest system is used to manage stock in WA hospitals

The use of an electronic imprest system in WA hospitals allows consumable stock to be managed efficiently. The system works by having the desired amount of each consumable item, in each imprest store room, in each ward, in each hospital entered into the system. Staff regularly assess and record stock levels. When the volume of recorded stock is lower than the desired amount, an order is automatically generated to replenish stock back to the correct level.

Consumable stock in all metropolitan public hospitals is managed by the Health Corporate Network (HCN), a shared services arrangement providing human resources, supply and business services to the Department of Health. HCN staff are located in each metropolitan hospital to monitor and resupply each imprest store. Royal Perth Hospital has 116 imprest stores.

HCN also run the State Distribution Centre (SDC) which was established in 2013. This centre coordinates and supplies all metropolitan hospitals with consumables. A single electronic imprest system links the SDC to each metropolitan public hospital.

Around $6.5 million worth of consumables is held in the SDC on any given day. This equates to approximately 4 weeks of stock supply for all metropolitan hospitals.

Figure 1: State Distribution Centre
Consumable stock in regional areas is managed differently to the metropolitan area.

The WA Country Health Service is divided into 7 regions with each region managing consumable stock and other services through a central hub. Each hub has a Supply Manager. In the South West, Bunbury Hospital coordinates and supplies consumable stock to the surrounding inland and coastal hospitals. Bunbury Hospital has a warehouse and distribution facility which holds around $550,000 worth of consumables at any point in time.

The way consumable stock is managed varies from region to region. However, at a minimum all regional hospitals use the same electronic imprest system to monitor and replenish supply, and orders for all consumables are captured in Health’s iProcurement system.

**Health has robust processes for selecting suitable consumable products**

Before a consumable item is added to imprest stores a robust assessment of the quality, value, safety and function of the product is undertaken. Part of this process may include a trial of the product.

The assessments are carried out by Product Evaluation and Standardisation Committees (PESC). Members of each PESC include users of the products such as senior nurses and clinicians. When developing new contracts, staff responsible for purchasing and contracting are also included.

Each PESC considers whether the product:

- meets the requirements of the clinical area
- is an improvement on similar existing items
- is cost effective
- will require any additional resources if introduced into the hospital.

If the item is considered faulty or substandard once in use, the user who identified the fault is asked to document their experience. PESC reviews the documentation, assesses if the issue is experienced more broadly, and where necessary finds replacements or negotiates adjustments to a contract.

All of these processes allow for the most appropriate product to be selected, value for money to be obtained and adjustments to be made if the product is later deemed to be unsuitable.

**Appropriate stock levels are maintained**

Appropriate stock levels of consumables are maintained through the use of imprest systems and the constant topping up of stock.

Each imprest store in Royal Perth Hospital is topped up every 2 days. It is rare that stock is completely depleted. Staff advised that if this does happen, the item can still be sourced from nearby imprest stores and requests are easily made for the desired stock level to be adjusted upwards.

The desired amount of each consumable item is initially set by PESC when it is introduced into imprest stores. In the metropolitan area HCN analyse reordering trends and make recommendations for adjustment to the desired stock level and to remove items that are rarely replenished.
One of the key performance indicators for the SDC is that 99% of stock items are supplied in full within 2 days of being ordered. Since August 2015, this KPI has been met. This means that each hospital imprest store almost always receives supplies in full within 2 days of ordering the item, leaving no need for hospitals to store excess stock.

**Sound stock management practices exist in distribution centres**

The SDC uses sound stock management practices such as first in, first out stock rotation, clear labelling of shelves and rolling stocktakes.

First in, first out rotation practices refer to all new stock being added to the back of the shelf ensuring older products are used first. Clear labels on shelves ensures all stock of a single item is located in one place and allows staff to select the correct item quickly.

Rolling stocktakes occur when the imprest system generates a random list of items which are then reconciled with the actual number of products on the shelf. The SDC holds approximately 4,000 items, each of which are subject to a rolling stocktake at least once per year. The regional hub in Bunbury which supplies surrounding hospitals also operates a rolling stocktake.

Imprest stores within each hospital operate first in, first out rotation practices and have clear shelf labels. However, once an item enters an imprest store no further stocktake is undertaken.

**Actual use, and consequently waste, is not monitored**

Once an item leaves an imprest store, no hospital is able to determine if it was used, discarded or still remains somewhere within the hospital. Therefore actual use, and consequently waste of consumables, is not known.

The current system considers all consumables to be used on entry to an imprest store. Staff take items as needed directly from the store. No further tracking of the product occurs.

The volume of consumables used in each hospital is substantial and methods for directly tracking use may not be cost effective. Senior staff in Health expressed a desire to measure actual use and waste, but as yet, no appropriate direct methods have been identified.

Senior staff also believe improvements may be made by indirectly monitoring waste as Health moves to an activity based funding model. This will change health services from traditional block funding to linking funding to specific activities. It requires extensive knowledge of the exact costs of providing care to a patient, including the cost of consumables. Staff believe one of the added benefits of this model will be the ability to compare the volume of consumables used in providing similar patient care in different settings and to raise questions when large variations are evident.
Most consumables are purchased through common use agreements and whole-of-Health contracts

The good stock management process of robust item selection, setting and maintaining stock levels, and monitoring supply occurs when consumables are purchased through common use agreements and whole-of-Health contracts. Almost all consumable stock is purchased through these arrangements.

Occasionally items are purchased outside of these arrangements and processed as pay only requisitions. This system is used to pay for goods and services that have already been received and consumed by the hospital. Specialised consumables or items that are infrequently used may be purchased in this way.

In the 2014-15 financial year, around $231 million was spent on consumable stock. Almost $4 million was used to purchase medical and surgical equipment processed through a pay-only requisition. A further $1 million was used to purchase dressings and bandages. Combined this equates to less than 2% of the consumables budget.

Pay-only requisitions are also used for medical goods that are on consignment agreements with suppliers. These medical goods are owned and restocked by suppliers, stored in each hospital, and are used when required. Once used, the supplier is reimbursed using the pay-only requisition function. The hospital does not incur the cost of an item unless it is used. This arrangement is predominately used for prosthetics.

While there are obvious benefits to using consignment stock, there is a lack of transparency with this approach and it is not clear that all hospitals are achieving value for money through their suppliers. An internal review of consignment stock was planned to start in January 2016.

Regardless of whether consumables are purchased through pay only requisitions, common use agreements or whole-of-Health contracts, all purchases are processed though Health’s electronic procurement system providing the capacity for tracking and analysing purchasing patterns.

Recommendation

1. The Department of Health should investigate cost effective methods for measuring actual use and waste of consumables.

Response from Department of Health

The Department of Health welcomes the opportunity to work with the OAG to review internal controls around stock management in WA Public Hospitals. The Department agrees with the recommendation and notes that the OAG considers that it professionally manages its hospital consumable stock. In accordance with the Department’s continuous improvement focus, all cost effective methods for measuring actual use and waste of consumables will be investigated.
### Auditor General’s Reports

<table>
<thead>
<tr>
<th>Report Number</th>
<th>Reports 2016</th>
<th>Date Tabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Health Department’s Procurement and Management of its Centralised Computing Services Contract</td>
<td>17 February 2016</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Report Number</th>
<th>Reports 2015</th>
<th>Date Tabled</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>Verifying Employee Identity and Credentials</td>
<td>2 December 2015</td>
</tr>
<tr>
<td>25</td>
<td>Operating Theatre Efficiency</td>
<td>18 November 2015</td>
</tr>
<tr>
<td>23</td>
<td>Information Systems Audit Report</td>
<td>5 November 2015</td>
</tr>
<tr>
<td>22</td>
<td>Safe and Viable Cycling in the Perth Metropolitan Area</td>
<td>14 October 2015</td>
</tr>
<tr>
<td>21</td>
<td>Opinions on Ministerial Notifications</td>
<td>8 October 2015</td>
</tr>
<tr>
<td>20</td>
<td>Agency Gift Registers</td>
<td>8 October 2015</td>
</tr>
<tr>
<td>19</td>
<td>Opinions on Ministerial Notifications</td>
<td>27 August 2015</td>
</tr>
<tr>
<td>18</td>
<td>Controls Over Employee Terminations</td>
<td>27 August 2015</td>
</tr>
<tr>
<td>17</td>
<td>Support and Preparedness of Fire and Emergency Services Volunteers</td>
<td>20 August 2015</td>
</tr>
<tr>
<td>16</td>
<td>Follow-On: Managing Student Attendance in Western Australian Public Schools</td>
<td>19 August 2015</td>
</tr>
<tr>
<td>15</td>
<td>Pilbara Underground Power Project</td>
<td>12 August 2015</td>
</tr>
<tr>
<td>14</td>
<td>Management of Pesticides in Western Australia</td>
<td>30 June 2015</td>
</tr>
<tr>
<td>13</td>
<td>Managing the Accuracy of Leave Records</td>
<td>30 June 2015</td>
</tr>
<tr>
<td>12</td>
<td>Opinions on Ministerial Notifications</td>
<td>25 June 2015</td>
</tr>
<tr>
<td>11</td>
<td>Regulation of Training Organisations</td>
<td>24 June 2015</td>
</tr>
<tr>
<td>10</td>
<td>Management of Adults on Bail</td>
<td>10 June 2015</td>
</tr>
<tr>
<td>9</td>
<td>Opinions on Ministerial Notifications</td>
<td>4 June 2015</td>
</tr>
<tr>
<td>8</td>
<td>Delivering Essential Services to Remote Aboriginal Communities</td>
<td>6 May 2015</td>
</tr>
<tr>
<td>6</td>
<td>Managing and Monitoring Motor Vehicle Usage</td>
<td>29 April 2015</td>
</tr>
<tr>
<td>5</td>
<td>Official Public Sector Air Travel</td>
<td>29 April 2015</td>
</tr>
<tr>
<td>4</td>
<td>SIHI: District Medical Workforce Investment Program</td>
<td>23 April 2015</td>
</tr>
<tr>
<td>3</td>
<td>Asbestos Management in Public Sector Agencies</td>
<td>22 April 2015</td>
</tr>
<tr>
<td>2</td>
<td>Main Roads Projects to Address Traffic Congestion</td>
<td>25 March 2015</td>
</tr>
<tr>
<td>1</td>
<td>Regulation of Real Estate and Settlement Agents</td>
<td>18 February 2015</td>
</tr>
</tbody>
</table>