Arizona State University
InstyMeds Dispensing Kiosk
Audit Report
May 15, 2017
This page left blank intentionally.
Summary: The InstyMeds Pharmacy Dispensing Kiosk audit was included in the Arizona State University (ASU) FY2017 audit plan approved by the Arizona Board of Regents (ABOR) Audit Committee and ASU senior leadership. The audit focused on the physical security, operation and financial management of the InstyMeds System located within Sun Devil Athletics. This audit is in support of ASU’s mission of Student Success.

Background: ASU Health Services (Health Services) is dedicated to the well-being and educational success of each individual student by providing high quality health care that is accessible, affordable, and compassionate.

Health Services entered into a contract with InstyMeds Corporation (InstyMeds) on September 26, 2014, shortly after closing the pharmacy which had been housed at the Health Services clinic on the Tempe Campus. InstyMeds provides an automated system, much like a bank ATM, which dispenses prescription medication directly to the patient. Specifically, ASU physicians are able to prescribe a medication through the Health Services system, NextGen, and indicate that it will be fulfilled through the InstyMeds dispenser. This provides the patient with a printed prescription which includes an authorization code. The patient utilizes the code along with their birthdate, to authenticate with the dispenser, at which time the medication is dispensed.

InstyMeds provides real time monitoring of the stocked medications and sends automatic shipments as necessary. In addition, InstyMeds is responsible for all medication disposals. They also provide technical support for the dispenser through physical site visits and monitoring of the dispenser online.

The InstyMeds dispenser was originally placed in the Health Services clinic; however, it was moved to the Sun Devil Athletics (SDA) clinic in June 2016 as a result of student athletes representing the vast majority of the machines’ usage. Currently, the dispenser is used only by student athletes. On average, 144 prescriptions are dispensed monthly.

Health Services is responsible for managing the overall agreement with InstyMeds including reviewing and approving monthly invoices, ensuring medications are appropriately controlled and accounted for, returning medications as necessary and controlling access to the InstyMeds reporting portal and to the dispenser itself. SDA Clinic staff is responsible for the daily operations of the machine including receiving medication, stocking the dispenser, validating inventory and ensuring expired medications are removed from the dispenser.

Audit Objective: The objectives of the engagement were to assess the design and operating effectiveness of controls in the following areas:
- Physical security for the dispenser and medications,
Controls governing the ordering, stocking and inventory of the medications utilized,
Controls over financial processes related to the agreement, and
Identify opportunities for improvement.

Scope: The scope of the audit focused on the InstyMeds Dispenser for the time period of July 2016 to February 2017.

Methodology: Our audit consisted of tests of procedures necessary to provide a reasonable basis for expressing our opinion. Specifically, audit work consisted of interviews with ASU Health Services and SDA Clinic staff, observation of work processes, and substantive tests including the following areas:

- Assessing the physical controls to the dispensing kiosk through observation of the dispenser and key management.
- Assessing logical access to the dispensing kiosk and the InstyMeds portal.
- Confirming the dispensing process requires a valid prescription and method to authenticate the patient through observing a student athlete obtaining a medication.
- Validating that medication shipments were received and stocked through tracing 15 shipments to the Distribution Summary report and packing slip detail in addition to the InstyMeds restocking reporting showing medications loaded to the dispenser.
- Validating that rejected and expired medications were returned to InstyMeds in a timely and complete manner by tracing transactions to InstyMeds product return records.
- Validating contractual payments were made with appropriate supporting documentation and required approval for three months of invoices.
- Validating current inventory was accurate and complete by performing a full inventory of the InstyMeds Dispenser to system inventory counts.

Conclusion: Overall, ASU Health Services has generally implemented adequate controls over the use of the InstyMeds dispensing kiosk. Physical and logical access to the kiosk is appropriate, ensuring medications are secure. Medications are received and stocked in a controlled manner and are validated back to monthly invoices to ensure all medication is accounted for. In addition, the medication dispensing process ensures appropriate patient authentication prior to dispensing medication.

One area of improvement was noted related to the management of expired and rejected medications. Specifically, adequate controls were not in place to ensure that product rejects and expired medications are returned to InstyMeds in a timely and complete
manner. Testing indicated multiple instances of rejected or expired medications not reflecting as being returned to InstyMeds. Due to the lack of reporting and tracking of returns, it could not be confirmed if these medications were appropriately handled or not.

The control standards we considered during this audit and the status of the related control environment are provided in the following table.

<table>
<thead>
<tr>
<th>General Control Standard</th>
<th>Control Environment</th>
<th>Finding No.</th>
<th>Page No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>(The bulleted items are internal control objectives that apply to the general control standards, and will differ for each audit.)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Reliability and Integrity of Financial and Operational Information</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Medication inventory is complete and accurate.</td>
<td>Reasonable to Strong Controls in Place.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>• Contractual payments are made with appropriate support and approval.</td>
<td>Reasonable to Strong Controls in Place.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Effectiveness and Efficiency of Operations</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• The medication dispensing process ensures appropriate patient authentication prior to dispensing medication.</td>
<td>Reasonable to Strong Controls in Place.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>• Appropriate receiving and stocking controls are in place to ensure all medication is accounted for.</td>
<td>Reasonable to Strong Controls in Place.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td>• Effective processes are in place to ensure product rejects and expired medications are appropriately managed and returned to InstyMeds.</td>
<td>Opportunity for Improvement</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Safeguarding of Assets</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Physical and logical access to the Dispensing Kiosk is appropriately restricted.</td>
<td>Reasonable to Strong Controls in Place.</td>
<td>N/A</td>
<td>N/A</td>
</tr>
<tr>
<td><strong>Compliance with Laws and Regulations</strong></td>
<td>Not Applicable</td>
<td>N/A</td>
<td>N/A</td>
</tr>
</tbody>
</table>

We appreciate the assistance of ASU Health Services staff during the audit.

Timothy Carroll, CFE  
Internal Auditor Senior

Lisa Grace, CPA, CIA, CISA, CISSP  
Executive Director
Audit Results, Recommendations, and Responses

1. Controls are not adequate to ensure all product rejects and expired medications are accounted for and returned to InstyMeds for disposal.

**Condition:** Currently, SDA Clinic staff sends rejected and expired medications to Health Services to complete the return form and return to InstyMeds for disposal; however, medication is not validated to source reports to ensure all medication is accounted for. In addition, there is not a defined process to ensure medication is returned in a timely manner.

**Criteria:** There are system reports that track product rejects and expired medications. Specifically, the product reject report is available through the InstyMeds portal and daily reports are sent to SDA Clinic staff listing the expired medications that should be removed from the dispenser. These two reporting sources provide systematic tracking of medications that should be returned to InstyMeds for disposal.

**Cause:** Health Services is not utilizing the available system reports to ensure that all rejected and expired medications are accounted for. Instead, they simply process what is sent to them from the SDA Clinic staff.

**Effect:** The volume of exceptions was not excessive and in some instances could be explained by working with InstyMeds to review audit logs (i.e. medication was restocked); however, as a result of the overall lack of monitoring and tracking controls it cannot be determined if all medications have been appropriately returned to InstyMeds.

**Recommendation:** Health Services should update their current process to utilize the available system reports to confirm that all rejected and expired medications have been accounted for. In addition, processes should be further enhanced to define specific time frames in which returns should be completed to ensure that necessary follow up can be done to confirm exception items as they occur. It is also recommended that the existing return form utilized to document returns be updated to include additional detail such as reason for return (rejected or expired) and associated date so that the detail can be easily matched to system reports.

**Management Response:** Health Services agrees with the recommendation made by University Audit and Advisory Services to update processes to confirm that all rejected and expired medications have been accounted for and to enhance processes to ensure that necessary follow up can be done to confirm exception items as they occur. Effective April 26, 2017, Health Services has implemented a new Standard Operating Procedure for tracking medication rejections, expirations, and medication returns for all its pharmacy vendors. The Health Services storeroom clerk will take the lead role
ensuring that all medication from the InstyMeds machine is accounted for utilizing the InstyMeds report functions. The new process tracks a medication reject/return report to the return log and finally to credits being received from the vendor. InstyMeds also has revised its medication return form to better track the location of the removed medication. The new Standard Operating Procedure and updated return form will strengthen the medication return reconciliation process as recommended.
Distribution:

Arizona Board of Regents Audit Committee
Michael M. Crow, President
Morgan R. Olsen, Executive Vice President, Treasurer and Chief Financial Officer
James Rund, Senior Vice President, Educational Outreach & Student Services
Jennifer Hightower, Vice President, Educational Outreach & Student Services
Aaron Krasnow, Associate President/Director ASU Health Services
Ruth Dassen, Director Fiscal & Business Ops, Education Outreach & Student Services
Joanne Anderson, Associate Director, ASU Health Services
Internal Audit Review Board