North Carolina Department of Correction

Response to Central Pharmacy Inventory Performance Audit

January 19, 2010

About Central Pharmacy

Duties/Responsibilities

- Provides quality, comprehensive, and cost-effective pharmaceutical care to approximately 40,000 inmates at 73 correctional facilities, which includes:
 - o Dispensing approximately 4,800 prescriptions daily (based on 2009)
 - o Intravenous services to five inpatient/infirmary facilities statewide
 - o Distribution of medical supplies
 - o Distribution of over-the-counter medications to prison canteens
- Provides education and consultation to health care providers
 - Clinical consulting services for all health care professionals, with clinical pharmacists assigned to five specific areas: diabetes, hepatology, infectious disease, medical inpatient, and inpatient mental health
 - o Drug therapy and interaction monitoring with interventions
 - o Training sessions for health care providers and inmate drug information
- Management of the DOC Formulary
- Participation in the utilization review process to ensure proper use of medications not on formulary
- Coordination of the acquisition, distribution, and reporting for Hepatitis A and B, seasonal influenza, and H1N1 vaccines

Policies/Procedures/Guidelines

- Operates in accordance with the rules and regulations promulgated by the North Carolina Board of Pharmacy and Drug Enforcement Administration (DEA)
- Follows community standards of practice with regards to physical inventory access
- Complies with all state and federal laws regarding the use of controlled substances
- Enforces stringent access procedures and monitoring to assure that access to stock is only by pharmacy employees with clearance in a particular area of the pharmacy

Costs

- o Approximately \$25.1 million spent on pharmaceuticals in FY 2007-08 (audit period)
- o Medications purchased at discounted rates via a multistate purchasing contract
- o Returned medications which could be returned to inventory saved the agency approximately \$1.1 million in FY 2007-08 (audit period)

Major Audit Findings/Recommendations

RECOMMENDATION: Central Pharmacy management should ensure that all pharmacy inventory is subject to effective accountability procedures and physical safeguards.

RESPONSE/CORRECTIVE ACTION:

- Community standards of practice with regards to physical inventory access
- Card swipe entry system in the pharmacy, dispensing areas, the warehouse, and the controlled substance vault
- Security cameras within the pharmacy and on the building's exterior
- 24-hour onsite security
- All inventory withdrawals recorded through electronic software database

RECOMMENDATION: Management should assess risk of non-controlled drugs and store those at higher risk of theft or loss in a secured room or vault.

RESPONSE/CORRECTIVE ACTION:

 Central Pharmacy Management agreed to develop processes and systems that can be utilized to identify and monitor noncontrolled drug inventory items that are assessed as being at a higher risk of theft or loss

RECOMMENDATION: Management should compare purchasing and dispensing data to calculate inventory difference every month and investigate significant differences.

RECOMMENDATION: Management should conduct periodic routine counts of inventory in addition to annual inventory count, compare physical inventory counts to quantities recorded in the system and investigate all significant differences. These counts should be blind counts because the same pharmacists who have access to inventory may be counting inventory.

RESPONSE/CORRECTIVE ACTION:

- Central Pharmacy is in the process of acquiring robotic dispensing system that will increase accuracy and improve inventory accountability
- Complete inventory following the full implementation of new software
- Central Pharmacy will develop inventory control process and systems including periodic counts of randomly selected medications and better comparisons of purchasing and dispensing data
- Central Pharmacy will continue to utilize a blind count system for all inventories

RECOMMENDATION: Management should limit the number of individuals with ability to adjust inventory records, require explanations for adjustments, ensure that a properly designated official approve all adjustments, and prevent employees with access to the pharmacy inventory from making inventory accounting record entries.

RESPONSE/CORRECTIVE ACTION:

- New pharmacy software will require adjustment type and comments and provide inventory adjustment reports
- Future staffing pattern changes with the implementation of robotics will further delineate and separate inventory ordering, receiving and adjustment responsibilities

RECOMMENDATION: Central Pharmacy management should require employees to document the drugs being disposed of, quantities and reasons for drug disposals. Reasons for disposal should be reviewed and analyzed.

RECOMMENDATION: Management should establish and monitor performance measures for drug disposal and investigate unexpected results and unusual trends.

RESPONSE/CORRECTIVE ACTION:

- New software system allows for each medication shipped from pharmacy to have specific barcodes that can be scanned and identified
- Reasons for returns will be captured in the computer system and enhanced report programming will allow for review and analysis
- Addition of robotics will allow realignment of the duties of pharmacy technicians to include actually counting quantities of the returns
- Reporting data will allow the investigation of unexpected results and unusual trends for established drug disposal performance measures