SimpleDose Application Audit

Internal Audit Report – # 21170



Jeff Hawkins, Senior Vice President, IT Retail Systems

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I. AUDIT BACKGROUND

CVS Health (CVSH) launched the SimpleDose Application ("SDA"), formerly Multi-Dose Packaging (MDP), in an effort to simplify the daily routine of retail pharmacy patients taking multiple medications. SDA supports the business SimpleDose Program to provide patients with a 30-day supply of pre-sorted medications in easy-to-open packets, which are labeled by dose, date, and time, and delivered directly to the patient's home or local CVS Pharmacy, at no added cost. Patients may enroll by calling the Pharmacy Care Team, directly online, and in select instances, in-store with the Retail Pharmacy Team.

The SDA is undergoing systematic enhancements to support CVSH's growth strategy and help meet the goal of 70 million prescriptions in 2022. Enhancements including the automation of patient enrollment will continue to improve workflow, increase efficiencies in processing and shipping orders, reduce labor costs, and communication with patients. The July 2021 SDA release increased capacity whereby all patients would be able to enroll on the platform.

At the request of management, Internal Audit (IA) performed an application review to assess the effectiveness of the controls in place for SDA.

II. SCOPE & OBJECTIVES

The scope of this audit was to provide reasonable assurance that management has effective controls in place to ensure the design and operating effectiveness of the SDA. The scope included the following objectives, for the period from January 1, 2021 ending March 31, 2021:

- A) Technology infrastructure supporting the SDA is able to support increased Patient and Pharmacy data volume.
- B) Access to critical system files is restricted or monitored based on individual job responsibilities.
- C) Changes to the production environment are reviewed, tested, and approved prior to production implementation.
- D) Data integrity and daily balance controls between the source systems and SDA are in place and data reconciles completely and accurately.
- E) Control processes for running jobs are in place for altering jobs schedules.
- F) Controls are in place to adequately resolve backup failures and ensure that data can be recovered for significant Retail Pharmacy Systems.

III. CONCLUSION & FINDINGS SUMMARY

□ Effective □ Improvement Needed □ Ineffective
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Based on the procedures performed for this audit, except for the issue noted, the information technology controls in place over SDA provide reasonable assurance that the business risks reviewed are adequately mitigated.

	Description	Business Area Rating		Ref. to Objective		
	Finding					
1.	User Access to Critical Application Directories	Retail Systems	Medium	В		

IV. FINDINGS & MANAGEMENT ACTION PLANS

1. User Access to Critical Application Directories

Critical directories on 6 of the 12 SDA servers were selected for testing to ensure access was restricted based on user job responsibilities. The SDA uses an active/passive resiliency model in event a significant disruption would result in the primary servers in the Rhode Island data center will failover to the Arizona data center servers.

Based on the test work performed, IA found that write permissions for critical SDA directories, on 3 of 6 servers reviewed and did not align with Control standard ATCS-190 "Development Personnel Should Not Have Production Access". ATCS-190 is designed to ensure the confidentiality, integrity and availability of information resources be maintained in accordance with a user's role and responsibilities. It appears the excessive permissions were isolated to the passive Arizona servers. Specifically, the number of users with excessive write permissions on the 3 servers were noted as follows:

Arizona Servers	Developers & SDA Support	Middle Tier Support	Technical Support	Total
RAZ1MPKAPL10V	42	28	56	126
RAZ1MPKDPA1B	24	0	76	100
RAZ1MPKWPL10V	41	29	56	126

As a result, individuals with excessive permissions had the ability to alter system and data files outside normal change management control processes.

Rating: Medium

Management Action Plan:

For short term remediation, change requests were submitted for access privileges to be aligned to appropriately restrict access based on user job responsibilities, which mirrors the Rhode Island based SDA server permissions. A long-term solution will be implemented to periodically review critical SDA library access privileges.

Remediation Owner:

Remediation Due Date: November 5, 2021 William Mullins, Director, IT Pharmacy Systems Completion Due Date: November 12, 2021

V. STANDARD TERMINOLOGY

Overall Control Environment Opinion:

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Effective	Overall, controls are appropriately designed and functioning as intended. Control weaknesses, if noted, do not threaten the effectiveness of the process reviewed.				
Mostly Effective	Except for the issues noted, controls in place provide reasonable assurance that business risks are adequately mitigated.				
Improvement Needed	One or more significant control weaknesses exist that require prompt action to prevent the process from becoming ineffective.				
Ineffective	Control weaknesses are pervasive or one weakness is so severe that it impacts the entire operation under review. Immediate management attention is needed to remediate the finding identified.				

V. DISTRIBUTION LIST

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