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|  | | | ***21107 - SimpleDose Application (SDA)***  **Date: 4/21/2021**  **Physical Location: N/A** | | |
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| **Attendees** | | | | | |
| **Customer** | | **Internal Audit Department** | | | |
| Gaurav Sachdeva, Sr. Director, IT Systems  William (Bill) Mullins, Director, IT Pharmacy Systems  Jeanne Willis, Sr. Manager, Information Systems  Padmalatha Ajit, Sr. Manager, Application Development | | Sarah Kubiak, Manager, IT Internal Audit  Michael Bavasso, Audit Project Manager, IT Internal Audit  Seun Mafi, Sr. Consultant, IT Internal Audit  Daniel Rodrigues, Sr. Consultant, IT Internal Audit  Daniel Benner, Consultant, IT Internal Audit  Ashish Joshi, Consultant, IT Internal Audit | | | |
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| **Business Unit** | IT Retail Systems | | | | |
| **Process** | Capacity Planning | | | | |
| **Process Owner(s)** | William Bill Mullins, Director, IT Pharmacy Systems  Padmalatha Ajit, Sr. Manager, Application Development | | | | |
| **Policies and Procedures** | -- | | | | |

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| **Purpose of the process walkthroughs** |
| The purpose of this walkthrough is to get a complete understanding of how the Capacity Planning process completed by the SimpleDose Application (SDA) team including identifying any systems used and the reports used/generated related to capacity planning. |

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| **Roles & Responsibilities of the Personnel involved in the process** | |
| **Role** | **Responsibilities** |
| William Mullins, Director, IT Pharmacy Systems | Technical owner of SDA. |
| Padmalatha Ajit, Sr. Manager, Application Development | Manager of the SDA Development and Support Teams. |
| Sudhakar Sunkara, Sr. Advisor, Database Engineer | Database Analysist (DBA) for the SimpleDose Application |

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| **Supporting Systems** | |
| **System Name** | **System Description** |
| Simple Dose | An application that helps customer service representatives better assist patients and customers with refilling their prescriptions. |
| Oracle | The underlying database for the SDA. |
| GIT Hub | The software development and version control tool for the SDA. |
| Splunk | The monitoring tool used to track and log user, transaction, and server activity related the SDA. |
| RxConnect | CVS Retail Pharmacy Patient Safety System |
| ESL | Enterprise Services Layer integrates connecting systems into the enterprise architecture. |
| Digital | Pharmacy Digital Business Products |
| Control M | Control M Distributed is the Tool used to control Batch Jobs |
| MED 3 | Tool used for monitoring batch job set up. |
| Guardian | Capacity Monitoring tool for SimpleDose Application |

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| **Process Walkthrough** |
| **Narrative populated based on consolidated minutes from walkthrough meetings: “**[**Capacity Planning Consolidated Meeting Minutes**](https://cvshealth.auditboardapp.com/download?file_id=84249&name=CP_Capacity%20Planning%20Consolidated%20Meeting%20Minutes.docx)**”**  The SimpleDose application team plan on executing capacity rollouts and its respective measurements in small successions as they move further along with deployment. The team currently do not have a final plan strategy for capacity planning neither do they have an assigned load distributor. Bill Mullins stated that in order to determine capacity, the team meets with the DBA to know how much space is needed on the database; however, they use basic tools for file storage. The DBA assigned for SimpleDose is the enterprise DBA.  The number of members/users that will be deployed on SimpleDose (SDA) will grow up to 500 users. The plan is not to exceed 800 users at any point. Only 4000 patients at this time through the use of Digital system will see their information on SImpleDose. It was also noted that Digital is downstream. At the moment, most users are being trained on how to navigate the SimpleDose interface. SimpleDose which is an Oracle database on Prem and is currently under 25% capacity. The DBAs manage the additional storage off-line independently and routinely check to see if there are any risks associated with accommodation. Clarity as to whether storage is virtual or on a hard drive was not ascertained.  Bill stated that the team set up monthly measurements of the database to see and make sure storage is not exceeded beyond limit. According to Padmalatha Ajit, the SimpleDose team alongside with the DBAs (admins), closely monitor the database should they need to purchase additional space. Both the DBAs and Padma’s team receive notifications which they monitor closely. They also have a testing performance environment. Monitoring is handled by an application team – the support team that will support production. Essentially, the database is a 1TB capacity. Once it gets to roughly about half (500gb), they are notified that SimpleDose (SDA) is cutting close to capacity, at which point they add more storage to the database. It was noted during the discussion that a good question to ask the DBAs is to know how they closely monitor capacity on the database? The DBAs consist of a run team and build team. If there is a production enhancement, production support is handled by the DBA team and they further coordinate these activities.  The SimpleDose application is still in phase 1. The team has not created any metrics, they mainly rely on metrics from DBA. They also utilize Guardian – a monitoring tool. Padma noted that they do performance testing. In phase 2, there are some volume testing and performance testing for Batch Jobs ongoing and these are handled by the Dev Team. They also involve other teams in DBA during this process. It was also noted that these volume and performance testing are done routinely on each release. Currently, the SimpleDose application has a low volume, capped at 1TB. Padma foresees that this capacity will last about 2 to 3 years. By the third quarter, there will be at about 4000 patients. At the moment, no further detail on data synchronization was ascertained. Padma also noted that data recovery will be managed by the DBAs. The DBA for SimpleDose is Sudhakar Sunkara. SimpleDose has a disaster recovery plan separate from what infrastructure has planned in such scenario. Jeanne noted that she will be available to provide the DR and Fall Over Plan upon request. |