

# Quality Improvement Organization Manual

## Chapter 8 - Data Management

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## **8000 - Introduction - (Rev. 1, 05-23-03)**

This section describes the minimum requirements and responsibilities of the Quality Improvement Organizations (QIOs), formerly the Peer Review Organizations (PROs) in using the Standard Data Processing System (SDPS). The QIOs must document the policies and procedures they develop to conduct these requirements in a SDPS Data Management Plan. The SDPS Data Management Plan should follow the format in Exhibit 8-1.

## **8005 - Staffing Functions - (Rev. 1, 05-23-03)**

### A. Staffing

CMS' SDPS provides you with hardware and software tools to enable your personnel to fulfill the requirements of the QIO programs. You are responsible for adequately staffing the functions described in this section and associated references to other documentation. This includes, but is not limited to, knowledgeable personnel to perform:

- Timely updates;
- Routine maintenance procedures; and
- Local troubleshooting for SDPS workstations, printers, file servers, routers, and database servers.

Make the necessary business decisions within your organization to ensure Information Systems (IS) staff are adequately hired, maintained, managed, and trained to continue effective operation of the SDPS system in its current environment. If you are unable to fulfill the functions described in this manual section and/or as described in your SDPS Data Management Plan and associated references to other documentation due to staffing changes, immediately notify your project officer and the SDPS Help Desk.

### B. Responsibilities and Descriptions

**Security Staff** -- Personnel with responsibility to make decisions about access to databases and the network for staff at their QIO. These individuals should have sufficient business knowledge to determine the access that would be appropriate for SDPS applications and the databases with which they are associated.

**Technical Staff** -- Personnel with a basic understanding of relational databases with emphasis on Oracle. Ability to follow directions provided by SDPS Memos and the SDPS Help Desk, as well as supporting local analysis efforts. Technically capable of

coding and reviewing code run against large databases such as the National Data Warehouse.

QIO RS/6000 Systems Administrator -- This qualification should include 3 - 4 years of experience in working with IBM AIX. AIX Systems Administration Certification is a plus but not a requirement. Ability to follow directions provided by SDPS Memos and the SDPS Help Desk, as well as supporting local analysis efforts. This administrator will follow the guidelines in the Systems Administrator Guide. This administrator will be required to:

- Perform normal systems maintenance
- Daily backups of the AIX file server
- Support the local user population
- Report any problems in the local SDPS environment to the SDPS Help Desk for resolution
- Follow instructions provided by the SDPS Engineers for changes to the local SDPS environment
- Use the Remedy system to provide information on the local SDPS environment to CMS and the SDPS Help Desk
- Keep abreast of any SDPS memos or Technical Alerts posted to the SDPS Intranet

QIO LAN Administrator -- This qualification should include 3 - 4 years of experience in working with the Novell network operating system and user/workstation support. Novell CNE certification is a plus but not a requirement. Ability to follow directions provided by SDPS Memos and the SDPS Help Desk, as well as supporting local analysis efforts. This administrator will follow the guidelines in the Systems Administrator Guide. This administrator will be required to:

- Perform normal systems maintenance
- Daily backups of the Novell file server
- Support the local user population
- Report any problems in the local SDPS environment to the SDPS Help Desk for resolution
- Follow instructions provided by the SDPS Engineers for changes to the local SDPS environment

- Use the Remedy system to provide information on the local SDPS environment to CMS and the SDPS Help Desk
- Keep abreast of any SDPS memos or Technical Alerts posted to the SDPS Intranet

### C. Security

Password Change Notification -- Each QIO is required to notify the SDPS Help Desk any time they change the RS/6000's root password. Each QIO is required to maintain a list of root passwords they have used in the past and keep the effective date and date the password was changed in the event the SDPS Help Desk would need to restore from an old MKSYSB tape.

Employee Resignation and Termination -- In the event of a QIO employee either leaving or being terminated, the QIO is required to remove or disable the users login account on the local RS/6000 and in the Oracle database, and they must notify the SDPS Help Desk that the user is no longer employed at the QIO. In addition, the QIO is required to notify the SDPS Help Desk to disable any accounts for national Quality Net access. This will serve as a way to remove/disable any accounts that the particular user may have on either Quality Net complex 1 or 2 SP's.

### **8010 - Mandatory System Use - (Rev. 1, 05-23-03)**

CMS-approved systems are the standard for the SDPS community. SDPS is the Office and Division of Clinical Standards and Quality (central and regional offices), the Clinical Data Abstraction Center, and the Quality Improvement Organizations data system for communications. It is also the standard platform for data and for accessing the data. The components of the SDPS include, but are not limited to, file servers, workstations, database servers, commercial off the shelf (COTS) products, custom written software (e.g., including, but not limited to PROvantage, PRS, PATS, CATS, SDPS Infonet reports, and SEFF), and video conferencing. All QIOs are required to use the same software, hardware, and procedures to conform to the entire SDPS. You are required to use all components of SDPS and SDPS Developed Applications (e.g., PROvantage, PRS, PATS, CATS, SEFF, MedQuest), and other new components, when implemented, to manage and report work done under the current Statement of Work (SOW). Enter information according to the QIO Manual and applicable SDPS reporting requirements.

### **8015 - Operations - (Rev. 1, 05-23-03)**

A. Monthly Merge -- The SDPS databases located at the QIO site have periodic load processes that you are required to run by the 5th calendar day of each month. This load process is referred to as the Monthly Merge. The Monthly Merge is a set of processes

you perform to load and merge claims, beneficiary, reference, physician, Health Services Providers, Health Maintenance Organizations, and other files that are needed on a regularly scheduled basis into the Oracle database. (See the SDPS Data Base Administrator (DBA) Guide for specific instructions.) Until the SDPS applications are moved to a national database, this Monthly Merge process must be kept current. Prior merges not run, need to be caught up to keep the data accurate. Problems regarding the monthly data merge process should be directed to the SDPS Help Desk as soon as they are identified.

B. Capacity Metering -- Monitor the capacity of the SDPS. Perform and collect periodic capacity analysis. Capacity analysis includes disk utilization and system performance. (See the DBA Guide for more specific instructions.) Clean up system disk areas on a regular basis. The SDPS Team may periodically access the QIO SDPS to monitor disk space and volume capacity to determine future needs of the QIO.

C. Backups -- Perform regular backups as required in the Backup and Recovery Guide referenced as an appendix to the DBA Guide.

- AIX Systems Backups -- Complete AIX Database Server Backups must be completed as specified in the AIX Systems Administrator Guide. QIOs should follow the AIX Systems Administrator Guide as to purchasing the specific quantity and brand of backup tapes. QIOs should allocate an annual budget for tape replacement.
- AIX MKSYSB Backups -- A MKSYSB must be completed at least once a month. We suggest the first Monday of the month for performing the MKSYSB. See the AIX Systems Administrator Guide for how to perform the MKSYSB.
- Novell File Server Backups -- Complete backups of the Novell file server are to be performed each night as specified in the SDPS LAN Administrator Guide. The QIO is responsible for purchasing and having on hand the backup media required to maintain the backup schedule as specified in the SDPS LAN Administrator Guide.
- Offsite Tape Storage -- Each QIO must participate in a qualified off-site tape storage program. See the AIX Systems Administrator Guide and the SDPS LAN Administrator Guide for the requirements.

D. System Upgrades -- The SDPS team provides periodic systems upgrades, which are released to the QIO community. You are responsible for installing them in a 30-day timeframe according to the instructions provided. Future system upgrades are based on the fact that prior upgrades have correctly been installed. If problems arise in this area, contact the SDPS Help Desk immediately.

E. Producing Required Data/Reports -- CMS requires you to enter data timely. You are required to meet this schedule and ensure that the data and information are accurate and

complete (e.g., reflects current status of QIO performance). This information may be generated from the SDPS-provided software.

F. Ad Hoc Data Requests -- QIOs wanting access to CMS data that is not accessible to them may request it through the process outlined in the Ad Hoc attachment to the SDPS DBA Guide. As additional data sources become available, they are documented and provided to you through this Ad Hoc process.

G. Quality Assurance/Data Integrity of QIO Generated Data -- You are responsible for implementing processes to routinely monitor the quality and integrity of data which is generated by your staff and collaborators when performing Seventh Statement of Work activities. Policies, results, analysis, and corrective actions should be documented and kept on file.

H. Insurance Issues -- Unless otherwise specified, if a contractor uses Government-furnished property, the Government acts as a self-insurer. If the contractor exercises reasonable care and custody, we will replace any damaged or stolen equipment.

I. QIO/Clinical Data Abstraction Center (CDAC) Interaction -- CDACs will perform data abstraction for all national projects. You are encouraged to use the CDACs to perform data abstraction for any of your local projects. If this option is used, develop and provide specifications to the CDACs based on CMS standards.

## **8020 - Communication - (Rev. 1, 05-23-03)**

A. SDPS Memos -- SDPS Memos are issued routinely to inform the QIO community of CMS and SDPS issues. SDPS Memos are sent by e-mail from the SDPS Help Desk to the appropriate SDPS Points of Contact (e.g., DBA Point of Contact, Review Point of Contact, etc.). Copies of the SDPS Memos are also stored on the SDPS Infonet as a reference. Distribute the memos to appropriate QIO staff and act on the instructions in a timely manner.

B. Internet -- The SDPS provides Internet access and e-mail on the World Wide Web for use by the QIO community for business-related work. QIOs are responsible for educating Internet users as to appropriate business use. The SDPS Help Desk monitors use of this service.

C. CMS Newsletters -- The SDPS Newsletter is published monthly by the SDPS team and distributed to CMS and the QIO community. Route the SDPS Newsletter to the appropriate QIO staff. The SDPS Newsletter is distributed on the 15th of each month via e-mail from the SDPS Help Desk and is also posted on the SDPS Infonet.

D. Infonet -- The SDPS Infonet is set up on the Wide Area Network (WAN) to provide information via the SDPS Newsletter, SDPS Memos, newsgroups, release notes, release executables, user documentation, and training documentation. This setup provides

efficient distribution of materials for your use. The Infonet has zones set up with limited access to provide security for the information posted. You need a password to access the secured areas of the Infonet. Routinely access the Infonet server to obtain information on the latest changes in the SDPS. Workgroup activity and other information are located in the Newsgroups section of the Infonet, which is helpful to the end users.

E. Periodic Data Issues Conference Calls -- The SDPS team provides a periodic Data Issues call as published in the SDPS Newsletter. Provide a representative to participate in the latest activities related to the SDPS.

F. Training -- The SDPS provides training on SDPS Developed Applications (including but not limited to PROvantage, PRS, PATS, CATS, and SEFF) and new features of SDPS (e.g., using reporting tools) via Quality Net e-University. Hands-on training is provided at the Quality Net User's Group Conference. You are responsible for having appropriate personnel attend these sessions.

G. Point of Contact (POC)/ SDPS Help Desk -- The SDPS provides a Help Desk accessible to you via e-mail, fax, or telephone. Assign a designated POC with the SDPS Help Desk. This information should be kept current. Any changes to the POC list should be reported to the SDPS Help Desk immediately. The SDPS Help Desk is used to facilitate questions, problems, suggestions, Engineering Review Boards (ERBs), and maintenance issues. The SDPS Help Desk may be contacted at 1-888-432-2737, or you may fax them at 1-888-329-7377, or you may send a GroupWise message to the SDPS Help Desk in the IA-DEV Public Group. QIOs are required to contact the SDPS Help Desk in the event of any system problem or issue. QIOs should only use the designated SDPS Help Desk Support Number to report problems or issues and should refrain from contacting the support staff directly without an issue ticket being created. Only the designated QIO Point of Contact is to call the SDPS Help Desk.

H. QIO Use of the Remedy System -- The Remedy system is used by the SDPS Help Desk to track changes and problems within the SDPS environment. Each Remedy user must have his or her own username and password. Only the approved Remedy users are to have access to the username and password for the Remedy system. The QIOs are required to use the Remedy system to provide information to CMS and to the SDPS Help Desk. This information will include, but will not be limited to the following:

- SDPS hardware inventory
- SDPS software inventory
- ERB submission and tracking
- Tracking of changes to the SDPS environment
- Any additional information relevant to the operation of the local SDPS environment

I. SDPS Workgroups -- There are several SDPS Workgroups designed to provide input to CMS and the SDPS team for enhancements and suggestions for improvement. The SDPS Workgroups are divided into specific focus areas. Information about the Workgroups is available on the SDPS Infonet in the Newsgroups area. QIOs are urged to participate in the SDPS Workgroups.

### **8025 - Confidentiality Of System - (Rev. 1, 05-23-03)**

To maintain system confidentiality, CMS has a WAN in place that is exclusive to the QIO community. Information retrieved and/or transmitted within this system is protected from outside invasion. Do not transmit confidential data through the Internet without prior written permission from CMS. In addition, DO NOT connect or install external systems, applications, or procedures without prior approval by CMS and the SDPS team. You may request potential changes to the SDPS infrastructure through the ERB request process. If you fail to obtain prior approval, you may be disconnected from the SDPS WAN without warning.

### **8030 - Applicable Documentation - (Rev. 1, 05-23-03)**

The SDPS community is provided with documentation (e.g., guides and manuals) to support the activities of the SDPS system. A Users Guide and a list of updates accompany each release of the SDPS-developed software applications (including but not limited to PROvantage, PRS, PATS, CATS, and SEFF). A Data Model to chart the tables and associations of data and an SDPS Data Dictionary with extensive definitions for the various components of the Data Model are also provided by SDPS. Other documentation is released to inform QIOs of procedures, processes, and system maintenance. This documentation is as follows:

- Users Guides;
- SDPS Data Model Poster;
- PDF Version of the SDPS Data Model;
- SDPS DBA Guide;
- The InfoMaker Master Library; and
- The SDPS Data Dictionary.

Copies of SDPS documentation can be obtained from either the SDPS Infonet or by contacting the SDPS Help Desk.

## **8035 - Process For Moving - (Rev. 1, 05-23-03)**

If you plan to move offices and/or major SDPS equipment (file servers, database servers, etc.), you must contact the SDPS Help Desk immediately. It takes approximately 54 business days for the phone service companies to move the FTS2000 government telecommunication lines. In addition, properly package and insure all equipment to protect against damages during the move.

## **8040 - Standard Data Processing System (SDPS) Engineering Review Board (ERB) Process -- Approved Software And Hardware - (Rev. 1, 05-23-03)**

The SDPS Team provides a list of standard hardware and software. Periodically, the SDPS Team adds additional items to the list of approved SDPS items. Prior to purchasing approved SDPS items or having external non-SDPS procedures, connections, or applications integrated with the SDPS system, submit an SDPS ERB request on the AR System ERB Database. The SDPS ERB Team evaluates and coordinates the purchase of approved, denied, or returned for additional documentation based on the determination of the SDPS ERB Team and CMS. When you receive an approved SDPS ERB request involving software or hardware, pay the vendor directly from your invoice. Once the hardware or software is received, you need to update the AR System hardware or software inventory database.

QIOs are required to submit an ERB request to the SDPS Help Desk and wait for approval before making any changes to the RS/6000 system or its peripherals. All requests will be properly evaluated before a request can be implemented. All ERB requests submitted must benefit the entire QIO community before they will be approved.

QIOs are required to submit an ERB request to the SDPS Help Desk and wait for approval before making any changes to the Novell file server, workstations, or any peripherals. All requests will be properly evaluated before a request can be implemented. All ERBs will be submitted online using the Remedy system.

Hardware and software approved by the Engineering Review Board and CMS must be purchased and installed within 45 days of the notification to the QIO that the ERB was approved. Any information relevant to the ERB (e.g., hardware or software serial numbers or license certificates) must be communicated to the SDPS Help Desk.

## **8045 - Hardware Maintenance Process - (Rev. 1, 05-23-03)**

The SDPS provides for maintenance on most SDPS equipment. Hardware maintenance issues are called in to the SDPS Help Desk. The information is entered into an SDPS tracking system. The SDPS Help Desk coordinates with the maintenance vendor to

resolve the issue. Once resolved, notify the SDPS Help Desk to complete the tracking of the issue.

IBM CE Support -- Under no circumstance should any QIO allow an IBM CE or any other person posing as a support technician to perform any service or maintenance to the RS/6000 or its peripherals without an SDPS Help Desk AIX Systems Administrator being on the phone or having direct knowledge of the case at hand.

Hardware Replacement (Warranty) Notification -- QIOs are required to notify the SDPS Help Desk any time there is a physical serial number change to the RS/6000 or any of its peripherals due to maintenance or hardware failure.

Database Server -- System Updates (AIX, Oracle, Mlink, SAS, PowerChute) – QIOs are not to install any unauthorized software on the RS/6000. In the event the QIO is required to perform any updates to the system without the SDPS Help Desk being present, the QIO must submit a Statement of Completion form to the SDPS Help Desk.

Novell File Server Support -- Under no circumstance should any QIO personnel or any other person posing as a support technician perform any service or maintenance to the Novell file server's hardware or its peripherals without a SDPS Engineer being on the phone or having direct knowledge of the case at hand. Any changes to the Novell file server's hardware or software configuration must be directed by a SDPS memo and formal instructions. The changes must be recorded when complete using the Remedy system (mentioned above), and any documentation or files requested by the SDPS Engineering team must be sent to the SDPS Help Desk. All changes released by the SDPS Engineers by way of an SDPS memo and formal instructions must be implemented within 45 days of the release of the SDPS memo unless otherwise directed by an SDPS Engineer. QIOs are not to install any unauthorized software or hardware on the Novell file server.

Workstations -- The LAN Administrator is to maintain the standard SDPS workstation image on the workstations at all time unless directed by an SDPS Engineer. Unauthorized software or hardware is not to be installed on the workstations. Any changes must be approved by an ERB.

### **Exhibit 8-1 - (Rev. 1, 05-23-03)**

#### STANDARD DATA PROCESSING SYSTEM (SDPS) DATA MANAGEMENT PLAN

QIO Organization:  
Applicable State(s):

SDPS Data Management Plan Section:

A. Process -- Describe, in detail, your process for ensuring that the required activity in each Section of the SDPS Interface Document is fulfilled within your organization. Include how coordination with other activities will occur, if warranted.

B. Primary -- Indicate the staff person (e.g., job title) who has primary responsibility for conducting the process described in (A):

C. Secondary -- Indicate the staff person (e.g., job title) who has secondary responsibility for conducting the process described in (A) (e.g., this is the backup to the primary, so it must be someone other than the primary listed in (B)):

D. Frequency -- Indicate the frequency which the process described in (A) is performed:

E. Criteria -- Describe the criteria used to determine when an intervention is required:

F. Intervention -- Describe the intervention(s) which may be taken if warranted:

G. Notes -- Additional notes:

Listed below are the sections to be plugged into the final SDPS Data Management Plan document:

#### I. Staffing Functions

A. Staffing

B. Responsibilities and Descriptions

C. Security

#### II. Mandatory System Use

#### III. Operations

A. Monthly Merge

B. Capacity Metering

C. Backups

D. System Upgrades

E. Producing Required Data/Reports

F. Ad Hoc Data Requests

- G. Quality Assurance/Data Integrity of QIO Generated Data
  - H. Insurance Issues
  - I. QIO/CDAC Interaction
- IV. Communication
- A. SDPS Memos
  - B. Internet
  - C. CMS Newsletters
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  - E. Periodic Data Issues Conference Calls
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