

2016

SPARCS Operations Guide

Bureau of Health Informatics
Office of Quality and Patient Safety
NYS Department of Health

Version 1.2 (November 2016)

SPARCS Operations Guide

Version 1.2 (November 2016)

Table of Contents

- I. Overview 3
 - Objective..... 3
 - SPARCS Operations..... 3
 - Background..... 3
- II. Facility Access Accounts 4
 - Adding New Facilities..... 4
 - Information Needed to Add Facility to HCS: 4
 - Obtaining an HCS Account..... 5
 - Adding Vendors 6
- III. Submitting Data via the Health Commerce System 6
 - SPARCS Upload Permission..... 6
 - Data Submission Requirements..... 7
 - SPARCS Data Sources 7
 - SPARCS Input Data Dictionary 8
 - SPARCS-837 PC Software 8
- IV. Processing SPARCS Data..... 9
 - SPARCS File HCS Submission and Edits 9
 - Submitting the SPARCS File 9
 - Editing Process 9
 - Master File Updates..... 11
 - Key Identifying Information..... 11
 - Inpatient Primary Keys Data Elements:..... 11
 - Inpatient Alternate Key Data Elements for Adding Records: 11
 - Outpatient Primary Key Data Elements: 11
 - Outpatient Alternate Key Data Elements:..... 12
 - Reports and Data 13
 - Reports/Data Available for Request on the Health Commerce System 13
 - Reports Available on the Public Website..... 14
 - Audit Report 14
 - Compliance Report..... 15
 - Submission HISTORY REPORT 17
 - Error Correction Process..... 18

	Edit Reports	18
	Error Files	19
	Additional Resources.....	19
V.	Communications	20
	Public Website	20
	Bureau Mail Log.....	20
	ListServ.....	20
	SPARCS Update Newsletter	20
VI.	SPARCS Data Quality and Quantity	20
VII.	Output User Files.....	20
	Data Types	20
	Identifiable	20
	Limited.....	21
	Public Use	21
	Data Request Flow.....	22
	SPARCS Health Data Query System	23
	Standard SPARCS Output File	23
	Inpatient Output File	23
	Outpatient Output File	23
	Contact Information.....	23
	Appendix A – Glossary of Acronyms and Terms	24
	Appendix B – Change Log Between Versions.....	29

I. OVERVIEW

OBJECTIVE

The purpose of this guide is to describe the New York Statewide Planning and Research Cooperative System (SPARCS) and its operations. It describes how data is acquired, processed, and accessed; and illustrates how data is added to the master files, how errors are flagged, and what data is available. In addition, the content and availability of file maintenance reports and output user files are provided, along with information on ensuring SPARCS data quality and quantity.

SPARCS OPERATIONS

The responsibility for protecting the confidentiality and privacy of data related to patient care resides with the Commissioner of Health. The responsibility for tracking and monitoring the technical functioning of SPARCS directly resides within SPARCS Operations. SPARCS Operations staff are responsible for answering questions about the collection, maintenance, and release of SPARCS data.

SPARCS Operations is located within the Bureau of Health Informatics (BHI) in the Office of Quality and Patient Safety (OQPS), Division of Information and Statistics. Contact information may be found in the last section of this guide.

BACKGROUND

The Statewide Planning and Research Cooperative System (SPARCS) is a comprehensive all payer data reporting system established in 1979 as a result of cooperation between the healthcare industry and government. The system was initially created to collect information on discharges from hospitals. SPARCS currently collects patient level detail on patient characteristics, diagnoses and treatments, services, and charges for each of the following facility types in New York State:

SPARCS has been an all payer public private partnership for over 35 years.

Inpatient

- Hospital Inpatient (1982-present)

Outpatient

- Ambulatory Surgery (1983-present)
- Emergency Department (2005-present, partial collection for 2003-2004)
- Expanded Outpatient Data Collection (EODC) (2011-present)

The enabling legislation for SPARCS is located under Section 28.16 of the Public Health Law (PHL). The regulations pertaining to SPARCS are under Section 400.18 of Title 10 (Health) of the Official Compilation of Codes, Rules, and Regulations of the State of New York (NYCRR).

The regulations require that inpatient data be submitted by all Article 28 facilities certified for inpatient care and that outpatient data be submitted by all hospital-based ambulatory surgery services and all other facilities providing ambulatory surgery services. Data are to be submitted in the designated format and schedule.

In April 1983 and June 1985, the State Hospital Review and Planning Council adopted additional regulations regarding the reporting of ambulatory surgery data to the New York State Department of Health. Additional specifications for ambulatory surgery appear in Section 755.1 and Section 755.10.

Recognizing the need for emergency department data, the New York State Legislature passed, and legislation was signed on September 2001 mandating the collection of emergency department data through SPARCS beginning September 2003.

On April 12, 2006, a new section was added to the law, Section 2816 (2) (a) (iv), authorizing the collection of outpatient clinic data from all Article 28 general hospitals and diagnostic and treatment centers (D&TCs) operating in New York State. The previous authority, granted for the collection of inpatient hospitalization stays and ambulatory surgery and emergency department visits, was

not changed. With the 2006 revision to Section 2816, the Commissioner, in consultation with the healthcare industry, is authorized to promulgate or adopt any rules or regulations necessary to implement the collection of outpatient services data.

In order to fulfill New York State regulations, data elements are required to be submitted to SPARCS in a specified format. SPARCS requires the submission of patient data electronically. Effective January 2008, inpatient and outpatient data is submitted to SPARCS in X12-837 formatted files. Inpatient and outpatient data must be submitted on separate submissions.

Changes in SPARCS submission requirements are published in the [SPARCS Update](#) newsletter, so that facilities can alter their internal systems or notify their vendor of the needed changes. These changes are also distributed to subscribers of the SPARCS-L listserv, described in the Communications section of this guide.

SPARCS data users and submitters will find a vast array of specific information concerning SPARCS data content, formats, and access on the Department of Health public website at the following direct link: <http://www.health.ny.gov/statistics/sparcs/>.

SPARCS continues to be a major management tool assisting hospitals, agencies, and healthcare organizations with decision making regarding financial planning and monitoring of inpatient and outpatient services and chargers. In an effort to reflect the needs of data users, data elements and formats are periodically modified. These modifications are the direct result of input from data users.

II. FACILITY ACCESS ACCOUNTS

ADDING NEW FACILITIES

The Department of Health's secured website is known as the Health Commerce System (HCS). The HCS is maintained by the Office of Information Technology Services, Bureau of HEALTHCOM Network Systems Management and managed by the Commerce Accounts Management Unit (CAMU). The confidentiality of submitted data is protected by requiring that each organization adheres to the New York State Department of Health's data security standards.

To submit SPARCS data, view a Hospital's Own Data (HOD), and review audit reports, quality reports, and performance metrics, new facilities must first contact SPARCS Operations at sparcs.submissions@health.ny.gov to be added to the HCS.

The administrator or other executive of an organization, who enrolls as the HCS Administrator, will automatically be made the HCS Coordinator and HCS Security Coordinator. The HCS Administrator can designate an alternate HCS Coordinator to perform the Coordinator function. The primary tasks of the HCS Coordinator are to add new users and to assign the HCS role of SPARCS Coordinator to whomever the facility's Director gave that responsibility to. Their information must also be included under *Coordinator Info*.

INFORMATION NEEDED TO ADD FACILITY TO HCS:

ORGANIZATION INFORMATION

1. Organization name
2. Organization type
3. Organization PFI

ADMINISTRATOR/DIRECTOR INFORMATION

4. Complete first, middle, and last name
5. Month and day of birth
6. HCS ID (if one exists)
7. Job title
8. Work address
9. Office telephone number
10. Office fax number
11. E-mail address
12. Existing Director being replaced (if applicable)

HCS COORDINATOR INFO:

13. Complete first, middle, and last name
14. Month and day of birth
15. HCS ID (if one exists)
16. Job title
17. Work address
18. Office telephone number
19. Office fax number
20. E-mail address

OBTAINING AN HCS ACCOUNT

Once the Director and the HCS Coordinator have HCS accounts, the HCS Coordinator may use the paperless method to obtain HCS accounts for other users in the organization. This is a two-step process. First, the user must register to receive their account registration information (Step One). Then, the HCS Coordinator must complete the process by requesting the creation of an HCS account (Step Two).

STEP ONE: REGISTRATION

1. Open your web browser and enter this website in the address bar: <https://apps.health.ny.gov/pub/usertop.html>
2. Click **Register** for an account'
3. Complete the Name, Address and Policy Statement sections, and click **Continue**
NOTE: Your name and address must match what is on your NYS driver license or NYS Photo ID
4. Request a userid and create a password, click **Continue**
5. Answer at least six of the 27 secret question, click **Register**
6. Confirm your account information, and click **Confirm**
7. Print your NYSDOH Account Registration Completion information, click **OK**
8. You will receive a confirmation e-mail that your userid was created
9. See your *HCS Coordinator with your NYSDOH Account Registration Completion printout and your NYS DMV driver license or NYS DMV Non-driver Photo ID

Users can contact CAMU at (866) 529-1890 if they do not know the identity of the organization's HCS Coordinator.

STEP TWO: HCS COORDINATOR STEPS

The HCS Coordinator can enroll a user with the paperless process using the user's registration information and their driver's license.

1. Log on the HCS
2. Click **Coord Account Tools - HCS** under My Applications
3. Click **User** under 'Request an account for a...'
4. Click **Yes, they have a NYS DMV driver license or NYS DMV Nondriver Photo ID**
Note: A NYS driver license is required for the paperless process. If they do not have one, click '**No, they do not ...**'
5. Select your organization in the list
6. Enter the user's Public ID, click **Submit**
Note: This information must be supplied by the user when they registered for an HCS account
7. Enter the user's information from the NYS driver license or NYS Photo ID, click Submit
8. Enter the user's contact information (fields marked with an asterisk are required), click **Submit**
9. Your user is enrolled on the HCS. Please instruct them to log in using their userid and password.

ADDING VENDORS

Vendors must have their companies registered on the HCS. The organizational type is a commercial entity. The Director and the HCS Coordinator must be issued HCS accounts. The Director automatically becomes the HCS Coordinator unless specifying another individual in the company to fill that role. Please note that the healthcare facility is ultimately responsible for the timely submission of accurate SPARCS data.

STEP ONE:

If the vendor does not already have an HCS account, complete the “Information Needed to Add Facility” under the above section “Adding New Facilities.” When done, e-mail the information to sparcs.submissions@health.ny.gov to register the vendor’s business and to obtain HCS accounts for the two roles (Director and HCS Coordinator). SPARCS will receive notification that the business is registered on the HCS and forms will be e-mailed to the Director and HCS coordinator, with instructions on how to obtain a unique HCS userid and password. Once your HCS account is activated you can add individual users to the HCS by following the directions in the above section titled “Obtaining an HCS Account.”

If the vendor is already on the HCS and does have an existing HCS account, a facility can affiliate them with their organization by adding the user’s HCS ID to the “SPARCS Coordinator Role,” located under “Manage Role Assignments” in the “Coordinator’s Update Tool.”

STEP TWO:

After a vendor’s HCS account has been created, we will send them a blank vendor agreement form that needs to be signed by the facility, and by a binding party at the vendor’s organization. This document can then be submitted to us electronically at sparcs.submissions@health.ny.gov. Only the vendor’s Director may sign the vendor agreement.

III. SUBMITTING DATA VIA THE HEALTH COMMERCE SYSTEM

The HCS provides an efficient and secure data transmission option utilizing the Internet Secure Sockets Layer (SSL) encryption technology. This upload process is used to transmit X12-837 formatted claims to SPARCS. For specific edit and coding information, please refer to the SPARCS X12-837 input Data Dictionary: <http://www.health.ny.gov/statistics/sparcs/sysdoc/input5010.pdf>.

Data may be uploaded to SPARCS via the HCS 24 hours a day, 7 days a week. An electronic confirmation, which includes the submission mode (TEST or PROD), is received within a few minutes. Data is routed to the mainframe computer for processing Monday through Friday, 7:30AM - 5:30PM. Submission results (Edit Report and Error file, if applicable) are usually returned to the HCS within 2-3 hours of the time of data submission. Sometimes the return of the Edit Reports and Error files are delayed because of high traffic volume. Facilities should wait until the next business day before contacting the SPARCS or resubmitting their SPARCS file. The Edit reports and Error files are available on the HCS 24 hours a day, 7 days a week. All reports are automatically deleted from the HCS after 30 days have expired.

SPARCS UPLOAD PERMISSION

After receiving the HCS account, SPARCS data submitters must also receive SPARCS upload permission to submit SPARCS data through the HCS. To obtain permission, SPARCS data submitters must log onto the HCS. From the HCS home page:

1. Click on Applications from the top menu bar
2. Click on the letter S
3. Click on the green “+” for SPARCS Data Submission under Add/Remove to add to “My Applications”
4. From your “My Applications” list on the left of the HCS Home Page: Select SPARCS Data Submission
5. Complete the Request for Access to the SPARCS Data and Report System form

Your request will be e-mailed to SPARCS Operations staff. SPARCS staff contacts the healthcare facility’s SPARCS coordinator to obtain permission for the requestor to be granted SPARCS upload permission. For vendors, the organizational representative

(person who signed the vendor agreement) is sent an e-mail requesting their approval to grant SPARCS Upload permission. An e-mail will be sent when access has been granted.

Note: It is the responsibility of the SPARCS coordinator or vendor’s organizational representative to notify SPARCS if the SPARCS data submitter leaves the facility or no longer requires SPARCS upload permission. Failure to notify SPARCS of this change could allow unauthorized access to your healthcare facility’s data.

DATA SUBMISSION REQUIREMENTS

SPARCS DATA SOURCES

- Inpatient
- Outpatient
 - a. Ambulatory Surgery (AS)
 - b. Emergency Department (ED)
 - c. Outpatient Services (OP)

The following Article 28 licensed facilities are currently required to submit data to SPARCS:

- Hospitals
- Hospital extension clinics (only those licensed for ambulatory surgery services)
- D&TC (only those licensed for ambulatory surgery services)
- D&TC extension clinics (only those licensed for ambulatory surgery services)

Inpatient and outpatient data must be submitted on separate files in the X12 837 5010R file format.

The submission requirements are as follows:

- SPARCS data must be submitted on a monthly basis.
- 95% of the facility's SPARCS data must be submitted within 60 days following the end of the month of patient discharge/visit.
- 100% of the facility's SPARCS data is due within 180 days following the end of the month of the patient discharge/visit. Operationalized by requiring the submission of 100% of the facility’s data 180 days following the end of the quarter of the patient discharge/visit.

SPARCS Monthly Submission Schedule: Reporting Requirements; Section 400.18 of Title 10:

DEADLINE Last Day of the Month	Discharge/Visit Month
January	95% of November data
February	95% of December data
March	95% of January data
April	95% of February data
May	95% of March data
June	95% of April data
July	95% of May data
August	95% of June data
September	95% of July data
October	95% of August data
November	95% of September data
December	95% of October data

The X12-837 Input Data Dictionary is available on our public website at:
<http://www.health.ny.gov/statistics/sparcs/sysdoc/input5010.pdf>.

The SPARCS X12-837 Input Data Dictionary details the form and content for each required data element. Following is a sample page from the Input Data Dictionary for the SPARCS Facility Identification Number:

SPARCS INPUT DATA ELEMENT DESCRIPTION

<p>Data Element Name: SPARCS Facility Identification Number</p> <p>Format-Length: N - 5</p> <p>Effective Date: October 1999</p> <p>National Standard Mapping:</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 25%;">Electronic - 837I</td> <td style="width: 15%;">X12 Loop</td> <td style="width: 15%;">Ref. Des.</td> <td style="width: 15%;">Data Element</td> <td style="width: 10%;">Code</td> <td style="width: 20%;">X-12 Data Element Name</td> </tr> <tr> <td>Version 4050R</td> <td>2010AA</td> <td>REF 02</td> <td>127</td> <td></td> <td>Service Provider Secondary Identification</td> </tr> <tr> <td>5010R</td> <td></td> <td></td> <td></td> <td></td> <td></td> </tr> <tr> <td>Paper Form</td> <td>Locator</td> <td>Code Qualifier</td> <td>Description</td> <td></td> <td></td> </tr> <tr> <td>Institutional - UB-04</td> <td>N/A</td> <td>N/A</td> <td>Does not apply- needed only for electronic submission</td> <td></td> <td></td> </tr> </table>	Electronic - 837I	X12 Loop	Ref. Des.	Data Element	Code	X-12 Data Element Name	Version 4050R	2010AA	REF 02	127		Service Provider Secondary Identification	5010R						Paper Form	Locator	Code Qualifier	Description			Institutional - UB-04	N/A	N/A	Does not apply- needed only for electronic submission			<table style="width: 100%; border-collapse: collapse;"> <tr> <th colspan="4" style="text-align: center;">Data Edit Specifications</th> </tr> <tr> <td style="width: 25%;">AS</td> <td style="width: 25%;">ED</td> <td style="width: 25%;">IP</td> <td style="width: 25%;">OP</td> </tr> <tr> <td>R</td> <td>R</td> <td>R</td> <td>R</td> </tr> </table> <p>Revision Date: March 2011</p>	Data Edit Specifications				AS	ED	IP	OP	R	R	R	R
Electronic - 837I	X12 Loop	Ref. Des.	Data Element	Code	X-12 Data Element Name																																						
Version 4050R	2010AA	REF 02	127		Service Provider Secondary Identification																																						
5010R																																											
Paper Form	Locator	Code Qualifier	Description																																								
Institutional - UB-04	N/A	N/A	Does not apply- needed only for electronic submission																																								
Data Edit Specifications																																											
AS	ED	IP	OP																																								
R	R	R	R																																								

Definition:

The Department of Health's five (5) digit SPARCS Facility Identifier issued by the SPARCS Administrative Unit. Department regulations state that services must be reported under the physical location where they are provided. Common ownership of different facilities does not change this requirement.

Codes and Values:

1. Equals SPARCS Facility Identifier.

Edit Applications:

1. Must be entered, if not, entire file will be rejected.
2. Files submitted via the Health Commerce System (HCS) must have data for only one SPARCS Facility Identifier.

Data Element in Output Data Set: Yes

SPARCS-837 PC SOFTWARE

SPARCS offers a PC application called SPARCS-837, which may be downloaded from the HCS' SPARCS upload page under the header, "Tools". A informative users guide is also included for download. This is a Windows-based application developed to assist providers with the creation, editing, translation, and submission of their SPARCS inpatient and outpatient data. Data in ASC X12N-837 format can be imported and modified. New records are created by data entering each data element using the input screens or existing records may be imported and modified. Data can then be selected based on export criteria and exported in ASC X12N-837 format. The exported files can then be uploaded using the SPARCS upload application on the Health Commerce System (HCS). Additional tools exist to validate and edit the imported data. Please note that updating information using this application does not update the original hospital records.

Note: The SPARCS-837 application is not meant for larger imports or entry.

Features include:

- Import ASC X12N-837 4050 or 5010 Formatted Files
- Export ASC X12N-837 5010 Formatted Claims
- Maintain Facility, Subscriber, Patient and Claim Level Information
- Built-in Edits for Required Elements
- Validate Data for Individual Subscribers, Patients and Claims
- Batch Edit Claims
- Support for Submission and Retrieval of SPARCS AMI, Payor Typology and enhanced Race/Ethnicity Elements
- Browse by Facility, Subscriber, Patient, or Claim

Visit the SPARCS public website for additional information and details on downloading the SPARCS-837 PC application software and user guide: <http://www.health.ny.gov/statistics/sparcs/submission/>

IV. PROCESSING SPARCS DATA

The SPARCS data system is a dynamic system, which means that data files are never frozen or static. A facility may submit and update data for any point in time from 1982 through the present. Although SPARCS accepts the submissions of the SPARCS input files 24 hours a day and 7 days a week, the data is collected and added to the master files in batches. The master file upload schedule is based upon the year of the discharge or visit. The current and previous year are updated weekly, while all other years of data are uploaded monthly.

SPARCS FILE HCS SUBMISSION AND EDITS

SUBMITTING THE SPARCS FILE

Inpatient and outpatient data must be submitted in separate SPARCS input files. Upon HCS upload of a SPARCS input file, a confirmation notice is returned to the submitter on the submission page. Submitters are advised to make a PDF copy of this page, and retain and add the date and time the data was submitted.

Data from file C:\Users\test02\Desktop\test88889.txt

File type is X12-837

X12-837 Version is: 5010

Data file loaded: x0890

Submission Mode: T

EDITING PROCESS

Although SPARCS input files are accepted 24/7, the editing process only occurs 7:30AM - 5:30PM, Monday through Friday. SPARCS input files submitted outside the hours, 7:30AM - 5:30 PM, Monday through Friday, are processed the next business day. SPARCS input files submitted during business hours are processed in about two to three hours, but longer wait times are experienced during high volume days. If the SPARCS input file is processed successfully, an Edit Report and/or Error File with the same assigned log number is returned on the SPARCS submission results page. The log number is a six-digit number, preceded by either an I or O, depending upon whether the file is inpatient or outpatient. The log number is used as a reference number by SPARCS Operations for trouble shooting.

If an Edit Report fails to materialize by the next business day, submitters should check the Failure Notice drop down box before resubmitting the SPARCS file. The Failure Notice will contain the upload log number found in the confirmation notice, plus the date the file was submitted to the editor.

THE EDITING PROCESS OCCURS IN TWO PHASES:

PHASE 1: FATAL EDITS

1. The SPARCS input file must be submitted in a properly formatted X12-837 version 5010 file, as described in the SPARCS X12-837 Input Data Dictionary. For example, the ISA segment must conform to the specific spacing requirements.
2. Must contain a valid SPARCS facility identification number and collector code.
3. The X12-837 format allows for additional segments that SPARCS does not collect. These extra segments are ignored, but if there are too many of these segments, they cause a Failure Notice.

If any of the above fatal errors are encountered, the entire submission is immediately rejected without further processing. A Failure Notice will appear in the submitter's Submission Results Directory on the HCS SPARCS Data Reporting System and the Edit Report and Error File are not created.

PHASE 2: DETAILED EDITS

After the submitted file has passed the fatal edits phase, the second phase called the detailed edits begins. This phase examines each of the claims within the file for various conditions, dependent upon the data elements. These edits are specified in the SPARCS X12-837 Input Data Dictionary. An example of one is that diagnosis codes are checked to ensure that they are valid ICD Diagnosis codes.

Unlike the fatal edits, which would cause the total submission to fail, the failure of one or more of the detailed edits will only cause a specific claim to fail. Other claims on the same submission that did not have any errors would pass the edit process.

Edit reports and error records, in X12-837 format, are sent back electronically to the submitter's Submission Results Directory on the HCS SPARCS Data Reporting System. Submitters should review the Edit Report and (if errors are present) download the Error File, correct errors, and resubmit back to SPARCS. An electronic copy of the Edit Report should be saved, as it contains the log number, which is used as a reference number by SPARCS Operations for trouble shooting.

The detailed edit process creates the following files.

SYSTEM WORK FILES

The following work files are used by SPARCS Programming staff, with the log number extension:

1. TINFO. Contains records exactly as they were received by SPARCS.
2. EDITED TRANSACTION. Contains each claim that passed SPARCS edits as specified in the SPARCS [X12-837 Input Data Dictionary](#) and stored in a weekly (most current 2 years)/monthly (older than 2 years) edited transaction file.

REFERENCE

The following reference files, which contain the log number, are used by SPARCS Operations and Facility staff.

1. Edit Report File. A multi-part Edit Report is generated for each submission. These reports, which greater detail of their description is located in the "File Maintenance Reports" section shown below, are comprised of:
 - a. **Submission Analysis Section** - lists the error value(s) for each claim that fails the edits
 - b. **Error Summary Section** - lists the number of errors for each edit type
 - c. **Claims Summary Section** - displays the number of claims submitted, rejected, and accepted by the type of data. The number of duplicate claims within the SPARCS file submission are shown. Duplicates within a submission are determined by the following data elements:

Inpatient Data Elements

Patient Control Number

Statement-Covers-Period-Through Date (Discharge Date)

Transaction Type (3rd character of bill type)

Outpatient Data Elements

Patient Control Number

Statement-Covers-Period-Through Date (Discharge Date)

Discharge Hour

Transaction Type (3rd character of bill type)

2. Error File: This file contains all the claims that had an error in the edit report. The claims are in the X12-837 format. These claims may be downloaded and corrected for resubmission. As these claims never made it to the Master File, the transaction type for resubmission is transaction type = 1 (new submission).

MASTER FILE UPDATES

An Inpatient and Outpatient Master File is maintained for each discharge year. The Master File update process is performed on a weekly/monthly cycle, after midnight on each Tuesday, to update the Master files with weekly/monthly edited transaction files. This batch update process consists of all submissions received in a given period to be merged onto the Master file on the following schedule:

- **Weekly** - Current and Previous year discharges
- **Monthly** - Older years with at least 1,000 inpatient or outpatient transaction or upon request by SPARCS Operations
- **Annually** - All other files, where the volume is less than 1,000 records, are updated at least once a year during the January update.

KEY IDENTIFYING INFORMATION

There are two keys (primary and alternate) for the inpatient and outpatient data types. Primary keys are used to determine duplicates for additions and matches for corrections and deletions. The alternate keys are used for new submissions and are used to keep duplicates from being added to the master file.

INPATIENT PRIMARY KEYS DATA ELEMENTS:

- Permanent Facility Identifier (PFI)
- Patient Control Number
- Medical Record Number
- Statement-Covers-Period-From Date
- Statement-Covers-Period-Through Date (Discharge Date)

INPATIENT ALTERNATE KEY DATA ELEMENTS FOR ADDING RECORDS:

- Permanent Facility Identifier (PFI)
- Statement-Covers-Period-From Date
- Statement-Covers-Period-Through Date (Discharge Date)
- Date of Birth
- Unique ID
- Address Line 1
- Insurance Policy Number
- Birth Weight

OUTPATIENT PRIMARY KEY DATA ELEMENTS:

- Permanent Facility Identifier (PFI)
- Patient Control Number
- Medical Record Number
- Statement-Covers-Period-From Date
- Statement-Covers-Period-Through Date (Discharge Date)
- Discharge Hour (AS and ED only)

OUTPATIENT ALTERNATE KEY DATA ELEMENTS:

- Permanent Facility Identifier (PFI)
- Statement-Covers-Period-From Date
- Statement-Covers-Period-Through Date (Discharge Date)
- Date of Birth
- Unique ID
- Address Line 1
- Primary Diagnosis
- Discharge Hour (AS and ED only)

The first step merges the individual work and reference files, described previously, pertaining to those records that have been submitted during the current period (since the last update) and stores them onto the following cumulative/historical work and reference files for storage and retrieval:

1. **Edited Transaction File.** All valid transactions collected during the week are merged and sorted by: primary key, process date, and transaction code. The merged/sorted transactions for each calendar year are then applied to the master file for that year.
 - Transactions with the same primary key and transaction codes within the same file are transactional duplicates. Transactional duplicates are coded as exceptions and added to the Exception File.
 - Transactions with the same primary key and different transactions codes are processed in process date order. Transactions with the same primary key and different transaction codes that were processed on the same date are processed in transaction code order: deletion (1), addition(2), correction(3). When the primary key data are the same, DELETIONS, ADDITIONS, and CORRECTIONS may be submitted in the same SPARCS file.
 - When the primary keys for the addition (replacement) record are different than the primary key for the an existing record deletion, there is no guarantee that the transactions will be sorted so that the deletion goes first. For example, if the addition (replacement) record has a patient control number or medical record number that is higher than the deletion record, the addition record will be processed first, and may fail as an alternate key duplicate. The only safe way to do a deletion and replacement, when attempting to replace data where the replacement records have different primary key information than the records being replaced, is to have the deletions and additions (replacements) processed on different updates. As outpatient services data does not have the data element, discharge hour, the delete and replace protocol is required when changing revenue codes that change the type of data from ambulatory surgery or emergency department to outpatient services data.
 - Alternate key data elements:
If the primary keys do not match another record in the Master file and the claim's transaction type (third character of the bill type) equals 1, addition/new record, the alternate key data elements are checked against the existing records in the Master file before updating. If the alternate key data elements make a match, then the record is considered an Alternate Key Duplicate and added the the Exception file.
2. **Claims transaction types (third character of the bill type) are as follows:**

DELETION RECORD

- 3rd digit of the transaction type = 8 indicates a DELETION
- If the primary key data elements on the claim are the same as data elements on a claim existing in the Master file, the update takes place and the claim is deleted from the Master file.
- If the key data elements cannot be matched to an existing claim in the Master file, then the claim is rejected as an exception and placed in the Exception File.

ADDITION/NEW RECORD

- 3rd digit of the transaction type = 1
- If the primary key and alternative key data elements or the claim are not the same as that of another record in the Master file, then the claim gets added to the Master File.

- If the primary key and alternative keys match to an existing claim in the Master file, then the claim is considered to be a duplicate and not added to the Master File. The claim is rejected as an exception and the claim is placed in the Exception File.

CORRECTION OR REPLACEMENT OF NON-MATCH KEY DATA ELEMENTS:

- 3rd digit of the transaction type = 7 indicates a REPLACEMENT or CORRECTION
 - If the primary key data elements of the claim are the same as a claim on the Master File, the update or correction takes place.
 - If the match keys of the replacement claim to not find a match on an existing claim in the Master File, the claim is rejected as an exception and added to the Exception File.
3. **Report File.** All edit reports are merged into a cumulative report file by log number. The cumulative file makes it possible to retrieve an edit report electronically for any data submission. This process enables facilities to obtain copies of edit reports for their assigned facilities as needed. Access to these reports require an HCS account and SPARCS upload permission to the SPARCS Data and Report System.
 4. **Error File.** If a submission file does not pass all edits, an Error File is generated. Each claim that fails the SPARCS edits is stored in this file (X12-837 format) by Log Number. This enables facilities to obtain copies of error files for their assigned facilities as needed. Access to these files require an HCS account and SPARCS upload permission to the SPARCS Data and Report System.
 5. **Exception File.** Updated Exceptions are merged into an Exception file. The form of each file is the SPARCS Output File format (3000 character).

REPORTS AND DATA

Due to the various uses of SPARCS data, many of which impact the healthcare provided to the residents of New York State, SPARCS Operations requires that the data must be complete and accurate. To assist in this task, various reports and files are available to SPARCS Operations and facility staff. File Maintenance Reports are designed to promote quality data by providing hospitals with current information regarding their SPARCS data submissions. Data quality issues of completeness and accuracy are addressed through periodic reviews of a facility's submissions and by comparing SPARCS data with other Department of Health databases.

REPORTS/DATA AVAILABLE FOR REQUEST ON THE HEALTH COMMERCE SYSTEM

All reports are downloadable from the HCS. Reports on the HCS are only available for 30 days before being removed. Old reports may be obtained by request through the [Data/Report Request](#) on the SPARCS Data Submission and Data/Report System page on the HCS.

1. Edit Reports by SPARCS Log Number: Summary of the results of the edit.
2. Error Files by SPARCS Log number: Each claim reported in the Edit Report as containing an error.
3. Audit report provides total and month by month counts of SPARCS records on the SPARCS Master file. These reports are updated on the Master File upload schedule.
4. Update Summary File. By year, provides an outcome of each type of exception, DUPLICATE Transactions, ADDITION Duplicates, REPLACEMENTS for which there is no matching record, and DELETIONS with no matching record, by patient control number, Statement Covers-Period-Through Date, log number, and processing date.
5. Listing of Records on Master File for Year and Month. The report lists all claims resident in the inpatient and outpatient Master Files. The data elements in this report are the following:
 - a. Patient Control Number
 - b. Medical record number
 - c. Admission date
 - d. Statement Covers-Period- Through Date (Discharge Date)

- e. Reported gender of patient
 - f. Patient date of birth
 - g. Log Number
 - h. Permanent Facility Identifier (PFI)
6. Detailed History Report. Also called History Summary Report, provides all the information about each submitted SPARCS file. This report allows the submitter to retrieve the log numbers for edit reports and error files. All unresolved errors and unresolved exceptions are listed separately and may be extracted. This report enables the data Submitter to examine the exceptions to determine what further action is required. For example, an ADDITION duplicate, when meant as a REPLACEMENT, should have the Facility Type Code changed and the data resubmitted. It is also possible that an ADDITION duplicate is really just a duplicate, and no further action is required.
- a. UDS OUTPATIENT HISTORY REPORT, DSCHG YR, MONTHS SUMMARY LIST BY LOG NUMBER, DISCHARGE YEAR AND MONTH OF ALL OUTPATIENT RECORDS SUBMITTED. (EXCEPT THOSE CHANGED WITH SUBSEQUENT BILL TYPE=NN7 OR NN8)
 - b. UDS OUTPATIENT HISTORY REPORT, DSCHG YR 2016, MONTHS 01-06 09/02/2016 SUMMARY LIST BY DISCHARGE YEAR, MONTH AND LOG NUMBER OF ALL OUTPATIENT RECORDS SUBMITTED. (EXCEPT THOSE CHANGED WITH SUBSEQUENT BILL TYPE=NN7 OR NN8)
 - c. UDS OUTPATIENT LOG FILE IN LOG NUMBER ORDER OF SUBMISSIONS, DISCHG YR, MONTHS
 - d. UDS OUTPATIENT HISTORY REPORT, DISCHG YRS, MONTHS DETAIL LIST OF ALL MASTER, ERROR, AND EXCEPTION RECORDS (EXCEPT THOSE CHANGED WITH SUBSEQUENT BILL TYPE=NN7 OR NN8)
 - i. Patient Control Number
 - ii. Medical record number
 - iii. Statement Covers-Period_From Date (Admission date)
 - iv. Statement Covers-Period- Through Date (Discharge Date)
 - v. Bill type
 - vi. Outcome
 - vii. Log Number
 - viii. Patient Birth date
 - ix. Reported gender of patient
 - e. UDS OUTPATIENT HISTORY REPORT, DSCHG YR, MONTHS DETAIL LIST OF ALL UNRESOLVED ERRORS RECORDS
 - f. UDS OUTPATIENT HISTORY REPORT, DSCHG YR, MONTHS DETAIL LIST OF ALL UNRESOLVED MERGE EXCEPTION RECORDS
7. Health Facilities Own Data (HOD) are distinct from the regular output files available to requesters upon approval.
- a. Can only be requested by a facility for its own data by using the Data/Report Request Option within the SPARCS Data and Report System on the HCS.
 - b. Request creates an electronic copy of a facility's SPARCS data. The file will be sent to the Submission Results directory of an HCS account. The file that is provided to the facility contains all the information maintained on the Department of Health master file. Those with SPARCS Upload Permissions may electronically submit an HOD Request by using the Data/Report Request option within the HCS SPARCS Data and Report System.
 - c. The electronic form used to generate this file has the following options:
 - System Type: Inpatient or Outpatient
 - Year: 1982 through current
 - Beginning and Ending Months: January through December

This file may be requested in either the Version 5010 or SPARCS Output file formats at this time.

REPORTS AVAILABLE ON THE PUBLIC WEBSITE

AUDIT REPORT

Provides total and month by month counts of SPARCS claims on the SPARCS Master file. The reports are organized by Discharge Year/State Region/Facility Identification Number/Discharge Month and are updated according to the Master File update schedule.

Reports are located at the following website: <http://www.health.ny.gov/statistics/sparcs/reports/audit.htm>. The Last Update Date on the report identifies the date on which data for that year was last processed for the particular hospital. Statewide audit data is also available.

The Audit Report provides total and month by month counts of SPARCS claims on the SPARCS Master file by inpatient and outpatient data. Effective 2011 Audit Reports are parsed by type of outpatient data, ambulatory surgery, emergency department, and outpatient services data.

Emergency department Audit Reports show the emergency department claims referred from ambulatory surgery and the number of claims referred to inpatient from the emergency department, and the number of "treat and release" emergency department claims.

The audit reports contain data submitted before Tuesday at 5:00 PM. Update begins at 12:01 AM on the following Wednesday morning. It is the Wednesday date which appears in the upper left-hand corner of the Audit Report. The weekly Audit Reports are generally posted to the public website on the following Friday after the update. Problems with the update push the posting into the following week.

COMPLIANCE REPORT

SPARCS only knows the number of patients a facility has per year from the number of records submitted to the Master files. To assist in the compliance process, SPARCS utilizes a protocol that flags the month(s) of a facility's record where the number of monthly claims by type of data (inpatient, ambulatory surgery, emergency department, or outpatient services) are significantly less than the previous year's monthly average number of claims for that type of data.

An example of a compliance report is shown below. The SPARCS compliance report shows the number of claims submitted by type of data (inpatient (IP), ambulatory surgery (AS), emergency department (ED), and outpatient services (OP)) by month of the discharge or visit (Discharge Month). The column (Prev. Yr. Avg) is the monthly average of the previous years' data. The column (# Recds Expected (Target)) is either 80% of the previous year's monthly number of claims or, for months of historically low volume, 75% of the previous year's monthly number of claims. Shortage is the difference between the number of monthly claims submitted and the target. Pct of PrevYrAvg Submtd is the percent of last year's monthly claims submitted this year. The Pct of PrevYrAvg Submtd is coded green (the number of claims are same as last year), yellow (the number of claims for the current year are greater than last year's), and red (the number of claims for the current year are less than last year's).

Compliance reports are produced once per month off the monthly update of the Master file. The monthly update of the month is triggered by the first Tuesday of the month. Data submitted before 5:00 PM on the first Tuesday of the month is included in the update which begins at 12:01 on Wednesday morning. The audit report which corresponds to the data in the Compliance report has the Wednesday date in the upper left hand corner of the first line of the audit report.

2013 SPARCS Data Submission Compliance Report -- Data Received Through April 2014
SPARCS Data Submission Compliance Report -- Data Received Through April 2014 Submissions Not Meeting the Standard of 80% of 2012 Monthly Average (Feb and Dec Set at 75%)
Submissions Not Meeting the Standard of 80% of 2012 Monthly Average (Feb and Dec Set at 75%)

File Type	Discharge Month	Prev Yr Avg	# Recds Expected (Target)	# Recds Submtd	Shortage	Pct of PrevYrAvg Submtd *	Exception On File w/SPARCS	Extension Granted	File Last Submtd
AS	January	206	164	235		114%			2013 FEB
	February		154	217		105%			2013 MAR
	March		164	228		110%			2013 APR
	April		164	230		111%			2013 MAY
	May		164	216		104%			2013 JUN
	June		164	227		110%			2013 JUL
	July		133	206		154%			2013 AUG
	August		133	218		163%			2013 SEP
	September		133	231		173%			2013 OCT
	October		133	215		161%			2013 NOV
	November		133	217		163%			2013 NOV
	December		133	198		148%			2014 JAN
Total Records Submitted: 2,638									
ED	January	1212	969	1,035		85%			2013 FEB
	February		909	889	20	73%	YES		2013 MAR
	March		969	1,051		86%			2013 MAR
	April		969	1,158		95%			2013 JUN
	May		969	1,037		85%			2013 MAY
	June		969	1,179		97%			2013 JUL
	July		969	1,087		89%			2013 JUL
	August		969	1,212		100%			2013 SEP
	September		969	1,181		97%			2013 DEC
	October		969	1,163		95%			2013 NOV
	November		969	1,087		89%			2014 FEB
	December		909	1,150		94%			2013 DEC
Total Records Submitted: 13,229									
IP	January	167	133	146		87%			2013 MAR
	February		125	141		84%			2013 APR
	March		133	169		101%			2013 JUL
	April		133	189		113%			2013 JUL
	May		133	164		98%			2013 JUL
	June		133	150		89%			2013 OCT
	July		133	183		109%			2013 SEP
	August		133	163		97%			2013 OCT
	September		133	144		86%			2013 DEC
	October		133	134		80%			2013 DEC
	November		133	144		86%			2014 JAN
	December		125	136		81%			2014 MAR
Total Records Submitted: 1,863									

2013 SPARCS Data Submission Compliance Report – Data Received Through April 2014
Submissions Not Meeting the Standard of 80% of 2012 Monthly Average (Feb and Dec Set at 75%)

File Type	Discharge Month	Prev Yr Avg	# Recds Expected (Target)	# Recds Submtd	Shortage	Pct of PrevYrAvg Submtd *	Exception On File w/SPARCS	Extension Granted	File Last Submtd
OP	January	5345	4276	5,600		104%			2013 JUL
	February		4008	4,842		90%			2013 MAR
	March		4276	5,297		99%			2013 JUL
	April		4276	5,585		104%			2013 APR
	May		4276	5,363		100%			2013 JUN
	June		4276	4,829		90%			2013 JUN
	July		4276	5,117		95%			2013 AUG
	August		4276	4,876		91%			2014 JAN
	September		4276	4,808		89%			2013 OCT
	October		4276	5,481		102%			2014 MAR
	November		4276	4,590		85%			2013 NOV
	December		4008	4,547		85%			2013 DEC
Total Records Submitted: 60,935									

During reconciliation, the SPARCS coordinators are required to review their compliance reports to determine if the reduced number of monthly claims is due to the incorrect submission of SPARCS data or a decrease in the healthcare facility's patient volumes. If the problem is reduced patient volume, then the SPARCS coordinator is required to submit a written email request for an exception by month and type of data. The email should include the cause of the decline in volume, if known. Exceptions may not be granted when the number of unresolved errors exceed one percent of the number of records submitted. Once the exception request is reviewed and accepted by SPARCS Operations, the compliance report is annotated and returned to the SPARCS coordinator as documentation of this action.

If facilities require more time to complete their submissions two one-month extensions may be granted. Facilities are required to explain the reason for the delayed submission. When the extension is granted, the compliance report is annotated with the extension date and copy of the compliance report is returned to the SPARCS coordinator.

The column Field Last Updated shows the month and year when the type and month of data was last updated.

Some outcomes that are based on the Compliance Report include:

- Letters are sent to facilities currently out of compliance with SPARCS submission regulations (described previously). SPARCS Operations staff work with each facility receiving a letter to provide assistance to bring their submissions into compliance. Facilities are usually asked to provide a letter explaining why their data submissions are in arrears and when they project their submissions will be in compliance with regulations.
- Correspondence related to data submission problems may be forwarded to the Bureau of Hospital Reimbursement, as supporting evidence of a facility's good faith intentions to comply with submission regulations. If a facility is more than six months delinquent, copies of delinquency notices are forwarded to the Bureau of Hospital Reimbursement.

SUBMISSION HISTORY REPORT

This report provides a detailed accounting of transactions submitted to the SPARCS for the updating of the SPARCS Master files. It tallies the number of inpatient and outpatient stays submitted to SPARCS, the number of errors and exceptions encountered, and the number of error and exceptions still outstanding (unresolved). The purpose of the Submission History Reports is to show facilities the status of their records submitted to SPARCS. For detailed information visit

http://www.health.ny.gov/statistics/sparcs/reports/submission_history.htm. The reports are organized by Discharge Year/Facility

Identification Number/Discharge Month and are updated monthly. Below is a description of the report. Please pay particular attention to the Unresolved Errors.

- **SUBMIT:** The number of records submitted to SPARCS.
- **MASTER:** Of those records submitted, the number that were posted to the SPARCS Master File.
- **ERROR:** Of those records submitted, the number that were NOT posted to the SPARCS Master File because of SPARCS edit failures.
- **EXCEPTION:** Of those records submitted, the number that passed the SPARCS edits but were NOT posted to the SPARCS Master File. Possible reasons would have been: a new record was a duplicate of one already on the Master File, there was no record to correct, two identical records were processed in the same Master File update, or there was no record to delete.
- **UNRESOLVED - ERROR:** Of those Error records failing the edits, the number that were not corrected and submitted again.
- **UNRESOLVED - EXCEPTION:** Of those Exception records NOT posted to the SPARCS Master File, the number that were not corrected and submitted again.

ERROR CORRECTION PROCESS

EDIT REPORTS

Once the file that you successfully uploaded via the HCS is processed by the mainframe edit process (usually within 2-3 hours of upload), an edit report will be available in the Submission Results area of the HCS SPARCS Data Submission Application. Locate the edit reports of interest by referencing the most recent Log Number using the drop down menu. There are 4 sections to each edit report. The very top section is the header, which contains the name of the file you uploaded and the SPARCS inpatient or outpatient log number (this is vital information to provide to SPARCS staff if you end up needing assistance. See highlighted log number in edit report example below).

Check the pass percentage of your submission. If you discover that your SPARCS data upload pass percentage was less than 100%, your submission had errors. Edit Reports provide the following information: Error Code, Patient Control Number, Loop, HL Index, and Element Value. The values listed below the column headings will guide you to the cause of the edit issue. Clicking your mouse button on the Error Code hyperlink will bring you to an error Code description. The bottom of the Error Report displays a summary of the data upload statistics and can be used to track your SPARCS data upload progress. Take a look at your report and note the following for each file that you submit to SPARCS:

Sample Edit Report

Date 02/26/2014

Page 1

New York State Department of Health

Statewide Planning and Research Cooperative System (SPARCS)

X12-837 Inpatient Edit Report Production Log 123456 -- Upload Log X09876

Uploaded File: C:\Users\testuser\Desktop\SPARCS\facility_data.DAT

Data Collector 888 SPARCS Facility Identifier 009999

GET HEALTHY HOSPITAL BETTER HEALTH HOSPITAL

100 First St 100 Main Street

ALBANY NY ALBANY NY

12237 12237

Error Code	Patient Control Number	Loop	HL Index	Element	Value
2010REF2000	N/A	2010	12	REF02	88888888
2300CLM0000	M9999999999	2300	13	*SUB*	SUBSCRIBER FAILED

Code	Description	Errors
2010REF2000	UNIQUE ID CODE	1
2300CLM0000	INVALID SUBSCRIBER/PATIENT	1

Type	Accepted	Rejected	Total	% Pass
AMBULATORY SURGERY	0	0	0	0.0
AMBULATORY SURGERY FROM ED	0	1	1	0.0
EMERGENCY DEPARTMENT	2,047	174	2,221	92.2
EODC OUTPATIENT	0	0	0	0.0
TOTAL	2,047	175	2,222	92.1

Monthly Breakdown

Month	Claims
01/2014	2,222
2014	2,222
TOTAL	2,222

ERROR FILES

For each ERROR REPORT that indicates records from the SPARCS input file upload that were rejected, an X12-837 ERROR FILE is produced for each set of failed records. The ERROR FILE will have a matching Log Number to the ERROR REPORT for easy identification. The facility can then review the ERROR FILES for errors that have been flagged in the ERROR REPORT and to correct and resubmit the data to SPARCS.

ADDITIONAL RESOURCES

The following, additional troubleshooting resources are available:

- The Frequently Asked Questions page on the public website provides answers regarding common errors or issues: <http://www.health.ny.gov/statistics/sparcs/faqs/>.
- E-mail sparcs.submissions@health.ny.gov with questions.
- Call SPARCS Operations at (518) 473-8144. Be prepared to provide your Permanent Facility Identifier (PFI), log number, and error description.

V. COMMUNICATIONS

SPARCS Operations uses the following mechanisms to distribute important information to facilities.

PUBLIC WEBSITE

SPARCS information is available on the New York State Department of Health's public site at <http://www.health.ny.gov/statistics/sparcs/>. The website includes information on data collection, data release, compliance, training, reports, newsletters, and more.

BUREAU MAIL LOG

The SPARCS Bureau Mail Log (BML) (sparcs.submissions@health.ny.gov) is used to contact SPARCS coordinators and other parties with important announcements. SPARCS-related questions and changes to contact information should also be submitted by facilities to the BML in a timely fashion, in order to ensure that correspondence is distributed appropriately.

LISTSERV

SPARCS Operations also maintains the SPARCS-L, an electronic distribution list used to communicate important information. To request to be added to the distribution list, please contact SPARCS Operations at (518) 473-8144 or e-mail sparcs.submissions@health.ny.gov.

SPARCS UPDATE NEWSLETTER

The **SPARCS Update** is an electronic newsletter distributed monthly to SPARCS-L listserv subscribers. This newsletter provides information pertaining to SPARCS Operations, including: announcements, data collection and distribution, reports, compliance, and training sessions. Newsletters are posted online: <http://www.health.ny.gov/statistics/sparcs/newsletters/>.

VI. SPARCS DATA QUALITY AND QUANTITY

This section has been moved to a separate document titled, *SPARCS Data Compliance Protocol: Quantity and Quality*, located at <http://www.health.ny.gov/statistics/sparcs/training/>.

VII. OUTPUT USER FILES

DATA TYPES

There are three types of SPARCS data available to researchers and others wishing to use the data for public health initiatives.

IDENTIFIABLE

Identifiable data pertains to a particular individual's facility stay which, if disclosed, would constitute an unwarranted invasion of personal privacy, as stipulated in Department regulations, Title 10, NYCRR 400.18. Below is the list of current identifiable element categories that can be requested and the data elements they contain.

Category	Elements
Dates	Accident Related Date Admission Date Date Alternate Care Required Date of Service Date of Visit Discharge Date Non-Acute Care From Date Non-Acute Care Thru Date

Category	Elements
	Principal Procedure Date Other Procedures 1-4, 5, 6-14 Statement Covers From Date Statement Covers Thru Date
Date of Birth	Patient Date of Birth
Address	Residence Address Line 1 Residence Address Line 2 Patient Zip Code Extension
Numbers	Medical Record Number Mothers Medical Record Number (for newborn) Patient Control Number Pre-Hospital Care Report Number
Policy Number	Policy Number
UPI	Unique Personal Identifier

Permission to use SPARCS identifiable data can be obtained by completing the SPARCS Limited and Identifiable Data Request application, and submitting it by e-mail to sparcs.requests@health.ny.gov. Applications and instructions can be found on our public website at <http://www.health.ny.gov/statistics/sparcs/forms/>. Applications go through a preliminary review process where changes are made (if needed). When an application is ready, it will be presented to the Data Governance Committee (DGC), who will then vote on whether or not to approve the application. The Commissioner of Health ratifies the application. If approved and ratified, an invoice for the data will be sent (if applicable) and, upon receipt, of payment the data will be mailed. If the application is denied, a notification will be sent with the denial reason.

LIMITED

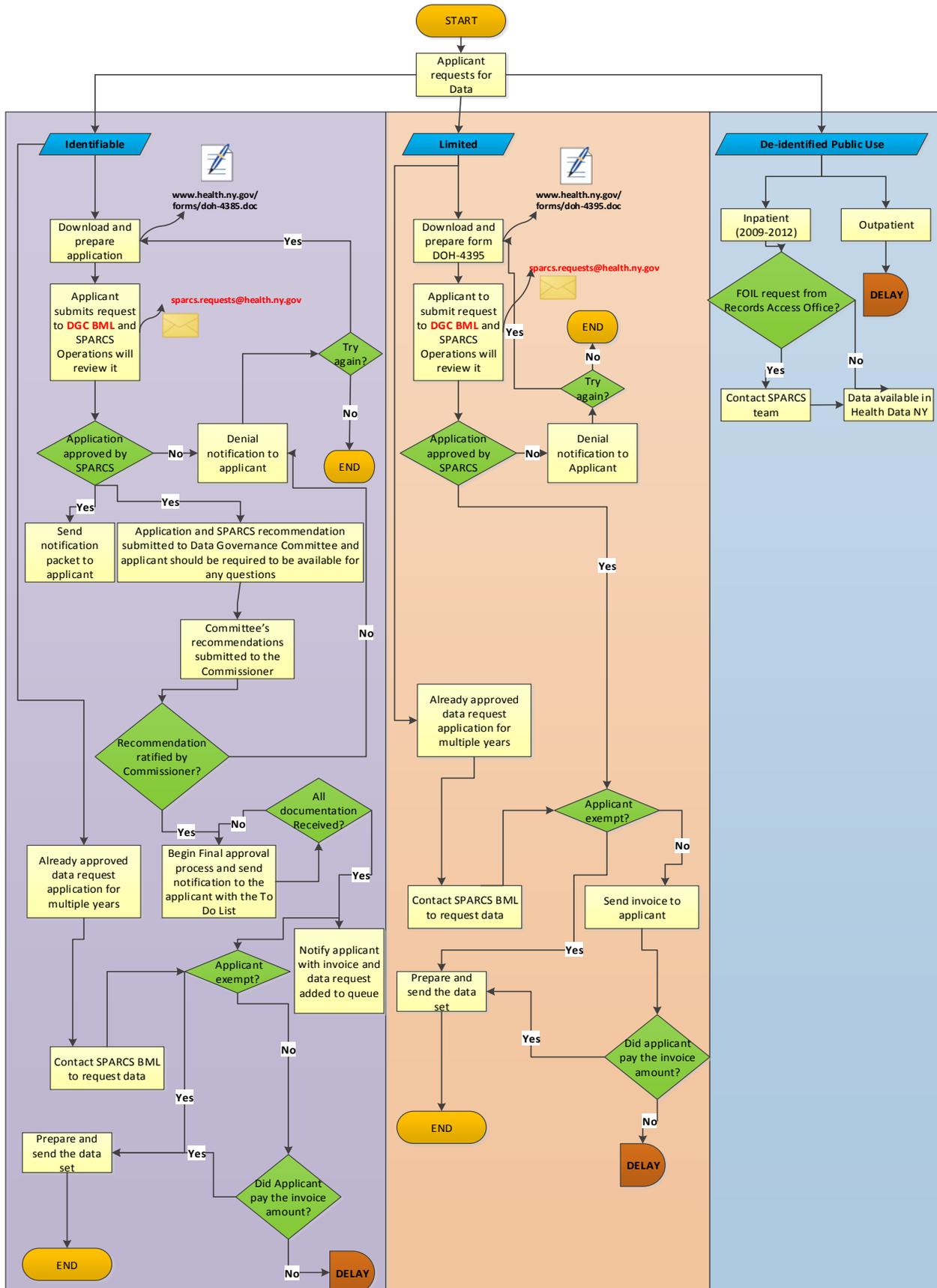
Limited data contains elements that are deemed as indirect identifiers according to HIPAA standards. A complete list of these elements can be found in the output data dictionary (inpatient or outpatient), located on the public webpage at <http://www.health.ny.gov/statistics/sparcs/datadic.htm>

The process to request the use of these data can be started by completing the SPARCS Limited and Identifiable Data Request application found on the public website at <http://www.health.ny.gov/statistics/sparcs/forms/>. E-mail a completed application to sparcs.requests@health.ny.gov. If accepted, an invoice will be sent (if applicable), and upon receipt of payment the data will be mailed. If there is something wrong with the application, it will be returned with correction instructions.

PUBLIC USE

Public Use data contains de-identified data consisting of basic record-level detail. It does not contain protected health information under HIPAA. Public data is openly available at <https://health.data.ny.gov/>. By keying in "SPARCS" in the search box, located about half way down the page on the left hand side, you will be presented with a list of available data, by year. Currently available is Hospital Inpatient Discharges from 2009-2014.

SPARCS DATA APPLICATION PROCESS



SPARCS HEALTH DATA QUERY SYSTEM

SPARCS discharge data is summarized in statistical tables on an annual calendar year basis. These tables are grouped into the following major areas: Statewide, County, and Hospital. Some of the specific data categories included in these tables are: Age, Sex, Expected Principal Source of Reimbursement, Service Category, Major Diagnostic Category, and Disposition of Patient. The tables are available within the Health Data Query System located on the Department's public webpage at <https://apps.health.ny.gov/pubdoh/sparcsqry/>.

A similar application, the Annual Report Generator, is located on the HCS in the SPARCS Data Query application.

STANDARD SPARCS OUTPUT FILE

Output files have been created for the SPARCS inpatient and outpatient data streams consisting of edited data maintained on the master file, in addition to several calculated fields that have been added to enhance the value of the information to various users.

INPATIENT OUTPUT FILE

The SPARCS Inpatient Output File contains the inpatient information received from the facility, as well as certain calculated data elements such as Age, Diagnosis Related Groups (DRGs), Major Diagnostic Categories (MDCs), and Calculated Lengths of Stay. Please refer to the SPARCS Inpatient Output Data Dictionary at <http://www.health.ny.gov/statistics/sparcs/datadic.htm> for details. The SPARCS Inpatient Output File includes data from 1982 to present.

OUTPATIENT OUTPUT FILE

The SPARCS Outpatient (AS, ED, & OP) Output File contains the outpatient information received from the facility, as well as certain calculated data elements such as Age. Please refer to the SPARCS Outpatient Output Data Dictionary at <http://www.health.ny.gov/statistics/sparcs/datadic.htm> for details. The SPARCS Outpatient Output File includes data from 1983 to present.

CONTACT INFORMATION

We always welcome questions, comments, and feedback. Please contact us at:

SPARCS Operations
Bureau of Health Informatics
Office of Quality and Patient Safety
New York State Department of Health
Empire State Plaza
Corning Tower Room 1970
Albany, New York 12237

Phone: (518) 474-3189
Fax: (518) 486-3518
E-mail: sparcs.submissions@health.ny.gov (general content and submission inquiries)
sparcs.requests@health.ny.gov (data requests)

ListServ: SPARCS-L@health.state.ny.us
Website: <http://www.health.ny.gov/statistics/sparcs/>
Newsletter: <http://www.health.ny.gov/statistics/sparcs/newsletters/>

SPARCS Operations has made every effort to provide accurate and complete information in this guide. Any typographical error is unintentional on our part and we urge users of this guide to bring them to our attention for correction. Edits, deletions, modifications, or changes to areas of this guide will be maintained in a change log (Appendix B) and updated versions of the guide will be released.

APPENDIX A – GLOSSARY OF ACRONYMS AND TERMS

Acronym or Term	Definition
5010 R	Version of the Health Care Services Data Reporting used by SPARCS. The 5010(I) Institutional version is used for all electronic claim submissions for payment starting January 1, 2012.
Affidavit – Individual	Data use agreement that must be signed by the project director and all individuals who will be working with SPARCS data.
Affidavit – Organizational	Binding document that must be signed by a representative of the organization who is authorized to sign on behalf of said organization. This person is usually a corporate officer or department chair.
AHRQ	Agency for Healthcare Research and Quality
AMI	Acute Myocardial Infarction – for SPARCS purposes, this refers to the collection of blood pressure and pulse data elements.
ANSI ASC X12 837	American National Standards Institute (ANSI) Accredited Standards Developers (ASC) committee that establishes national electronic standards for submitting claims in the format called X12-837 for health care institutions. Selected version standards have been adopted under HIPAA (Department of Health and Human Services (HHS) for the administrative and financial transactions required by the Health Insurance Portability and Accountability Act of 1996.)
APR DRG	All Payer Refined Diagnosis Related Group.
AS	Ambulatory Surgery data.
Audit and History Report	A report of the number of records that have been accepted onto the master file and the number of records containing outstanding errors.
Backup Coordinator	The backup contact at a facility responsible specifically for SPARCS data and security.
Breach	Unauthorized use of SPARCS data, either by a person without an individual affidavit on file, or by using the data in a manner, or for a purpose, not approved by the SPARCS data review committee.
CCA	Commission Catchment Area
CCS	AHRQ Clinical Classification System, developed as part of HCUP
Claim	A record submitted by a health care facility containing encounter and billing information about a patient's visit(s).
Collector Code	Unique 3 digit number identifying the entity submitting a SPARCS data file.
Commerce Accounts Management Unit (CAMU)	The unit within the DOH responsible for establishing and maintaining HCS accounts, including issuance of user id's and passwords.
CPT	Common Procedure Terminology. A code set maintained by the American Medical Association (AMA).
Data Governance Committee	The Data Governance Committee (DGC) was formed in September 2014 and is responsible for reviewing and approving SPARCS identifiable data requests. It supersedes the Data Protection Review Board.
Data Protection Review Board	The Board that presides over the request and presentation of SPARCS data applications, ensuring that SPARCS data is only released to researchers with the proven ability to effectively perform the research and maintain a secure environment for the data.
Data Queue	Following approval of the data application, the applicant is instructed to contact sparcs.submissions@health.ny.gov to request the years and file types. The applicant's request is then added to the queue with other data requesters. The

Acronym or Term	Definition
	file will be cut when they reach to top of the queue. The wait time in the queue varies depending on the number of requesters and the complexity of the data cut. SPARCS Operations' goal is to complete each request within 30 days.
Data Retention	Length of time that each applicant is allowed to use SPARCS data. The date is set programmatically to two years after the last year of data is received. Retention can be extended for up to two additional years by e-mailing a request to sparcs.requests@health.ny.gov and including the reason for the extension.
Data Set Sheet	Document created upon finalizing an applicant's request. It contains the information necessary to create the specific data file.
Data Specifications	Commonly referred to as "X12-837 Input Data Specifications". A document describing the elements and requirements of data collected by SPARCS.
De-identified Data	Unlike identifiable data, a public use file that does not contain data that can be used to identify a patient (alone, or linked with other data).
DTC or D&TC	Diagnostic and Treatment Center, commonly referred to as a "clinic."
Duplicate	A record with the same key existing on the Master file.
ED	Emergency Department data.
EODC	Expanded Outpatient Data Collection
Edit Report	An on-line report of the results of edits applied during file intake.
Error File	File containing records which did not make it to the Master File.
Exceptions	Relates to claims submitted. Records which were not found (REPLACEMENT/DELETION) due to a key mismatch or duplicate records (NEW/DUPLICATE).
Facility ID	Facility ID that is a unique 5 digit code identifying a facility location certified to provide health care services under Article 28 of the Public Health Law. This number was assigned upon receiving your Certificate of Operation. Also known as Permanent Facility Identifier (PFI).
File	Typically, refers to an electronic file containing claims/visit data.
File Transfer Utility	See FTP.
FTP	File Transfer Protocol. This is a tool available on the HCS.
HCPCS	Healthcare Common Procedure Coding System - a set of procedure codes based on the American Medical Association's Current Procedural Terminology (CPT).
HCS	Health Commerce System. A secure intranet site for exchanging information between DOH and the health care industry. Formerly known as the Health Provider Network (HPN).
HCS Coordinator	Person at a facility responsible for management of HCS accounts for the facility.
Health Data Query System	Report tool located at https://apps.health.ny.gov/pubdoh/sparcsqry/ that produces listings or comparisons by year, facility, county, HAS, or CCA on patients, days, and charges.
HIPAA	Health Insurance Portability and Accountability Act of 1996.
HOD	Health Facility Own Data. Data submitted and accepted by a facility that is stored on the DOH Master file.
HPN	Previous name for the HCS.
ICD-10	International Classification of Diseases, Version 10. This is a medical classification list for the coding of diseases, signs and symptoms, abnormal findings, complaints, social circumstances, and external causes of injury or diseases; maintained by the World Health Organization. The implementation

Acronym or Term	Definition
	date for this code set in the United States is October 1, 2015. The code list was completed by WHO in 1992.
ICD-9	International Classification of Diseases, Version 9. This is a medical classification list for the coding of diseases and procedures. Published in 1977 by the World Health Organization.
ICR	Institutional Cost Report. Submitted by facilities to the DOH financial office annually.
Identifiable Data	SPARCS data elements that could identify a patient. This type of data is also referred to as Protected Health Information (PHI) or direct identifiers.
Inpatient	SPARCS currently collects patient level detail on characteristics, diagnoses and treatments, services, and charges for inpatient stays in New York State from 1982 to present.
Input Data Specifications	Commonly referred to as "X12-837 Input Data Specifications." A document describing the elements and requirements of data collected by SPARCS.
Input File	The file, either inpatient or outpatient, submitted by a facility to SPARCS.
IP	Inpatient data.
Key	<p>Unique combination of elements which identify a claim/visit.</p> <p><u>Inpatient key includes:</u> Permanent Facility Identifier (PFI), Patient Control Number, Medical Record Number, Statement-Covers-Period-From Date, and Statement-Covers-Period-Through Date (Discharge Date).</p> <p><u>Outpatient (AS, ED) key includes:</u> Permanent Facility Identifier (PFI), Patient Control Number, Medical Record Number, Statement-Covers-Period-From Date, and Statement-Covers-Period-Through Date (Discharge Date), and Discharge Hour.</p>
Limited Data	Limited data contains indirect identifiers that are deemed potentially identifiable according to HIPAA standards.
Log #	A unique number identifying a file submitted by a facility, its associated error report, and error file.
Master File	Database containing all claims/visits submitted to SPARCS which have passed the edits.
NPI	National Provider Identifier. Unique identifier number assigned to providers of health care and health care entities on a national level.
NUBC	National Uniform Billing Committee. A governing body for forms and codes used in medical billing in the USA.
NYCRR 400.18	Enabling legislation and regulations for SPARCS are located under Section 2816 of the Public Health Law (PHL), Section 400.18 of Title 10 (Health) of the Official Compilation of Codes, Rules, and Regulations of the State of New York (NYCRR). The section authorizes SPARCS to collect data from facilities, and control the manner in which data can be released.
OP	Outpatient Services data. Collection of OP data started in 2011.
Operating Certificate (OPCERT)	Operating Certificate. The official document issued by DOH certifying an entity. In addition to facility type, it lists the certified services, beds, and locations for a facility.
Outpatient	<p>SPARCS currently collects patient-level detail on characteristics, diagnoses and treatments, services, and charges for outpatient visits in New York State for the following:</p> <ul style="list-style-type: none"> • Ambulatory Surgery (1983-present) • Emergency Department (2005-present)

Acronym or Term	Definition
	<ul style="list-style-type: none"> Expanded Outpatient Data Collection (EODC) (2011-present)
Output Data Dictionary	Document describing the output data elements available from SPARCS, including calculated variables. There are two output data dictionaries: inpatient and outpatient.
Output File	A file of either inpatient or outpatient data elements available from SPARCS including calculated variables/value-added data elements. Available by discharge/visit year.
Patient	Person receiving health care services from a facility.
Payer	Insurance company responsible for payment of services rendered to a patient by a facility.
PFI (see also Facility Identifier)	Permanent Facility Identifier. Unique 5 digit code identifying a facility location certified to provide health care services under Article 28 of the Public Health Law (renamed Facility ID in 2011).
POA	Present on Admission Indicator.
POC	Plan of Correction. A facility's response to a SOD describing how it plans to correct the violations identified.
PPC	Potentially Preventable Complications.
Primary Key	See "Key."
Programmer's Guide	Appendix NN. Document describing the X12-837 data elements by loop and segment for both the Inpatient and Outpatient submission file. Includes the syntax for each data element (previously the Inpatient and Outpatient Addendum).
Public Health Law (PHL), 2816	New York Public Health Law that defines SPARCS.
Ratification	Commissioner of Health's approval of the data review committee recommendations to release or not release SPARCS data.
Record	Information in an electronic file submitted to SPARCS which contains all the patient's claim information.
Review and Recommendation (R&R)	Document created by SPARCS Operations while reviewing an applicant's request. It is used to assist the data review committee with their recommendation.
Safe Harbor	HIPAA "Safe Harbor" is the de-identification of Medical Record Information requiring that certain identifiers of the individual or of relatives, employers, or household members of the individual must be removed from medical record information in order for the records to be considered de-identified.
SOD	Statement of Deficiencies. Official document describing individual violations of Department regulations.
SPARCS	Statewide Planning and Research Cooperative System.
SPARCS 837 PC Application	A free Windows-based desktop application developed by SPARCS programming staff used to enter, edit, and manage claims to be sent to the SPARCS system.
SPARCS Administrator	Person or designee responsible for assuring that NYCRR Title 10 Section 400.18 is adhered to when requesting access to SPARCS identifiable data.
SPARCS Annual Report Generator	A SPARCS query tool available on the Health Commerce System where registered users can quickly query and download inpatient, emergency room and ambulatory surgery data.
SPARCS Coordinator	The primary contact at a facility responsible specifically for SPARCS data and security.
SPARCS ID	Unique 5 digit code (Facility ID plus a check digit) identifying a facility.

Acronym or Term	Definition
SPARCS Operations	Program area within the Bureau of Health Informatics, Office of Quality and Patient Safety that collects and releases SPARCS data.
SPARCS Update	The monthly SPARCS newsletter published by SPARCS Operations.
Subscriber	The person holding the insurance policy.
Test/Production Indicator	A single character element located in segment ISA15 which determines whether a file submitted to the SPARCS system is a test or production. (Test files are not retained by SPARCS.)
Title 10 – NYCRR	New York State Law governing health care facilities (Article 28 of the Public Health Law).
Transparency	Refers to the Department of Health’s commitment to data openness, trust, and accountability.
Upload Log #	A sequential submission number assigned to files uploaded to the SPARCS system.
Value Codes	A numeric code, defined by NUBC, which identifies what the value immediately following the code represents. Example: Value code 24=Medicaid Rate Code. The Value amount following this code would represent the specific Medicaid Rate Code used on the claim. (See Appendix OO for these value "amounts").

APPENDIX B – CHANGE LOG BETWEEN VERSIONS

<i>Version</i>	<i>Date</i>	<i>Page(s)</i>	<i>Area</i>	<i>Summary of Change</i>
Version 1.1 (Sept. 2014)	9/4/2014	24	Output User Files	Replaced sparcs@health.state.ny.us with sparcs.submitters@health.ny.gov Replaced dprb@health.state.ny.us with sparcs.requests@health.ny.gov
Version 1.1 (Sept. 2014)	9/4/2014	18	Communications	Updated SPARCS newsletter link to Http://www.health.ny.gov/statistics/sparcs/newsletters/
	9/12/2014	30	SPARCS Data Application Process	Flowchart updated to account for the change from DPRB to DGC.
	2/11/2015	26	Contact Information	Updated contact information (room number and tel. number) to room 1970 and (518) 474-3189.
Versions 1.2 (Nov. 2016)	10/31/2016	1/2	Title	Versions 1.2 Nov. 2016
	10/31/2016	3	SPARCS Operations	function of SPARCS Operations Adding Division of Information to location
	10/31/2016	3	Background	Statement about emergency department data partial collection 2003-2004
	10/31/2016	4	Adding New Facilities	Adding OTIS to BHMSM and CAMU organizations
	10/31/2016	6	Submitting Data via the Health Commerce System	Expiration in 30 days
	10/31/2016	7	SPARCS Upload Permission	Note: Failure to notify SPARCS of this change could allow unauthorized access to your healthcare facility's data.
	10/31/2016	8	SPARCS input data dictionary	Changed URL on input data dictionary
	10/31/2016	8	SPARCS-837 PC SOFTWARE	Additional information on the SPARCS PC program
	10/31/2016	9	SPARCS-837 PC SOFTWARE	Changed URL on detail about SPARC-837 Pc program
	10/31/2016	9	Editing Process	Changed information on the Editing process.
	10/31/2016	11	Key Identifying Information	Modified last sentence in Key Identifying Information
	10/31/2016	11	Outpatient Primary Key Data Elements	Added (AS and ED only) to discharge hour \
	10/31/2016	12	Outpatient Alternate Key Data Elements	added (AS and ED only) to discharge hour
	10/31/2016	12	Edited Transaction File	Modified Edited Transaction file
	10/31/2016	13	Detailed History Reports	added reports available in Detailed History Reports

Version	Date	Page(s)	Area	Summary of Change
	10/31/2016	14	Edit and log report	Delete section 8, as a duplicate.
	10/31/2016	15	Compliance Report	Compliance report language
	10/31/2016	17	Compliance Report	Extensions and exceptions
	10/31/2016	17	Submission History Report	Added further information to Submission History Report
	10/31/2016	18	Submission History Report	Changed percentage and percent
	10/31/2016	21	SPARCS Data Quality And Quantity	Removed SPARCS data Quality and Quantity and added URL
	10/31/2016	22/23	SPARCS Data Quality And Quantity	Deleted pages
	10/31/2016	25	General content and submission inquires	SPARCS.submissions@health.ny.gov
	10/31/2016	26	Appendix A-Glossary of Terms	CCS definition
	10/31/2016	28	Appendix A-Glossary of Terms	identifiable data definition