SPARCS Data Compliance Protocol: Quantity and Quality

SPARCS Operations
Bureau of Health Informatics
Division of Information and Statistics

November 2016
Version 1.0

NEW YORK STATE | Department of Health | Office of Quality and Patient Safety

Contents

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

Background

The SPARCS program is located within the New York State Department of Health, Office of Quality and Patient Safety, Division of Information and Statistics, Bureau of Health Informatics.

Complete, accurate and timely submission of inpatient and outpatient SPARCS data is an essential process for all Article 28 facilities operating in New York State. SPARCS data are used by DOH for a variety of purposes including: hospital financial rate setting; developing and evaluating policy; epidemiology; health planning/resource allocation; quality of care assessment; research; surveillance; utilization review, efficiency metric calculations, etc. It is in the best interest of facilities to ensure that the SPARCS data they submit are timely, complete and accurate.

To purpose of reporting efforts of compliance and data quality is to provide facilities with technical assistance, ensure all facilities submit data on a monthly basis, and give the facilities necessary feedback on the volume (quantity) and quality of data received.

Compliance Overview

The SPARCS program, through legislative authority NYCRR 400.18 (b) is implementing a data quantity and quality protocol. This document should be consulted in conjunction with the SPARCS Operations Guide.

When looking at both quantity and quality reports, it is important that facilities have processes in place to reconcile their internal data systems to data that are received and processed by the SPARCS system ("reconciliation"). Findings within the quantity and quality reports generated as part of the compliance protocol may be greatly influenced by a facility's ability to reconcile their data in a timely and complete manner.

Facilities are provided data quantity (Table 3) and quality (Table 4) reports on the **SPARCS Data Submission Reports** page on the **Health Commerce System** (HCS). Historical data quality reports are prepared for Calendar Year (CY) 2014 and 2015 data for facility review, and facilities are urged to correct deficiencies so that the SPARCS system contains timely and accurate data. As of CY 2016 data, facilities are required to adjust data that do not meet data quality standards and benchmarks. Starting with CY 2017 data, facilities in non-compliance after the reconciliation period may be issued Statement of Deficiencies.

Quantity

The regulations for SPARCS, NYCRR 400.18 (b) (iii), requires health care facilities to submit

- SPARCS inpatient discharges and outpatient discharges on a monthly basis;
- at least 95 percent of their total SPARCS inpatient discharges and outpatient visits within 60 days from the end of the month of a patient's discharge or visit (see table 1 for schedule); and
- 100 percent of inpatient, ambulatory surgery, emergency department, and outpatient services data within 180 days from the end of the month of the patient's discharge or visit.

The schedule for the '95 percent rule' is:

Table 1: SPARCS 95 Percent 60-day Reporting Schedule

Month of Discharge/Visit	**Jan**	**Feb**	**Mar**	**Apr**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Nov**	**Dec**
95 % deadline	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Jan	Feb

Monthly reminders are sent to facility SPARCS coordinators that fail to submit inpatient and/or outpatient SPARCS data. As of October 2016, SPARCS began issuing reports on 60-day submission requirements as part of quantity compliance.

In the 180-day period reconciliation, SPARCS expects facilities to complete fixing their errors and reconcile the number of records submitted to SPARCS as compared to their own facilities' records. The Quantity Compliance component is based upon the determination that the number of records a facility submits each month is equal or greater than the expected number of records. The expected number of records or the monthly targets are determined for each data type, inpatient, ambulatory surgery, emergency department, or outpatient services, and are based upon the number of records submitted the previous year.

- The monthly target is 80% of the previous year's monthly average of SPARCS records.
- A lesser percentage, 75% of the previous year's monthly average SPARCS records, is allowed for those months that the facility has historically shown to have low patient volumes.

The monthly targets are found on the **Compliance Report**, which are located on the SPARCS public website at ***http://www.health.ny.gov/statistics/sparcs/reports/compliance/.*** If a facility has either a valid reason for submitting less than the expected number of patient records or has verified the number of records submitted are correct, the facility SPARCS coordinator must submit a request for an "*exception*" through the SPARCS Bureau Mail Log ***SPARCS.Submissions@health.ny.gov*****.** Vendor issues are not an acceptable reason for an exception request.

At this time SPARCS has operationalized this regulation by setting the reconciliation period to be 180 days from the end of each quarter. For example, all SPARCS data containing discharges and visits that occur in the months of January to March are required to be submitted by September 30th.

The calendar for the *Quarterly Reconciliation* process, as depicted in **Table 2**, is as follows:

- During the first three months of the reconciliation period, facilities are to reconcile any differences between the data in their system and the data that was accepted into the SPARCS master file.
- During the last three months of the reconciliation period, the SPARCS program sends warning emails to SPARCS coordinators of facilities with outstanding compliance issues.
    - The first email is based upon the compliance report generated by the first monthly update after 90 days has expired from the end of the reporting quarter. For example, a facility reporting no or insufficient number of records for visits or discharges that occurred during the first quarter, January to March, would receive their first warning email the first week of the following July.
    - A second warning email is sent to the facility SPARCS coordinator of non-compliant facilities after 120 days have expired from the end of the reporting quarter.

    - A third and final warning email is sent to the facility SPARCS coordinator of non-compliant facilities after 150 days have expired from the end of the reporting quarter.
- After the update to the SPARCS master file at the end of the reconciliation period a certified letter is sent to the CEO or the administrator stating that their facility will be issued an SOD. An SOD will be sent to the facility's CEO or administrator by certified mail.
- A Plan of Corrective Action (POC) is required within two weeks of the facility's receipt of the SOD.

Quality

NYCRR 400.18 (b) (iv) permits the SPARCS program to conduct an audit evaluating the quality of submitted SPARCS data and issue a SPARCS ***Data Quality Audit Report*** to a facility listing any inadequacies or inconsistencies in the data. Any audited facility must submit corrected data to the SPARCS program within 90 days of the receipt of the audit report. This SPARCS ***Data Quality Audit Report*** consolidates many of the SPARCS quarterly data quality report findings into one document.

Quality compliance will be based on the same time frame as currently used by quantity compliance, mentioned previously. The SPARCS reconciliation period will continue to be 180 days from the end of each quarter. At the end of the reconciliation period facilities are required to have submit 100% of their corrected SPARCS data. At the beginning of the reconciliation period SPARCS will issue a monthly quality report issued following the update of the SPARCS master file. The ***Data Quality Audit Report*** will show the quality status of SPARCS submissions for the submitted data. The first ***Data Quality Audit Report***, as required by regulations as notification of noncompliance, will be issued after 90 days have expired from the end of the quarter. Facilities will have the remainder of the reconciliation period (90 days) to correct their SPARCS data.

Statements of Deficiency will be issued after the expiration of the reconciliation period for facilities out of compliance.

As with quantity, during the last three months of the quarterly reconciliation period, SPARCS staff send warning emails to the SPARCS coordinators of facilities with outstanding quality compliance issues.

- The first email will be sent to all facilities with outstanding quality issues as identified in the quality audit report.
- A second warning email is sent to the SPARCS coordinators of noncompliant facilities after 120 days have expired from the end of the reporting quarter.
- The last warning email is sent after 150 days have expired from the end of the reporting quarter.
- After the update to the master file at the end of the reconciliation period, a certified letter is sent to the CEO or the administrator stating that their facility will be issued a Statement of Deficiencies (SOD). Plan of Corrective Action (POC) are required within two weeks of the facility's receipt of the SODs.

Implementation of the Quality Protocol

Implementation of the quality protocol will begin with the issuance of the Quality Reports for the full CY 2014 and 2015. These reports are made available to facilities on the SPARCS Data Submission Reports page on the HCS on a monthly basis to help them to identify problem areas in their data.

Starting with CY 2016 data, SPARCS will begin reporting quality data in quarters. The first and second quarter quality reports will be released together according on the second quarter reconciliation period

calendar (see Table 2 for more details). The reports will be based upon the October 2016 master file update which will contain all data submitted to SPARCS by October 4, 2016. The quality reports for the third and fourth quarters will follow the normal reconciliation calendar (see Table 1). The 2016 data is to be used to assist facilities in becoming familiar with the new quality compliance routine. Further, SPARCS expects the facilities to address any anomalies in their data where possible. All corrections for 2016 data, following the new quality compliance routine, should be completed by June 30, 2017.

Full implementation of the Quality compliance protocol will begin with the 2017 SPARCS data submissions.

Addressing Anomalies

SPARCS Operations will contact facilities based on the inadequacies, inconsistencies or anomalies reported in the data. For these facilities, SPARCS staff will work with them to help determine the root cause of data quality issues and what corrective actions needed to be undertaken, if any. Such measures may include:

- Reporting that the data in question truly reflects the recorded information for those discharges and patients,
- Provide documentation supporting the data, and/or
- Submit corrected data to the SPARCS program.

The goal is to resolve addressing the anomalies within 90 days of the release of the report. As stated previously, SPARCS staff will assist facilities in determining the root cause of data quality issues and corrective actions needed to be undertaken. Due to the importance of the data quality, failure by a facility to address anomalies in their data may result in further actions.

Compliance Protocol for Quantity and Quality.

Table 2: SPARCS Compliance Protocol for Quantity and Quality

<table>
<tr><td colspan="12">Reporting Month</td></tr>
<tr><td>1</td><td>2</td><td>3</td><td colspan="3">4 5 6</td><td>7</td><td>8</td><td>9</td><td colspan="2">10</td></tr>
<tr><td>Submit Discharges / Visits</td><td>Submit Discharges / Visits</td><td>Submit Discharges / Visits</td><td colspan="3" rowspan="2">Reconcile Differences Between Facility Data and Accepted Data in SPARCS</td><td>Warning Letter 1</td><td>Warning Letter 2</td><td>Warning Letter 3</td><td colspan="2" rowspan="2">SOD Issued in still non-compliant after Reconciliation Period</td></tr>
<tr><td colspan="3">Data Quality Audit Report</td><td></td><td></td></tr>
<tr><td colspan="3">90 Day period</td><td colspan="3">90 Day period</td><td colspan="3">90 Day period</td><td>1 Day</td><td>14 Days Post Receipt</td></tr>
<tr><td colspan="3">Quarter of Discharges/Visits</td><td colspan="6">Reconciliation Period – 180 Days Total</td><td>SOD issued</td><td>POC Deadline</td></tr>
<tr><td colspan="3">Jan-Mar,
Apr-Jun,
Jul-Sept,
Oct-Dec</td><td colspan="6">Apr-Sept,
Jul-Dec
Oct-Mar
Jan-Jun</td><td colspan="2">Oct
Jan
Apr
Jul</td></tr>
</table>

SPARCS Data Compliance Protocol

The following are the reports by which Data Compliance will be based on.

Table 3: SPARCS Data Compliance Protocol for Quantity Reports

Report Name	Description	Data Type	Frequency of Reporting	Quality Benchmarks
Audit Report by Month of Discharge	Number of discharge/visit claims submitted by month and type of data	Inpatient Ambulatory Surg. Emergency Dept. Outpatient Services	Weekly	Minimum of one discharge/visit per month
Compliance Report	Compares the number of discharge/visit claims submitted against an expected value	Inpatient Ambulatory Surg. Emergency Dept. Outpatient Services	Monthly	Target is the monthly average from the previous year, discounted to 80/75 percent
Submission History	Number of discharge/visit claims submitted by month and number of accumulated unresolved errors and exceptions	Inpatient Ambulatory Surg. Emergency Dept. Outpatient Services	Weekly	Unexplained errors should be no more than 1% of the number of records in the master file

Table 4: SPARCS Data Compliance Protocol for Quality Reports

Report Name	Description	Data Type	Frequency of Reporting	Quality Benchmarks
Data Quality Audit Report	Report is used to consolidate the facility's data quality issues highlighted on the monthly data quality reports described within this document.	Inpatient, Emergency Room, Ambulatory Surgery	Quarterly	Based on data quality benchmarks for the individual monthly reports described within this document.
Present on Admission	The purpose of this report is to provide a summary of reporting on the Present on Admission	Inpatient	Annual (October)	POA Assessment Criteria Description

Report Name	Description	Data Type	Frequency of Reporting	Quality Benchmarks
	(POA) coding on inpatient discharges through the New York State Statewide Planning and Research Cooperative System (SPARCS) by Article 28 hospitals. The POA code indicates if onset of the diagnosis preceded or followed admission to the hospital. The report provides detail on non-exempt facilities that have submitted POA indicators that meet 1 of 5 criteria's (link to report: Page 4,Table 1), determined by 3M Corporation, for ICD-9 codes that fall within a red zone target or within two grey zone targets (as defined in the POA Report) and will be deemed out of compliance.			1. Pre-existing Diagnosis Codes Specified as Not POA 2. Percent Uncertain on Indicator for Secondary Diagnosis 3. Large Number of Secondary Diagnoses with POA 4. Small Number of Secondary Diagnoses with POA 5. For Elective Surgical Patients, Surgical Diagnoses marked as POA
SPARCS/ICR Comparison	The SPARCS/ICR Comparison is a statistical report that compares SPARCS inpatient data with Institutional Cost Report (ICR) inpatient data. Among the various statistics reported, three percentage comparisons that are review by SPARCS staff will be ICR Days Under/Over Reported in SPARCS (5%), ICR Discharges Under/Over Reported in SPARCS (3%), and ICR Charges Under/Over Reported in SPARCS (5%). A careful review of this information will be made for each facility.	Inpatient	Annual (October)	Facilities that are highlighted with discrepancies between the data sources will be contacted. The three percentage comparisons that are reviewed are: ICR Days Under/Over Reported in SPARCS (5%), ICR Discharges Under/Over Reported in SPARCS (3%), and ICR Charges Under/Over Reported in SPARCS (5%).
Claim Filing Indicator and Payment Typology	The SPARCS program has developed a coding crosswalk between the ASC X12 Claim Filing Indicator (CFI) Code List and Payment Typology codes. (See the Reports section of SPARCS Data Submission allocation on the HCS.) The Claim Filing Indicator / Payment Typology Report map	Inpatient, Emergency Room, Ambulatory Surgery	Monthly	If the submitted SPARCS claims contain a Claim Filing Indicator Code and a Payment Typology code that are not covered in the crosswalk map, the Claim Filing Indicator / Payment Typology pairing will be highlighted in the report.

Report Name	Description	Data Type	Frequency of Reporting	Quality Benchmarks
	incorporates, in some instances, a one-to-multiple relationship between the ASC X12 Claim Filing Indicator Code and Payment Typology. In other instances, there may be a one-to-one relationship between the ASC X12 Claim Filing Indicator Code List and Payment Typology. In either instance, if your submitted SPARCS claims contain a Claim Filing Indicator Code and a Payment Typology code that are not covered in the crosswalk map your Claim Filing Indicator / Payment Typology pairing will be highlighted in the report. The first report, Claim Filing Indicator 1 Mapped to Payment Typology 1 – Facility Accuracy Report displays the total number of discharges by facility, number and percent of correctly and incorrectly mapped CFI to Payment Typology. If the percent of payment topology correctly mapped is less than the New York State average, the row will be shown highlighted in the report. The second report, Claim Filing Indicator 1 Mapped to Payment Typology 1 – Facility Detail Report displays a summary of each facilities mapping results for the period. If a facility used a Claim Filing Indicator to payment typology combination that is not in the table, the row is highlighted.			
Diagnosis and Procedures	The Diagnosis and Procedures report lists SPARCS facility averages that will be compared with NYS Health Service Area regions (HSA 4 NY-PENN merged into HSA 3 Central NY) and New	Inpatient, Emergency Room, Ambulatory Surgery	Monthly	Facilities that report the lowest 10th percentile of diagnosis and procedures at the State level will be highlighted for further review. For cases

Report Name	Description	Data Type	Frequency of Reporting	Quality Benchmarks
	York State averages. SPARCS staff and facility representatives will be able to compare average length-of-stay, average number of diagnosis and average number of procedures. Significant variations in the facilities data from the calculated averages in the region in which it is located will be reviewed, taking in consideration the type and size of hospital.			where significant variation exists between the facilities data and the calculated averages in its region, the data will be reviewed.
Discharge Hour	The Discharge Hour report displays the percent frequency of hourly discharge times reported by the facility. Details regarding the Discharge Hour report can be found in the About this Report document. This report serves to highlight any inconsistencies in the point of origin data submitted to SPARCS.	Inpatient, Emergency Room, Ambulatory Surgery	Monthly	The facility's data will be highlighted in the report if 50 percent or greater of the facility's discharge hour is classified as any one of the possible discharge hours including unknown discharge hour. These cases will be deemed to be an anomaly.
Expanded Race and Ethnicity Reporting	The purpose of these reports is to provide facilities with insight as to how the expansion of race and ethnicity are being reported. It also serves to highlight any inconsistencies within the data submitted to SPARCS.	Inpatient	Monthly	Highlighted facilities are the result of anomalies in the reported data for the following conditions: Ethnicity: When either the combined 'Hispanic' rate is zero or the 'Unknown' rate is 100 percent. Race Overall: When either 100 percent of discharges are listed as 'other' or the total discharges are greater than 200 and all are reported as 'white'. Race Specific: The reporting of discharges totals for Asian, Native Hawaiian/Pacific Islander or Multiple Race are greater than 50 and the

Report Name	Description	Data Type	Frequency of Reporting	Quality Benchmarks
				corresponding 'specific' count is zero.
Patient County Correctly Reported / Homeless Indicator	The SPARCS Homeless Indicator Report has been created to study the accuracy in which facilities are coding the County and Condition Code fields in SPARCS data as it relates to the discharge of homeless patients. The SPARCS codes and values require that counties located in New York State are coded with a valid two-digit numeric code in accordance with the Zip/County Code Edit Validation Table in Appendix F. Also, if the patient is homeless, the county code should be entered as '99' and if the patient lives outside the State the county code that should be entered is '88'. This report highlights the facility's row in the table if the percentage of county codes coded as '99' is 20 percent or greater than the total number of discharges reported for the year. This table is broken down by facility and claim type (I, E, and A). In addition to the test of the county code equal to '99', the SPARCS Homeless Indicator Report looks at the SPARCS Inpatient/Outpatient output data element Residence Indicator. The Residence Indicator will be coded with an 'H' if the patient discharge condition code is '17 = Patient is Homeless'. The number of discharges with Residence Indicator coded with an 'H' is compared to the Address field which should have been coded as 'HOMELESS' if the patient was homeless. If the number of discharges with	Inpatient, Emergency Room, Ambulatory Surgery	Monthly	The facility is highlighted if the percentage of county codes coded as '99' is 20 percent or greater than the total number of discharges reported for the year. Further, if the number of discharges with Residence Indicator coded with an 'H' is greater than the number of discharges where the Address field is coded with 'HOMELESS' the row in the table is highlighted.

Report Name	Description	Data Type	Frequency of Reporting	Quality Benchmarks
	Residence Indicator coded with an 'H' is greater than the number of discharges where the Address field is coded with 'HOMELESS' the row in the table is highlighted.			
Patient Disposition	The Patient Disposition report summarizes the dispositions of patients that were discharged from New York State hospitals in the reported year. This report also serves to highlight any inconsistencies in the patient disposition data submitted to SPARCS. There is grouping of the discharge codes to facilitate displaying the major disposition groups across 1 page. Details regarding the disposition groups can be found in the About this Report document.	Inpatient, Emergency Room, Ambulatory Surgery	Monthly	The facility's data will be highlighted in the report if 100 percent of the facility's patient disposition is classified as 'Home'.
Point of Origin	The Point of Origin report summarizes the point of origin of patients that were admitted to a New York State hospital as an inpatient in the reported year. The codes define the description of the point of origin and have specific meaning. Details regarding the point of origin codes can be found in the About this Report document. This report serves to highlight any inconsistencies in the point of origin data submitted to SPARCS. In addition to the SPARCS Point of Origin data quality report, an alternate Point of Origin Report – Newborns Only was developed to display the Point of Origin codes when the Type of Admission is equal to 4. Type of Admission 4 equates to Newborn and the Point of Origin codes change to either 5 – Born Inside Hospital or 6 – Born Outside Hospital.	Inpatient	Monthly	The facility's data will be highlighted in the report if 100 percent of the facility's point of origin is classified as Non-Health Facility or 90 percent or more is classified as Undefined Facility. If the report is for Newborn Only, the facility's data will be highlighted in the report if incorrect codes populate the Point of Origin data field. In either report these cases will be deemed to be an anomaly.

SPARCS Program Contact Information

We always welcome questions, comments, and feedback.

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Appendix A - Terms and Acronyms

Table 5: Terms and Acronyms used in the SPARCS Data Quality Protocol

Term or Acronym	Description
Article 28	Article 28 of NYS Public Health Law is the facility designation of reporting entities to SPARCS
BHI	Bureau of Health Informatics
CEO	The facility Chief Executive Officer or equivalent
CY	Calendar Year
DIS	Division of Information and Statistics
DOH	Department of Health
Exception	When non-compliance is waived. Caused when an irregularity exists in the data that is factual and not the result of submission errors.
Facility	A health care facility licensed under Article 28 of NYS Public Health Law required to submit inpatient and outpatient data to SPARCS
HCS	Health Commerce System
Master File	Data file containing all claims/visits submitted to SPARCS which have passed the edits. There is an inpatient and an outpatient Master File.
OQPS	Office of Quality and Patient Safety
POC	Plan of Corrective Action
Reconciliation Period	The period of time that is being audited for quality and quantity
Reconciliation	The process of identifying and correcting differences between the facilities records and those accepted into SPARCS master file
SOD	Statement of Deficiency
SPARCS	Statewide Planning and Research Cooperative System
SPARCS Coordinator	The facility coordinator that is the primary liaison with the Department of Health SPARCS Program on SPARCS related issues.