UNITED ARAB EMIRATES
MINISTRY OF HEALTH & PREVENTION

الإمارات العربية المتحدة
وزارة الصحة و وقاية المجتمع

Ministry of Health & Prevention Statistics and Research Center

SARC Data Quality Manual

Based on ISO 8000-61:2016

Data Quality Management

Part 61 - Process reference model

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Table of Contents

1. INTRODUCTION

1.1 About MOHAP

Established in 1970, the Ministry of Health and Prevention (MOHAP) is a healthcare regulatory system in the UAE. It introduces, updates, and implements healthcare policies that are followed across all the clinical facilities in the country.

1.1.1 Vision

An effective and sustainable Healthcare System for a happy society.

1.1.2 Mission

To enhance community health by providing comprehensive, innovative, and fair healthcare services as per international standards, and performing its role as a regulator and supervisor of the healthcare sector through a modern and integrated health legislative system.

1.1.3 Objectives

- **First Objective:** Provide a comprehensive and integrated healthcare in innovative and sustainable ways to prevent the spread of diseases in. the community.
- **Second Objective:** Develop effective health information systems and apply global standards in the management of health facilities and infrastructure.
- **Third Objective:** Build quality and safety for therapeutic, healthcare, and pharmaceutical systems according to international standards.
- **Fourth Objective:** Provide a vital legislative framework and, governance, and distinctive regulatory and supervisory services for the healthcare sector.
- **Fifth Objective:** Ensure and guarantee the provision of all administrative services according to the standards of quality, efficiency, and transparency.
- **Sixth Objective:** Entrench a culture of innovation in the institutional work environment.

1.1.4 Values

- **Patient Priority:** Patients are at the center of our attention and care.
- Excellence & leadership: Healthcare in line with highest standards of excellence & professionalism aiming at global leadership in health.
- **Initiative and productivity:** Effective contribution and proactive approach to achieve best possible results.
- **Accountability:** Act responsibly at all levels, and take the necessary measures to ensure optimal performance
- Respect: Demonstrate high regards to the rights and privacy of all concerned parties
- **Innovation:** Embrace creative thinking as a lifestyle to ensure readiness for the future
- **Teamwork:** Team spirit and synergy with all concerned patients

- **Community Happiness:** To deliver comprehensive and integrated health care that exceeds expectations for a happy community.

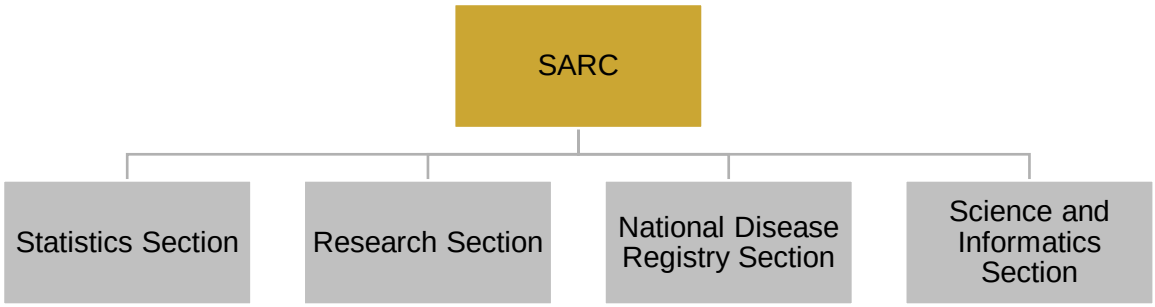
1.2 About SARC

The center aims at providing comprehensive and integrated health care through centralization in managing health statistical data at the UAE level to provide a database and develop statistical information systems to enhance health statistics and apply international standards in information management. The Centre also supports the cooperation and coordination in statistical work with relevant statistical authorities and relevant specialized international organizations and providing distinguished organizational services to support the health informatics and information base.

The center aims to support decision-making and improve its effectiveness and efficiency in various health statistical fields at the required time and the appropriate accuracy, through scientific and practical mechanisms and means that ensure appropriate decision-making and decision-taking by providing studies, prioritized data, study of the health situation at the national and local levels, and building databases and systems to support knowledge and artificial intelligence that would map the health status, identify strengths and weaknesses, and present suggestions and solutions to support decision-makers.

The vision of SARC is to serve as a federal agency for Health Statistics and Research by providing quality healthcare information and regulating and supporting health research in the country. This will also help to smooth the current process which the MOHAP undergoes to publish the Annual Statistical Report.

1.2.1 SARC Organization Structure:



1.2.2 Roles of the Statistics Section:

1. Providing health statistical support.
2. Managing statistical requests by collecting, refining, analyzing, and presenting statistical health data.
3. Building and developing statistical capabilities to keep pace with Statistical requirements at the local and international level.
4. Promote and improve statistical products qualitatively and quantitively in sustainable manner.

5. Building joint work programs between the center and the authorities concerned with health statistical work in the country and abroad.
6. Preparing and providing high-quality statistical data and information to decision-makers, government agencies, the business community, the media, researchers, individuals, and the international community
7. Continuity of attendance and active participation in international forums concerned with health work through statistical data and reports.
8. Preparing the department's statistical reports (monthly or annual).
9. Preparing future studies and expectations in the health field.

1.2.3 Roles of the Research Section:

1. Conducting and designing research, studies and surveys on health-related topics that study the health situation in the country.
2. Providing support to decision-makers by preparing reports that include the results of studies and presenting suggestions and solutions to improve the situation. In various health fields.
3. Strengthening partnerships with local and regional academic centers and institutions in the field of health studies.
4. Providing research consultations and support in the field of health studies and surveys.

1.2.4 Roles of the National Disease Registry Section:

1. Determination of primary diseases.
2. Establish national registries of priority diseases.
3. Preparing a database of related diseases.
4. Preparing periodic reports on priority diseases
5. Make recommendations and future strategies to investigate priority diseases and raise them to decision-makers.

1.2.5 Roles of the Science and Informatics Section:

1. Define and use scientific methods, processes, algorithms, and systems to extract value from data.
2. Set up data science capabilities to make better decisions and create more innovative products and services.
3. Managing the content of open data portals.
4. Preparing business analysis studies and defining process steps that contribute to extracting data and statistics in an optimal way.
5. Building electronic display dashboards for displaying data and statistics.
6. Complete statistical reports and health indicators.

7. Conducting activities related to data science such as (big data, artificial intelligence, machine learning ...)
8. Using GIS mapping techniques to display and analyze statistical data.
9. Preparing feasibility studies and suggestions made by the center.
10. Promote data science and informatics in the health field.

1.3 About the Standard (ISO 8000-61:2016)

1.3.1 Management System Standards

ISO 8000 defines characteristics of information and data that determine its quality, and provides methods to manage, measure and improve the quality of information and data.

When assessing the quality of information and data, it is useful to perform the assessment in accordance with documented methods. It is also important to document the tailoring of standardized methods with respect to the expectation and requirements pertinent to the business case at hand.

ISO 8000 includes parts applicable to all types of data and parts applicable to specific types of data. ISO 8000 can be used independently or in conjunction with quality management systems.

There is a limit to data quality improvement when only the nonconformity of data is corrected, since the nonconformity can recur. However, when the root causes of the data nonconformity and the related data are traced and corrected through data quality processes, recurrence of the same type of data nonconformity can be prevented. Therefore, a framework for process-centric data quality management is required to improve data quality more effectively and efficiently. Furthermore, data quality can be improved through assessing processes and improving under-performing processes identified by the assessment.

This part of ISO 8000 specifies the processes required for data quality management. This specification is used as a reference for assessing and improving the capability of the processes or increasing organizational maturity with respect to data quality management.

This part of ISO 8000 can be used on its own or in conjunction with other parts of ISO 8000.

This part of ISO 8000 is intended for use by those actors that have a vested interest in information or data quality, with a focus on one or more information systems both inter- and intra-organization views, throughout all phases of the data life cycle.

2. SCOPE

The following are within the scope of this part of ISO 8000:

- fundamental principles of data quality management.
- the structure of the data quality management process.
- definitions of the lower-level processes for data quality management.
- the relationship between data quality management and data governance.

- implementation requirements.

The following is outside the scope of this part of ISO 8000:

- detailed methods or procedures by which to achieve the outcomes of the defined processes.

This part of ISO 8000 is applicable to managing the quality of digital data sets that include not only structured data stored in databases but also less structured data such as images, audio, video and electronic documents. This part of ISO 8000 can be used by an organization managing data quality at the organization level because, for instance, multiple software applications are sharing and exchanging data.

This part of ISO 8000 is used as a process reference model by internal and external parties, including certification bodies, to assess process capability or organizational maturity for data quality management and to enhance data quality through process improvement.

3. Terms & Definition

The terms and definition are detailed in ISO 8000-2, Data quality — Part 2: Vocabulary

4. Fundamental principles of data quality management

The following fundamental principles apply to managing the quality of data.

- Process approach: the processes that use, create and update data are defined and operated. These processes become repeatable and reliable by also defining and operating processes for managing data quality.
- Continuous improvement: data are improved through effective measurement and correction of data nonconformities that arise from data processing. Such improvements, however, do not prevent the same nonconformities occurring repeatedly. Sustained improvement arises from analyzing, tracing, and removing the root causes of poor data quality, usually requiring the improvement of processes.
- Involvement of people: specific responsibilities for data quality management exist at different levels of the organization. End users have the greatest direct effect on data quality through data processing activities. In addition, SARC perform the necessary intervention and control to implement and embed processes for improvement of data quality across the organization. Finally, oversight by top management ensures the necessary resources are made available and directs the organization towards achieving the vision, goals, and objectives for data quality.

5. The data quality management process

5.1 The basic structure of the data quality management process

The basic structure of the data quality management process is as follows.

- The data quality management process consists of Implementation, Data-Related Support, and Resource Provision. This is depicted in Figure 1:Basic structure of data quality management.
- To achieve continuous improvement of data quality, the Implementation process is performed following the Plan-Do-Check-Act pattern.
- The Data-Related Support process enables the Implementation process by providing information and technology related to data management.
- The Resource Provision process improves the effectiveness and efficiency of the Implementation and the Data-Related Support processes by providing resources and training services at the organizational level.

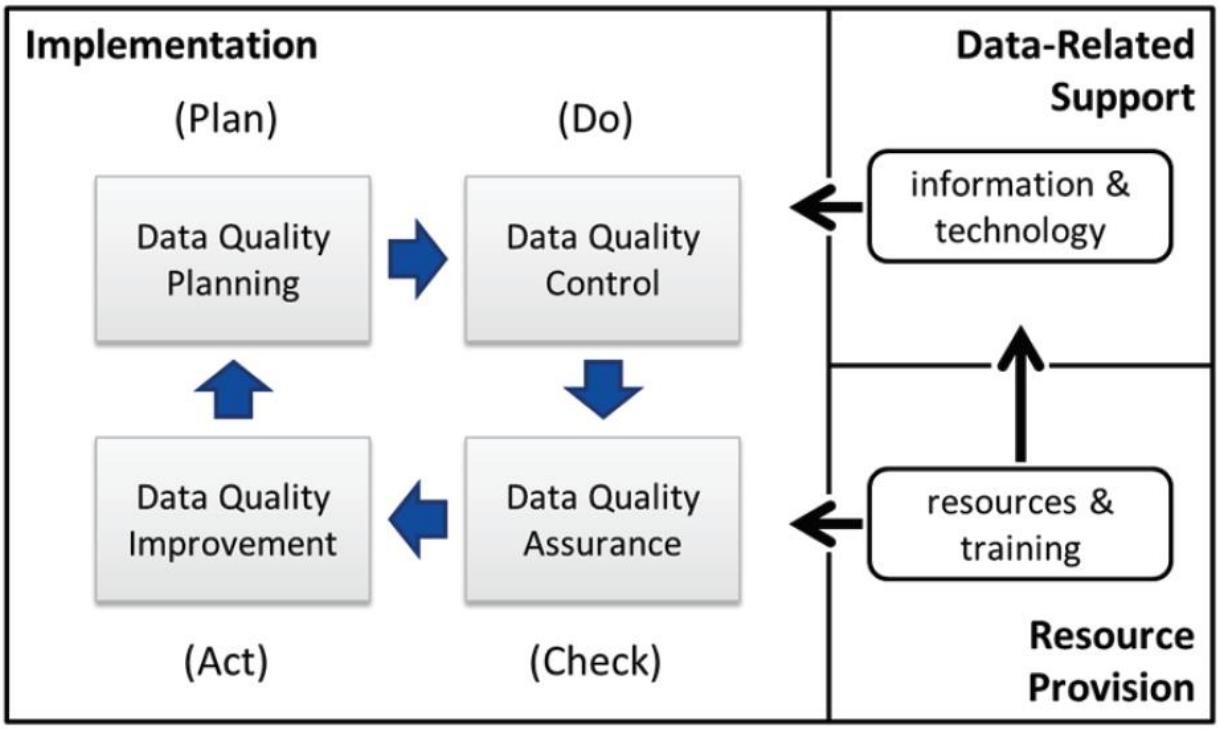


Figure 1:Basic structure of data quality management

5.2 The detailed structure of the data quality management process

As shown in Figure 2, the data quality management process is a hierarchy of lower-level processes, as follows.

a) The Implementation process consists of four sub-processes based on the "Plan-Do-Check-Act" pattern:

1. Data Quality Planning, corresponding to "Plan":
    - Requirements Management.
    - Data Quality Strategy Management.

- Data Quality Policy/Standards/Procedures Management.
- Data Quality Implementation Planning.

2. Data Quality Control, corresponding to “Do”:
   - Provision of Data Specifications and Work Instructions.
   - Data Processing.
   - Data Quality Monitoring and Control.
3. Data Quality Assurance, corresponding to “Check”:
   - Review of Data Quality Issues.
   - Provision of Measurement Criteria.
   - Measurement of Data Quality and Process Performance.
   - Evaluation of Measurement Results.
4. Data Quality Improvement, corresponding to “Act”:
   - Root Cause Analysis and Solution Development.
   - Data Cleansing.
   - Process Improvement for Data Nonconformity Prevention.

b) The Data-Related Support process provides Implementation with information, constraints and technology. This process consists of:
   1. Data Architecture Management.
   2. Data Transfer Management.
   3. Data Operations Management.
   4. Data Security Management.

c) The Resource Provision process enhances the performance of Implementation and Data-Related Support by providing resources at the organizational level. This process consists of:
   1. Data Quality Organization Management.
   2. Human Resource Management.

The sub-processes of Implementation take place in sequential order, while those of Data-Related Support and Resource Provision take place as and when necessary.

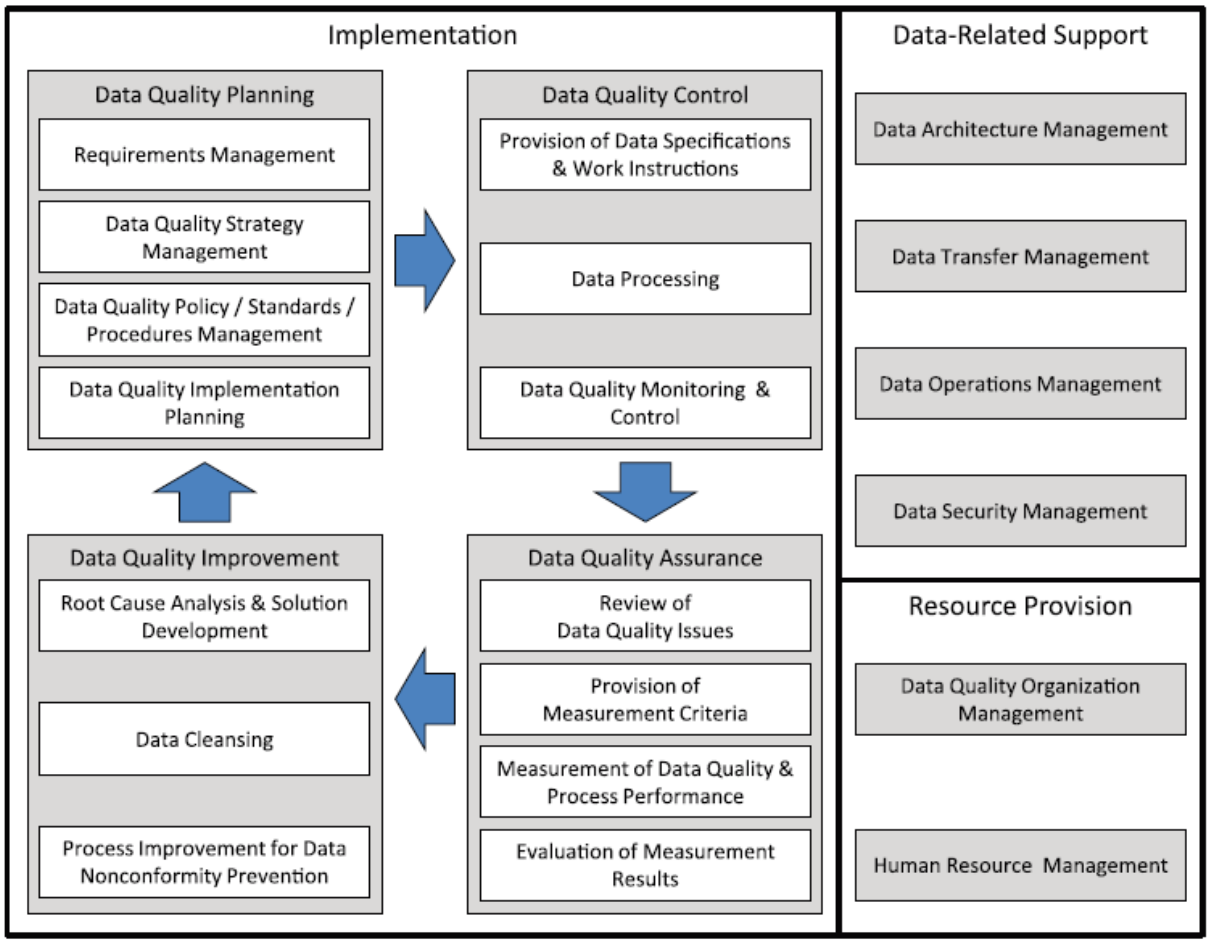


Figure 2: Detailed structure of data quality management

5.3 The elements of a process description

The process descriptions consist of the following elements:

- Title, which is a descriptive heading for the process.
- Purpose, which describes the goal of performing the process.
- Outcomes, which express the observable results expected from successful performance of the process.
- Activities, which is a list of actions that can achieve the outcomes.

6. The Implementation process

6.1 Overview of Implementation

The Implementation process identifies data requirements corresponding to the needs of stakeholders, establishes objectives and creates implementation plans to meet those

requirements. In line with these plans, end users perform data processing according to data specifications and work instructions, while SARC monitor and control the conformance of data to requirements.

The sub-processes of Implementation are Data Quality Planning, Data Quality Control, Data Quality Assurance, and Data Quality Improvement.

6.2 Data Quality Planning

6.2.1 Overview of Data Quality Planning

SARC has established measurable objectives (as a part of the MOHAP Strategic Plan) that are consistent with the relevant levels and functions in the Organization. Some of the objectives pertain to the clients' requirements and all the objectives aim at the continual improvement of the Data Quality Management System.

SARC Management has identified, and established resources required to satisfy the requirements of its customers, with regards to its products and services, and to achieve its Objectives.

The overall strategic objectives of SARC are embedded in the strategic goals for the organization. As part of its annual strategic planning.

A set of detailed processes, policies, procedures, and plans have been put in place to detail the actions, levels, cost, resources, and capabilities required to achieve these objectives.

6.2.2 Requirements Management

SARC has determined the needs and expectations of the interested parties that are relevant to its Data Quality Management System and that affect its ability to meet legal and regulatory requirements, aligned with the needs and expectations of stakeholders and achieve intended result(s) of the Data Quality management system.

Related Documents:

- Task Allocation
- List of statistical Reports with Details
- WHO Core Indicators
- Statistical Reports in Open data
- NHWA Reports
- Disease Registry Reports
- SLA Appendix Data Items MOHAP AD DOH

6.2.3 Data Quality Strategy Management

SARC has determined its purpose and its strategic direction of the organization and that affect its ability to meet legal and regulatory requirements and achieve the intended results of its Data Quality Management System, through developing the strategy related to its operations taking into consideration all relevant stakeholders, this strategy is implemented at all SARC levels.

The strategy includes vision, long term goals, an implementation roadmap and short-term objectives, which are defined in terms of quantitative outcomes, the strategy is communicated through the internal channels, and the outcomes are reviewed quarterly, and will lead to update this strategy.

Related Documents:

- SARC policy

6.2.4 Data Quality Policy/Standards/Procedures Management

SARC Documentation structure is managed by an internally consistent set of formal policies, procedures, standards, and guidelines governed by the Data Management Scope and supporting policies:

- Manual

The manual defines the boundaries of the Data Quality Management System in terms of the characteristics of the business, the organization, its location, assets and technology.

- Policy

Policy provides the Management commitment towards maintaining a strong Data Quality Management System across SARC, in-line with the MOHAP Strategic directions.

- Procedures, and Form
    - Procedures are step-by-step instructions to support compliance with the policies and standards.
    - Forms are the evidence of the implementation of the documented procedures.

6.2.5 Data Quality Implementation Planning

SARC has established of the data quality implementation plan that defines the scope and target of data quality and prepare detailed implementation plans including resource allocation and Data stewardship allocation.

Related Documents

- Task Allocation list
- SARC Report Per Quarter

6.3 Data Quality Control

6.3.1 Overview of data quality control

SARC is conducting Data Quality Control by preparing the implementation plan and the processes that meet requirements. The process involves creating, using, and updating data according to specified work instructions and monitoring quality by checking whether the data conform to pre-determined specifications.

Data Quality Control consists of Definition of Data Specifications and Work Instructions for Data Quality, Data Processing and Data Quality Monitoring and Control.

6.3.2 Provision of data specifications and work instructions

SARC has develop specifications that describe characteristics of data and are used for both Data Processing and Data Quality Monitoring and Control through the quarterly reports that prepared as part of the Data Quality Management.

Related Documents:

- SARC Policy & Process
- Report Request/ Change Form

6.3.3 Data Processing

SARC has adopted FSCA System for Creating, using, updating, and deleting data in accordance with data specifications and work instructions. This software has more ability to analyze the data and produce different report.

Related Documents:

- Statistical Reports in Open Data

6.3.4 Data Quality monitoring and control

SARC has Identified risks throughout the data life cycle, analyze the impact if each risk was to occur and determine risk priorities to establish the basis for monitoring and control of processes and data.

According to the identified risk priorities, SARC is monitoring and measuring process performance. Monitoring and measuring take place either on monthly basis or in accordance with applicable work instructions.

When the nonconformity happened, the action will be taken used the documented procedure “Control of Non-conformities Procedures”

6.4 Data Quality Assurance

6.4.1 Overview of Data Quality Assurance

Data Quality Assurance measures data quality levels and the process performance related to data nonconformities or other issues that have arisen because of Data Quality Planning or Data Quality Control. This measurement provides evidence by which to evaluate the impact of any identified poor levels of data quality on the effectiveness and efficiency of business processes.

Data Quality Assurance consists of Review of Data Quality Issues, Provision of Measurement Criteria, Measurement of Data Quality and Process Performance and Evaluation of Measurement Results.

6.4.2 Review of Data Quality Issues

SARC is conducting the review of Data Quality Issues through s steps:

1. Initiation: responding to the issues and nonconformities raised from the reports, the stakeholders through the data processing process.

2. Analysis: Review the issue or nonconformities arising from Data Processing to identify those that are possibly connected to the reported issue that has triggered the need for Data Quality Assurance. Further investigation could be conducted through the measurement of data quality levels and process performance, this investigation addresses aspects of data quality management, including trends and patterns in the occurrence of data nonconformities; the cause of stakeholder needs not being met; and the ways in which an individual nonconformity can propagate to cause other nonconformities.

Related Documents:

- List of UAE results from different global reports

6.4.3 Provision of Measurement Criteria

SARC has established the basis on which to perform Measurement of Data Quality and Process Performance by:

1. Determination of the data and processes to measure: Based on the set of data nonconformities output by the Review of Data Quality Issues process, determine the scope of target data and processes to measure.
2. Development of KPI's: Develop or select the measurement indicators and corresponding metrics used to measure the quality levels of data and the performance level of processes.
3. Development of measurement methods: Develop or select measurement methods related to measuring the data characteristics and process performance.

6.4.4 Measurement of Data Quality and Process Performance

SARC has developed a plan to conduct measurement of data quality and process performance, that includes the appropriate resources are deployed for the measurement, and the values are measured for data quality and process performance, by:

1. Establishment of measurement resources: Establish appropriate resources to measure data quality and process performance without disrupting the execution of business processes.
2. Measurement of data quality levels: Measure the data quality levels by implementing the measurement plans and determining the measurement results.
3. Measurement of process performance levels: Measure the process performance levels by implementing the measurement plans and determining the measurement results.

6.4.5 Evaluation of Measurement Results

SARC has established the priorities for performing Data Quality Improvement that include Measurement results to provide a quantitative perspective on identified data nonconformities, and an impact is evaluated, indicating the effect of poor levels of data quality or poor process performance on the organization or other stakeholders through:

1. Analysis of measurement results: Quantitatively analyze measurement results of data quality and process performance. These results are generated by Measurement of Data Quality and Process Performance.

2. Evaluation of the impact: Identify the consequences of any identified poor levels of data quality or poor process performance on the organization.

6.5 Data Quality Improvement

6.5.1 Overview of Data Quality Improvement

Data Quality Improvement involves analyzing the root causes of data quality issues based on the assessment results derived from Data Quality Assurance. To prevent future data nonconformities, Data Quality Improvement corrects existing nonconformities and transforms processes as appropriate.

Data Quality Improvement consists of Root Cause Analysis and Solution Development, Data Cleansing and Process Improvement for Data Nonconformity Prevention.

6.5.2 Root Cause Analysis and Solution Development

SARC is performing Root Cause Analysis and Solution Development in accordance with the data quality strategy and with the priorities identified by Data Quality Assurance, the basis on which to perform Data Cleansing and/or Process Improvement for Data Nonconformity Prevention to identify the root causes and associated impacts for each identified data quality issue, based on the results from the Data Quality Assurance process and taking account of the data quality strategy, Solutions involving data cleansing and process improvements to prevent recurrence of identified root causes, the cost-effectiveness for each identified solution, the priority for each identified solution, and a plan to implement the identified solutions.

The process is done through:

1. Analysis of root causes of data nonconformities: Analyze the root causes of each data quality issue and assess the effect of the issue on business processes in the organization.
2. Development of improvement solutions to eliminate the root causes: Propose solutions to eliminate the root causes and prevent recurrence of nonconformities. Evaluate the feasibility of the proposed improvements through cost-benefit analysis.

6.5.3 Data Cleansing

SARC is performing Data Cleansing to ensure, that the center is able to access data sets that contain no nonconformities capable of causing unacceptable disruption to the effectiveness and efficiency of decision making using those data, by developing a detailed specification for data cleansing to correct each identified data nonconformity, developing a schedule is developed and implemented in consultation with stakeholders to execute the required data cleansing, keep a record of all corrections made to the data, and develop actions to prevent the recurrence of actual or the occurrence of potential data nonconformities. and through:

1. Correction of data nonconformities and related data: Correct data nonconformities and related data, implementing developed solutions and make a record of the corrections.
2. Prevention of data nonconformity recurrence: Act to prevent the recurrence of each actual or the occurrence of each potential data nonconformity.

Related Documents:

- Data Dictionary
- WHO Core Indicators,
- Diseases registry data dictionary

6.5.4 Process Improvement for Data Nonconformity Prevention

SARC has developed a process for Improvement for Data Nonconformity Prevention to transform processes, taking account of the results of Root Cause Analysis and Solution Development, and to increase the extent to which the organization achieves a systematic and systemic approach to achieving data quality, by developing a schedule with stakeholders for implementation of the process improvements and evaluate the effectiveness for the process improvements that are implemented by:

1. Process improvement: Identify and make improvements to the activities, outcomes, and resources of processes with the objective to improve data quality in consultation with stakeholders.
2. Validation of process improvements: Evaluate the effectiveness and efficiency of the process improvements implemented.

7. The Data-Related Support process

7.1 Overview of Data-Related Support

The purpose of Data-Related Support is to provide the Implementation process with input data, control information and support for the continuous improvement of data quality.

Data-Related Support consists of Data Architecture Management, Data Transfer Management, Data Operations Management and Data Security Management.

7.2 Data Architecture Management

SARC has developed Data Architecture Management to ensure Data Quality Control, Data Quality Assurance, Data Quality Improvement, Data Transfer Management and Data Operations Management can re-use consistent structures and meanings for data across the center, the process is done, the outcome of this process are to define data models to share data among different software applications and different parts of the organization, implement transport mechanisms are implemented for common data to enable data exchange and sharing, create and maintain data-related artefacts for common use across the center, and the data architecture is extended as necessary to support new data requirements, though:

1. Exchange and sharing of organization-wide common data: Enable exchange and sharing of common data among FSCA system and data stores by defining data models of the common data at the organization level.
2. Management of organization-wide data-related artefacts: Maintain the consistency of data by creating artefacts for common use across the center.

7.3 Data Transfer Management

SARC has developed Data Transfer Management to support Data Quality Control, Data Quality Assurance and Data Quality Improvement by ensuring the traceability of all data that flows within, into and out from the center for all that, the records are kept of all data transfers, the data is tracked to identify those transferred data sets that result in data nonconformities, and data transfer is monitored and controlled according to applicable data specifications and work instructions., this is done through:

1. Data transfer recording: Record data transfers for analysis as part of the Data Quality Monitoring and Control process, the Measurement of Data Quality and Process Performance process and the Root Cause Analysis and Solution Development process.
2. Data transfer monitoring and control: Check that data transfers meet applicable data specifications and work instructions.

7.4 Data Operations Management

SARC has developed Data Operations Management to support Data Quality Control, Data Quality Assurance and Data Quality Improvement by ensuring implementation technology is properly configured to sustain data integrity and availability throughout the data life cycle, the environments are implemented and controlled to support the processing of data, these environments include FSCA software and database connectivity, ensuring effective and efficient processing of data across the center, Data is prepared in standard data formats for exchange to and from software applications or external third-party sources. In addition to this software is implemented for data backup and recovery to guarantee the recoverability of the data when necessary and ensure the performance and reliability for all data operations. (Performance and reliability are ensured by mechanisms including performance tuning, monitoring, and error reporting).

The Data technologies are installed and supported. (these technologies include FSCA software, data management utilities, data modelling tools, data quality analysis tools and data cleansing tools.

The data operations management is done through:

1. Data operations support: Provide environments to ensure effective and efficient processing of data. These environments require operations that include FSCA software updates, management of database connectivity, data exchange, data backup and recovery, performance tuning, monitoring, and error reporting.
2. Data technology management: Manage data-related software and tools, including FSCA software, data management utilities, data modelling tools, data quality analysis tools and data cleansing tools.

Related Documents:

- Disease registry

7.5 Data Security Management

SARC has developed Data Security Management process as a part of the implemented ISO 27001 management system is to support the other processes of data quality management by ensuring the confidentiality, integrity, and availability of data across the center, the processes include Policies, standards, controls, and procedures. The data access views and permissions are managed. These views are associated with individual usernames based on the roles and responsibilities of the corresponding user. The Data access is monitored and logged to identify which users have accessed what data. And the results are evaluated to determine the performance of implementing data security.

The data security management is done through:

1. Establishment of data security criteria: Establish and maintain policy, standards, controls and procedures for data security.
2. Management of data access authorization: Authorize data access privileges and responsibilities for users. Monitor data access by users.
3. Audit of data security: Evaluate the performance of data security and act to improve confidentiality, integrity, and availability of data.

Related Documents:

- Username / Access Form

8. The Resource Provision process

8.1 Overview of Resource Provision

The purpose of Resource Provision is to provide and control the organizational resources required for the performance of Implementation and Data-Related Support.

Resource Provision consists of Data Quality Organization Management and Human Resource Management.

8.2 Data Quality Organization Management

SARC has developed the Data Quality Organization Management process to support the other processes of data quality management by establishing appropriate structures for organizational units that execute, communicate and co-ordinate their responsibilities for data quality. The Organizational units are implemented and managed with respect to resources, including manpower, cost, and technology, to support data quality management. The Committees and team meetings are held to make decisions with respect to data quality. And Data and documents are managed after being generated by the data quality management process.

The data quality organization management is done by:

1. Operation of data quality organizations: Establish units supporting data quality management and ensure important decisions on data quality issues are taken, ultimately resulting in performance of the overall process for data quality management. Establish a

clear escalation process to ensure that decisions are taken at the correct organizational level.

2. Management of data and documents related to data quality: Manage the data, information, and knowledge about data quality.

8.3 Human Resource Management

SARC has developed the Human Resource Management process to ensure the availability of suitably qualified personnel to perform the other processes of data quality management. The Knowledge and skills are developed, acquired, and provided to execute effective and efficient data quality management. The personnel are trained to develop, maintain, or enhance knowledge and skills with respect to data quality management. The personnel are recruited to provide the center with suitable knowledge and skills to execute effective and efficient data quality management. The best practices are identified, shared, reused and enhanced to underpin data quality management throughout the organization.

The resources management is done through:

1. Provision of data quality knowledge and skills: Develop or acquire knowledge and skills for data quality management, providing them to personnel having responsibilities for data quality management.
2. Provision of data quality personnel: Provide personnel with knowledge and skills for data quality management by training or recruitment.
3. Knowledge management: Collect, share, reuse and enhance best practices, knowledge, and skills throughout the organization.

Related Documents:

- On-line training Materials
- List of trained Staff on extraction of reports

9. Relationship between data quality management and data governance

Data governance involves the specification of decision rights and an accountability framework to encourage desirable behavior in the creation, use, updating and deletion of data.

Data quality management contributes to the processes, roles, standards, and metrics of data governance, helping to ensure the effective and efficient use of data in enabling an organization to achieve its goals.

The following specific processes within data quality management contribute to data governance.

- Data Quality Strategy Management contributes by establishing goals and objectives.
- Data Quality Policy /Procedures Management contributes by establishing policies, standards, and procedures.

- Data Quality Implementation Planning contributes by establishing implementation plans and evaluating the performance of those plans.
- Data Quality Organization Management contributes by assigning roles and responsibilities.
- Human Resource Management contributes by developing relevant knowledge and skills of personnel.

10. Implementation requirements

SARC has prepared documentary evidence of the implementation of data quality management in accordance with this part of ISO 8000. This evidence include:

- The activities performed and the outcomes achieved, such as: Data specifications, results of data quality measurements, a log of nonconformities and a log of root cause analysis and corrective actions.
- The assigned roles and responsibilities for data quality management across the organization in the job descriptions is evidence of a role assignment.
- The resources used in performing data quality management including the human, financial and technical resources.
- Business process model is evidence to explain how data quality management is being applied alongside other processes.

Related Documents:

- Task Allocation & Budgeting Process