

New

Ministry

Health

Describe: Basic Job Details

Position

Position ID

Position Name (30 characters)

Data Quality Specialist

Requested Class

Systems Analyst Level 3

Job Focus

Operations/Program

Supervisory Level

00 - No Supervision

Agency (ministry) code

Cost Centre

Program Code: (enter if required)

Employee

Employee Name (or Vacant)

Vacant

Organizational Structure

Division, Branch/Unit

SPP/Data Access & Info Privacy/Data Delivery

Supervisor's Position ID

Supervisor's Position Name (30 characters)

Supervisor's Current Class

Design: Identify Job Duties and Value

Job Purpose and Organizational Context

Why the job exists:

Reporting to the Manager, Data Quality, the Data Quality Specialist is responsible for developing strategies to improve and maintain the quality of provincial health data used in health system decision making and research. The key responsibility of this position is to lead high complexity projects to perform Data Preparation for data sets that will be loaded into the corporate data repository for use by internal and external stakeholders. Alberta Health is currently in the process of modernizing the data environment by utilizing modern technology and data governance. The Data Quality Specialist will be key in identifying strategies to increase the value of the new environment for analysts. The Data Quality specialist is ministry subject matter expert on patient activity reporting and grouping methodologies, CIHI products, diagnoses and intervention coding and clinical vocabularies for acute care data. The Data Quality Specialist also participates in provincial IM/IT committees related to Data Quality and standards, both internal and external to the Ministry. This position is also responsible for performing Data Quality assessments, developing Quality indicators, and leading the projects to rectify Data Quality issues in corporate data assets. Other key responsibilities include providing application stewardship and technical oversight to a corporate application until needed.

Responsibilities

Job outcomes (4-6 core results), and for each outcome, 4-6 corresponding activities:

1. Develop and coordinate business strategies and processes to improve the quality of provincial health information and clinical data resources.

Activities:

- Provide strategic thinking on approaches to improve data quality at a provincial level for data generated by Alberta Health, for data received by Alberta Health from external sources; and for data shared and provisioned in the provincial analytic and research repositories.
- Provide research and analytical support to information management projects.
- Provide guidance to the ministry and Alberta Health services colleagues on clinical vocabularies and terminologies. Provide response to questions related to best practices on application of clinical vocabularies.
- Participate in the development of reporting requirements and supporting products for new applications ensuring the incorporation of approved standards and business processes and procedures.
- Provide data quality and assessment best practice advice and guidance to Ministry business teams.
- Identify solutions to address detected data quality issues ensuring a process is in place to measure the impact of corrective actions taken.
- Prepare issue background and recommendations for action.
- Prepare briefing notes and correspondence on data management issues to internal/external stakeholders as needed.

2. Lead high complexity projects to create, and enhance the datasets that are used by data scientists, and analysts to enable decision making.

Activities:

- Identify key data users and other stakeholders for data sets and collaborate with them to understand and document their analytical needs
- Apply problem solving skills to develop methodologies to transform data as per the analysts' need. Implement these methodologies as applicable to the datasets and review and refine it periodically.
- Create high quality documentation for the methodologies and data preparation process
- Engage the technical vendor team for providing long term solutions for data transformation and data enhancement
- Ensure compliance with data governance and security policies
- Participate in records management process and take steps for retention or archival of artifacts as per the information management policies of the department
- Plan work for potential enhancements, fixes for defects, and to meet new I.T. standards and infrastructure upgrades at Health that are mandatory and time sensitive.

3. Provide Subject Matter Expertise and technical oversight for one corporate application

Activities:

- Be the subject matter expert in the ministry for acute care data. Provide quality and timely response for questions related to this dataset to internal stakeholders and external stakeholders like CIHI and AHS.
- Keep updated on changes to upstream systems which impact the applications. Discuss with appropriate teams to gather more information and plan for changes.
- Plan work for potential enhancements, fixes for defects, and to meet new I.T. standards and infrastructure upgrades at Health that are mandatory and time sensitive.
- Work with various teams within AH to ensure all stakeholders are aware of upcoming work, and secure funding for work.
- Project manage the work with vendor to ensure work is done properly and on time

- Review/edit/approve documentation and processes
 - Review/edit/approve changes to vitality documentation to ensure it accurately captures current state of system.
 - Work with Privacy team to keep the application Privacy Impact Assessment (PIA) documents up to date
4. Develop and deliver data quality education internally and externally.

Activities:

- Research and track best practices and emerging trends in data quality management, health information and health informatics.
- Develop and maintain data quality education modules at beginner and advanced levels to cover data quality dimensions, best practice, identification and resolution of data quality issues, and responsibility of data creators, owners, and stewards.
- Liaise with Netcare program administrators and AHS Data Integrity Unit to ensure data quality education aligns with and supports the needs of the electronic health record in Alberta.
- Deliver data quality modules to internal and external stakeholders, including community practice setting.
- Evaluate the attendance and effectiveness of data quality training modules and refresh as necessary.
- Assist Ministerial staff in gaining access to CIHI education products.
- Liaise with Alberta Health Reference Services to maintain access to educational support and reference materials.

5. Support internal and external information management and information technology committees, ensuring the Ministry's position and concerns are articulated in a knowledgeable and professional manner.

Activities:

- Support the Ministry's position and concerns on the Alberta Health Services Data Collection Working Group;
- Provide input on provincial data quality initiatives including GoA Information Management, and Office of Statistics and Information;
- Liaise with CIHI and in particular the Data Quality Program to stay informed and to influence data quality practice for national health data holdings;
- Provide domain knowledge expertise and administrative support to other provincial IM/IT committees as required.

Problem Solving

Typical problems solved:

This position has a very wide range of responsibilities, from technical data quality analysis of provincial health information system projects and applications, to being the ministry expert on acute care data. Types of problems faced will have both medical terminology and technical aspects and will require in depth knowledge of health information management processes; a senior level knowledge of clinical vocabularies and their structure and content is required in order to provide coding direction and understanding of coded data and its interpretation. This position also requires a good understanding of data warehouse technologies.

The Data Quality Specialist is required to:

- Pro-actively identify opportunities to implement data quality measures in automated data collection and reporting systems and liaise between business and technical stakeholders on projects. Example: Identify need for Data Quality assessment on datasets and perform it.
- Ensure communication between internal and external stakeholders including Alberta Health Services, CIHI and Service Alberta is timely and smooth. Example: Required when preparing a dataset and load it in the warehouse.
- Assess concurrent priorities and arrive at win-win situations for all parties. Example: Required when coordinating

multiple high priority requests, teams and timelines

- Identify impact of changes that will come from upstream applications and implement changes to our applications to accommodate those in a timely manner so there is no disruption to our applications.

Types of guidance available for problem solving:

The skills required for problem solving in this role include:

- The ability to analyze, interpret and vision deliverables of large scale projects
- Ability to think strategically;
- Excellent communication skills - written, verbal, including group facilitation;
- Effective negotiating and problem resolution skills;
- Ability to effectively organize and manage multiple concurrent activities/projects;
- Strong sense of judgment, the ability to recognize and effectively deal with potential political consequences; and
- Strong time management, effective priority setting and work scheduling skills.

Direct or indirect impacts of decisions:

The ability to understand health data, data standards, and data quality has a direct effect on ministerial decision making, it is critical that problems are recognized and resolved in a timely manner.

- Strong sense of judgment, the ability to recognize and effectively deal with potential political consequences; and
- Strong time management, effective priority setting and work scheduling skills.

Key Relationships

Major stakeholders and purpose of interactions:

Internal:

- Data Delivery Unit Team Members
- Director, Data Delivery
- Manager, Data Quality
- Branch Staff
- Branch Managers
- Executive Director
- Other Department Management and Staff

External:

- Alberta Health Services stakeholders
- CIHI stakeholders
- Alberta Cross Government
- Other Health Jurisdictions
- Technical Vendor team

Required Education, Experience and Technical Competencies

Education Level Applied Degree	Focus/Major Other	2nd Major/Minor if applicable Science	Designation Other
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If other, specify:

Equivalences will be considered

Job-specific experience, technical competencies, certification and/or training:

Solid foundation in data management, data analysis, grouping methodologies, diagnosis and intervention coding and clinical vocabularies.

Behavioral Competencies

Pick 4-5 representative behavioral competencies and their level.

Competency	Level					Level Definition	Examples of how this level best represents the job
	A	B	C	D	E		
Systems Thinking	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	Integrates broader context into planning: <ul style="list-style-type: none"> Plans for how current situation is affected by broader trends Integrates issues, political environment and risks when considering possible actions Supports organization vision and goals through strategy Addresses behaviours that challenge progress 	The Data Quality Specialist must be able to strategically recognize and articulate the information management considerations involved in integrating the many systems required to manage the collection, access and use of information throughout the health care system to ensure high quality and standardized information.
Build Collaborative Environments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Creates an open environment of communication: <ul style="list-style-type: none"> Promotes sharing of expertise Initiates strategic communication systems Anticipates and addresses potential conflict areas Inspires with a bold, complete and shared vision Leads cross-functional collaboration 	Building collaborative relationships and environments is another crucial aspect of the position. This position supports internal and external information management and information technology committees. The position ensures that Alberta Health's position and concerns are articulated in a knowledgeable and professional manner.
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	Creates the environment for innovative problem solving: <ul style="list-style-type: none"> Generates new ways of thinking; ensures right questions are being asked about a problem Eliminates barriers to creativity and innovation Encourages a culture of 	When providing Data Quality guidance on projects this position needs to clearly determine which Data Quality dimensions are most applicable for that particular dataset and provide recommendations on how Data Quality can

		innovation	be achieved if the resources are limited.
Agility	○ ○ ○ ● ○	Proactively incorporates change into processes: <ul style="list-style-type: none"> • Creates opportunities for improvement • Is aware of and adapts to changing priorities • Remains objective under pressure and supports others to manage their emotions • Proactively explains impact of change on roles, and integrates change in existing work • Readily adapts plans and practices 	Requests coming in from Open Data Portal are often varied in nature. Need to determine which business areas to engage and how to provide best answers to the requesters in a short turnaround time.

Benchmarks

List 1-2 potential comparable Government of Alberta: [Benchmark](#)

Assign

The signatures below indicate that all parties have read and agree that the job description accurately reflects the work assigned and required in the organization.

Employee Name	Date yyyy-mm-dd	Employee Signature
Supervisor / Manager Name	Date yyyy-mm-dd	Supervisor / Manager Signature
Director / Executive Director Name	Date yyyy-mm-dd	Director / Executive Director Signature