

Update

Ministry
Health

Describe: Basic Job Details

Position

Position ID Position Name (30 characters)
Senior Economist

Current Class
Program Services 4

Job Focus Supervisory Level
Operations/Program 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, HSV/ HEF Current organizational chart attached?

Supervisor's Position ID Supervisor's Position Name (30 characters) Supervisor's Current Class
Manager, Health Economics Manager (Zone 2)

Design: Identify Job Duties and Value

Changes Since Last Reviewed

Date yyyy-mm-dd
2024-04-22

Responsibilities Added:
Updated to be more focused on meeting the current needs of the Unit and Branch.

Responsibilities Removed:
None

Job Purpose and Organizational Context

Why the job exists:
The mandate of the Health System Value Branch is to provide system-wide leadership for measuring, monitoring, and improving quality and performance of the health system; ensuring patient care is integrated across sectors and between organizations; and evaluating quality and performance in the context of health expenditures to improve health system value.

The Health Economics and Funding Unit provides leadership in the application of economics to the development of health strategies, policies and programs to promote economic efficiency and effectiveness of the health system; and to enhance the system's ability to forecast fiscal resource requirements and to assess fiscal sustainability.

Reporting to the Manager, Health Economics, the Senior Economist provides leadership in the application of economic principles and methods to evaluate health policies and programs to support evidence-based decision making as well as help improve the quality of healthcare delivery and fiscal decisions. The position also develops and applies complex models and methodologies for a variety of projects to promote economic efficiency and effectiveness to support fiscal forecasts, assess fiscal sustainability, assess stakeholder alignment with system goals.

The responsibilities of the Senior Economist include (but not limited to):

- Conducting an in-depth research and analysis to assess the economic impact of healthcare programs, treatments and policies. This involves analyzing data, using economic models and evaluating the cost-effectiveness of various health programs
- Providing evidence-based recommendations to Senior Management Team (SMT) to inform the development of strategies to improve healthcare delivery and outcomes while managing costs
- Performing cost-benefit analyses to evaluate healthcare programs and interventions to help in assessing the effectiveness of healthcare initiatives
- Collaborating with various stakeholders, both internal and external, to inform decision-making and policy development
- Effectively communicating complex economic concepts and findings to a diverse audience including SMT and other healthcare professionals
- Contributing to the development of capacity in health economics in the Province which may involve training and mentoring up and coming health economist and promoting the integration of economic principles into healthcare decision-making
- Analyzing healthcare policies to determine their economic implications and assessing the impact of policy changes on healthcare outcomes, costs and access
- Utilizing economic models to forecast healthcare expenditure trends to plan for future healthcare needs including projecting the demand for healthcare services as well as anticipating the economic impact of demographic changes
- Conducting cost driver analysis to identify the major cost drivers in the healthcare system
- Conducting inter-provincial and international comparison analysis to help decision makers understand where Alberta compares to comparator provinces and countries in healthcare outcomes and spending

The Senior Economist will proactively collaborate with other areas of the department to provide analytical support in the development and implementation of information-driven processes for policy analysis and decision-making by the SMT within the Ministry, in other Ministries and other healthcare partners. The work of this position takes a lead role in enhancing accountability and consistency in the application of economic principles into healthcare decision making. The position will also support collaborative information sharing within the department to support short and long term decision making.

Responsibilities

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

1. Provide leadership and participate in projects that provide evidence to inform decisions and directions related to the application of economic evaluation and modeling (analyzing and measure efficiency, effectiveness and productivity) of the health sector.

- Identify research and incorporate applicable governing policies and regulations and adapt economic theories and methods for health sector applications. Evaluate the different options stemming from the research.
- Review and evaluate health program and service deliverables combining economic theories and methods with a user perspective to ensure satisfaction of the project/business objectives.
- Provide analytic support in conducting complex research on projects involving multi-stakeholders and develop recommendations to aid in planning and/or changing policies, programs and objectives.
- Assess the impact of changes in healthcare programs and initiatives on healthcare delivery and

fiscal sustainability.

- Provide leadership in economic analyses to evaluate the economic efficiency and effectiveness of healthcare programs, services, and initiatives.
- Analyze quality metrics, patient outcomes, and performance indicators to evaluate the effectiveness of healthcare interventions and initiatives. Recommend strategies to enhance quality of care and patient satisfaction.
- Monitor healthcare policy changes, regulatory developments, and market trends that may impact healthcare operations. Provide recommendations on policy advocacy, compliance strategies, and risk mitigation.

2. Provide leadership and participate in the identification and use of appropriate statistical methods and information to analyze health expenditures trends and cost drivers over time and across jurisdictions (i.e., scanning, benchmarking, and projecting emerging population and demographic trends).

- Utilize economic and statistical methods/techniques to analyze healthcare data, including claims data, identify patterns, trends, and opportunities for improvement in the health care system and resource allocation.
- Conducting inter-provincial and international comparison analysis to help decision makers understand where Alberta compares to comparator provinces and countries in healthcare outcomes and spending.
- Review and enhance health expenditure indicators and assess their strengths and weaknesses. Provide analysis of growth and utilization of provincial health expenditures.
- Prepare audience-specific summary reports, briefings and presentations
- Evaluate and compare groupers, their performance with respect to clinical and resource homogeneity and their relevance and value for the current health system in Alberta

3. Forecast health expenditures under various scenarios to inform decision making and policy directions.

- Develop economic forecasts and scenario analyses to support strategic planning and decision-making in healthcare operations. Anticipate future trends in healthcare utilization, patient demographics, and healthcare technology adoption.
- Perform statistical and economic analysis of health data including development and simulation of economic models. Refine analytical methodologies and models to quantify cost and volume pressures, forecast health expenditures under various scenarios and assess fiscal sustainability
- Assess Alberta's health sector fiscal policies and fiscal performance and provide appropriate recommendations to the leadership team.
- Utilize economic models to forecast healthcare expenditure trends to plan for future healthcare needs including projecting the demand for healthcare services as well as anticipating the economic impact of demographic changes.

4. Collaborate with internal (within Health as well as other Ministries) and external (AHS, IHE, HQCA, etc) stakeholders to complete projects as required.

- Works with the Unit leadership to understand Unit/Branch and Division business goals and value-added partnership opportunities that can be used to answer policy questions.
- Develop economic forecasts and scenario analyses to support strategic planning and decision-making in healthcare operations. Anticipate future trends in healthcare utilization, patient demographics, and healthcare technology adoption.
- Make decisions needed to maintain project timelines according to project plans and budgets. This can involve projects with other branches within the division or other divisions to address policy questions, as well as with external partners.
- Implements and advises on appropriate methodologies and tools to formulate project goals and deliverables.
- Draft project charters and establish work-plans and implementation plans in collaboration with project partners as required.
- Present economic analyses, research findings, and recommendations to internal stakeholders,

including executive leadership, operational teams, and clinical staff. Collaborate with external partners, including government agencies, payers, and industry organizations.

- Provide guidance, mentorship, and support to up and coming health economists and analysts in the province and within the team. Foster a collaborative and inclusive work environment that promotes knowledge sharing and professional development.

5. Provide support to the Ministry on various requests/ initiatives throughout the year with quality, efficiency and timeliness.

- Research and respond to a variety of business in formation requests originating from the public or within government.
- Prepare responses to Action Requests (ARs) on topics that relate to health economics and financial forecasting. Prepare briefings for senior officials as required on topic areas of specialization..
- Stay abreast of emerging trends, best practices, and innovations in healthcare economics and operations. Contribute to thought leadership initiatives through analysis, presentations, and participation in discussions and forums.

Problem Solving

Typical problems solved:

The Senior Economist applies economic and analytic techniques on a variety of responsive and proactive projects related to the healthcare sector that provide evidence and information to inform system level strategic policy and program directions and decision making. The Senior Economist develops and participates in refinement of analytical framework(s), methodology and constructing model(s), generating simulations (including sensitivity analysis) and interpretation of model results.

Based on direction provided by the Manager, the Senior Economist develops project approaches and models and processes, and ensures conclusions are evidence-based and derived through the application of sound economic analysis. This requires creative thinking, adaptability and the ability to apply economic principles to address complex health care issues. The Economist must be able to consider projects within the larger context of an integrated health sector and the questions that are being posed so that models and methodologies are appropriately designed; the focus of work is on goals as well as process while mitigating undue project risks.

The incumbent collaboratively works with internal and external stakeholders to discuss relevant project issues, exchange information and assist in developing economic modelling projects.

This position leads more straightforward projects and is actively engaged in larger, more complex projects, at times taking leadership of a piece of larger projects. While the incumbent operates independently within the framework of projects, they will also receive direction from the Manager. The incumbent provides options for resolution to aid problem solving.

Types of guidance available for problem solving:

The Senior Economist works within policies and guidelines for economic and financial reporting set by Cabinet Committees and Cabinet, Alberta Treasury Board and Finance, Alberta Health, the Office of the Auditor General, the Minister and the Deputy Minister. Key legislations and policies that guide the work of the Senior Economist include the Financial Administration Act, Government Organization Act, Public Service Act, Freedom of Information and Protection of Privacy Act, Health Information Act, Alberta Health Care Act, various Ministry acts and regulations, as well as policies, guidelines, and procedures established by cabinet, the Minister and Deputy Minister.

The Manager is available to clarify broad goals, objectives, and priorities and provide consultation and guidance as necessary.

Direct or indirect impacts of decisions:

The work of the Senior Economist impacts the availability of evidence and recommendations to shape how Alberta's health system, or parts thereof, operates. Results produced by the unit are considered by ministry executive and government leaders to inform their decision-making and direction for health system.

The Senior Economist role as a leader analyst in the application of economic methods to evaluate health

programs and policies for Senior Management Team has a direct impact on those decisions, and as result the healthcare system.

The Senior economist ability to effectively explore different approaches and quantify the impacts of the results of the analysis on health sector spending, inform work on policy changes, improvement in the healthcare system and among others will be key in the success of the Ministry's strategic policy decisions and the associated implications.

Key Relationships

Major stakeholders and purpose of interactions:

Internal:
 Health Economics and Funding Unit - manage unit projects and provide updates on: trends in health expenditures; significant emerging funding issues; and application of methods and statistics for evidence-based decision making.
 Health System Value Branch Leadership - provide updates on projects; respond to queries.
 Directors/ Managers of other business units: gather and provide information regarding issues related to branch/divisional/Ministry priority initiatives.
 Branch Staff - Coordinate projects and tasks, and share information, as needed, to support the branch to achieve its mandate.
 Other Units in Alberta Health - Collaborate on projects and initiatives; share information and knowledge; provide expert advice as needed; represent the unit/branch on projects and working committees.

External:
 - Other ministries within the province - Collaborate on projects and initiatives, share information and knowledge as required.
 - Alberta Health Services (AHS) - Collaborate on projects and initiatives, share information and knowledge as required.
 - Institute of Health Economics (IHE) - Collaborate on projects and initiatives, share information and knowledge, manage projects as required.
 - CIHI - Share and request information, contribute to data development issues and provide feedback as required.

Required Education, Experience and Technical Competencies

Education Level	Focus/Major	2nd Major/Minor if applicable	Designation
Bachelor's Degree (4 year)	Economics	Other	

If other, specify:

Health Economics, Public Health Administration, or Statistics/Mathematics

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

A University Degree in Economics, Health Economics, Public Health Administration, or Mathematics/Statistics and a minimum of four (4) years of progressively responsible experience in economic analysis and forecasting using computerized applications to independently gather, compile and analyze data including preparation of narrative or statistical reports is required. Equivalent experience or education may be considered on a one for one basis when it demonstrates appropriate knowledge and capacity as described below.

The Senior Economist requires the following knowledge and skills:

Knowledge:

- Strong knowledge of techniques and tools for theoretical and applied economics/econometrics/statistical models. Experience utilizing experimental design, sampling techniques, large datasets and statistical programming software (SAS, Access, SQL, Python, Oracle, and/or similar software packages)
- Experience in developing dashboards (using SAS Visual Analytics, Power BI, and/or others similar software).
- Knowledge of the structure and evolution of health economics in Alberta, Canada and globally along with knowledge of Alberta's fiscal framework, and the political and social environments;
- Strong analytical ability, data interpretation and problem solving skills.
- Excellent understanding of health data and databases including approaches and methodologies to link data and limitations of existing databases.
- Excellent knowledge in project management, including project planning and tracking, and coordination of resources.

Skills:

- Applying both strategic and analytic techniques to provide business solutions and recommendations.
- Excellent communication (oral and written) skills, including an ability to generate high-level analytical reports in a timely manner and ability to tailor materials for technical and senior management audiences.
- Highly motivated, with a desire to work as a member of a dynamic and high performing team.
- Ability to prioritize multiple requirements and define a detailed process to complete required tasks.
- Demonstrated experience and competency in consultation skills with internal/external stakeholders.
- Ability to analyze complex issues including the identification and quantification of options. The job requires excellent model building skills including proficiency in developing, quantifying and simulating different types of economic and mathematical models.
- Must be skillful in identifying options and implementing contingency plans as well as having the ability to quickly shift priorities when required.
- Must be able to effectively coach other team members.

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 checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Takes a long-term view towards organization's objectives and how to achieve them:</p> <ul style="list-style-type: none"> • Takes holistic long-term view of challenges and opportunities • Anticipates outcomes and potential impacts, seeks stakeholder perspectives • Works towards actions and plans aligned with APS values • Works with others to identify areas for collaboration 	<p>This position works with a wide variety of inputs, some of which may be contradictory, and must also integrate leading practice and emerging trends to develop recommendations that are relevant for Alberta. Strong visioning and systems thinking are required, as well as critical and evaluative thinking, so that final recommendations to senior and executive leaders are reliable, valid and comprehensive.</p>
Creative Problem Solving	<input type="radio"/>	<input type="radio"/>	<input checked="" type="radio"/>	<input type="radio"/>	<input type="radio"/>	<p>Engages the community and resources at hand to address issues:</p> <ul style="list-style-type: none"> • Engages perspective to seek root causes • Finds ways to improve complex systems • Employs resources from other areas to solve problems • Engages others and encourages debate and idea generation to solve problems while addressing risks 	<p>The senior Economist must be able to analyze complex problems, generate ideas, and evaluate those ideas to find the most effective solutions to the problems. Creativity is also required to determine how best to illustrate, present and communicate complex economics models and concepts in ways that are easy to understand by different audiences.</p>

