



**Classification: Research Scientist Staff**

**Position Title: Senior Research Data Scientist**

**Position Number: 801-140-5594-005**

**Division/Branch: Policy, Research, & Eligibility Division**

**Location: Sacramento County**

### **Job Description Summary**

Under general direction of the Research Scientist Supervisor I, the Research Scientist Staff, Senior Research Data Scientist, undertakes novel studies and evaluations for Covered California's Research and Analytics program. Independently, and in coordination with other researchers, this position plans and executes complex scientific research studies of a highly developed scientific scope to evaluate Covered California's activities and provides complex technical guidance to inform the department's analytic agenda. Duties may include access to information systems containing protected enrollee information, including federal tax information, protected health information, and personally identifying information.

### **Job Description**

#### **35% (E)**

In-house empirical analysis on enrollment, health care, user experience, and survey data: The Senior Research Data Scientist is the lead on complex empirical studies at Covered California that foster innovation and add to the scientific evidence about the impact of the marketplace. Independently and on teams with other Research Scientists, senior managers, the incumbent: Designs program evaluation and data science strategies for operational and policy interventions, such as outreach campaigns, call-center optimization, and website architecture. Conducts studies to predict enrollment, churn, and utilization/health risk, using econometric or machine-learning prediction techniques as appropriate (such as hazard models, discrete choice models, etc.). Provides statistical expertise in the analysis of survey, claims, and administrative data to ensure valid inferences are made in projects throughout the organization. The Senior Research Data Scientist ensures that projects are implemented to the highest standards in the social sciences, and are independently authoritative and rigorous, including choice of appropriate research designs, empirical strategies, model specifications, data management, peer review, and so forth. Prioritizes research according to operational and policy improvements for consumers, and shares results in external publications, including peer-reviewed journals and other venues as appropriate. Develops hypotheses for studies and executes experiments based on findings.

#### **30% (E)**

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Data science infrastructure development: Develops strategic planning and implementation for data architecture in multiple data warehouses so that teams of other analysts and researchers can leverage Covered California's administrative data more easily, including use of cloud-native technologies such as Snowflake and Databricks/PySpark, and core analytic tools such as SOL, Stata, Tableau, SAS, Python, Excel.

**10% (E)**

Subject matter expert for research designs and statistical analysis related to health policy: As an expert in research methodologies, the Senior Research Data Scientist advises other divisions and staff on their data-driven policy and operational research needs, including developing expertise about Covered California's administrative data, health policy research literature, and empirical strategies for causal inference.

**10% (E)**

Presenting Findings: The Senior Research Data Scientist presents research findings to a range of technical and stakeholder audiences, from public boards to executives to peer analysts.

**10% (E)**

Data use agreements, human subjects' coordination: The Senior Research Data Scientist coordinates efforts to ensure Covered California has effective data science and research infrastructure, including preparing research protocols, data use agreements, and filings before institutional review boards at the organization. Travels statewide for off-site meetings, training, and events.

**5% (M)**

Performs special projects to support the Policy, Eligibility, and Research Division. Represents Covered California in open public forums to present scientific research and findings.

**Scope and Impact**

*a. Consequences of Error:* Position is considered autonomous and is expected to work at a high level with minimal supervision under general direction. Makes independent decisions and serves as a scientific advisor conducting studies. Work and conclusions are accepted as technically authoritative and are reviewed only for meeting the assignment's objectives. Incumbent will be entrusted to review and analyze extremely sensitive consumer protected health information and personally identifying information, which would be severely detrimental to Covered California if compromised. Incumbent will approve data that will be shared publicly by the Executive Director. Work and conclusions are accepted as technically authoritative and are reviewed only for meeting the assignment's objectives.

*b. Administrative Responsibility:* This position has no administrative responsibility.

*c. Supervision Exercised:* This position does not have supervisory responsibility, but acts as a lead and provides guidance to research staff as well as provides technical guidance and expertise to other data analysts throughout the department.

*d. Internal Personal Contacts:* Program leads, Executive Leadership, internal consultants.

*e. External Personal Contacts:* Stakeholders, plans, consumers advocates, academics, researchers, other state agencies, federal government, media.

#### Physical and Environmental Demands

Work Environment Work in a climate-controlled office under artificial lighting; exposure to computer screens and other basic office equipment; office space is open and thus noisy; work in a high-pressure fast-paced environment, under time-critical deadlines; work long hours; must be flexible to work days/nights, weekends and select holidays as needed; during peak periods, may be required to work overtime; appropriate dress for the office environment.

#### Essential Physical Characteristics

The physical characteristics described here represent those that must be met by an employee to successfully perform the essential functions of this classification. Reasonable accommodations may be made to enable an individual with a qualified disability to perform the essential functions of the job, on a case-by-case basis. Ability to attend work as scheduled and on a regular basis and be available to work outside the normal workday when required. Continuous: Upward and downward flexion of the neck. Frequent: sitting for long periods of time (up to 70%); repetitive use of hands, forearms, and fingers to operate computers, mouse, and dual computer monitors, printers, and copiers (up to 70%); long periods of time at desk using a keyboard, manual dexterity and sustained periods of mental activity are needed; Frequent: walking, standing, bending and twisting of neck, bending and twisting of waist, squatting, simple grasping, reaching above and below shoulder level, and lifting and carrying of files, and binders.

#### Working Conditions and Requirements

*a. Schedule:* Core business hours are Monday through Friday, 8:00am - 5:00pm.

*b. Travel:* Travels statewide for off-site meetings, training, and events up to 5% of the time.

*c. Other:*