Job Description

Job Title:	Medical Data Research Analyst
Department:	Medical Analytics

Summary

The Medical Data Research Analyst is responsible for 1) providing statistical programming expertise (in R and/or Python) to access, analyze and report data descriptives and analyses, 2) assisting with the design and implementation of medical analytics research on the impact of medical costs on the California workers' compensation system, and 3) development and maintenance of data products and reports.

While primarily responsible for analyzing medical transaction data, the Analyst will also occasionally work on other data sets, such as Policy and Unit Statistical Report data.

The Medical Data Research Analyst reports to Director, Medical Analytics.

Essential Duties and Responsibilities:

- Assist with the design and implementation of medical analytics research on the impact of medical costs on the California workers' compensation system.
- Independently develop well-documented and reproducible scripts in R and/or Python for pulling and wrangling data of medical transactions for the Analyst's own work and for the use of research staff in studies or to address ad-hoc requests.
- Assure quality of medical transaction data is appropriate to each study.
- Communicate clearly to research staff the rules employed to prepare the working data sets for study.
- Develop data visualization for analysis.
- Assist with statistical analyses (e.g., hypothesis testing, regression analysis, predictive modeling) on the medical transaction data.
- Prepare tables and figures to present analysis results in reports and presentations.
- Perform peer review of other analysts' work.
- Develop and maintain automation of routine analysis data and reporting tasks, including quarterly medical trend analysis.
- Communicate results via written and oral presentations.
- Interact and communicate with representatives of other units of the WCIRB on various data-related and operational projects and issues.

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Education, Experience, and Skill Qualifications

To perform this job successfully, an individual must be able to perform each essential duty satisfactorily. The requirements listed below are representative of the knowledge, skills and/or ability required. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Bachelor's Degree or above in a quantitative field such as statistics, economics, data science, computer science or other related field.
- A minimum of three years of R and/or Python programming experience in a Data Analyst or equivalent role. Experience in using R Markdown or Jupyter Notebook is a plus.
- Demonstrated knowledge of the U.S. healthcare system or property/casualty insurance obtaining through work or internship experience.
- Proficient in building functions and producing graphs in R and/or Python.
- Track record of completed analytical projects in R and/or Python.
- Experience with statistical modeling (e.g., regression analysis), text analytics, geospatial data or predictive modelling.
- Experience working with relational databases (using SQL), large data sets and multiple data sources.
- Ability to communicate both effectively and professionally, both verbally and in writing.
- Strong listening and interpersonal skills.
- Proficient in Microsoft office suite.

Physical Demands
The physical demands described here are representative of those that must be met by an employee to successfully perform the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Job requires approximately 90% sitting, 10% standing/walking.
- Significant time spent at keyboard and monitor.
- Some telephone and copy machine use.

Work Environment
The work environment characteristics described in this section are representative of those an employee encounters while performing the essential functions of this job. Reasonable accommodations may be made to enable individuals with disabilities to perform the essential functions.

- Steady stream of analytical work, decision-making, research, telephone work, meetings.
- Work requires attention to detail, follow-through and analysis of collected information.

Disclaimer
Management may assign or reassign duties and responsibilities to this position at any time. As such, the job description may be revised depending on the WCIRB's needs. Further, this job description is a general summary of responsibilities and requirements and is not intended to be all-inclusive of the responsibilities and requirements of this position.