

# 2017 Internships at axialHealthcare

axialHealthcare is transforming the lives of patients in pain and revolutionizing the delivery of pain care through insightful data analysis, data modeling, and creation of effective cloud-based platforms. We are currently seeking energetic, highly motivated, part-time interns enrolled in a graduate or post-graduate program in biomedical science, bioinformatics, engineering, computer science, mathematics, or related field. At axialHealthcare, you will work in an open, fast-paced environment, witness and actively contribute to the growth of a small start-up company, develop and refine communication skills with cross-functional teams, gain business acumen, and delve into the exciting and highly-marketable world of big data analytics. Apply your academic research skills in the workplace!

### Opportunities for Growth

- Improve and/or save lives of patients
- Enhance cost savings for our clients
- Develop knowledge about healthcare, claims, and small business environments
- Learn structured guery language (SQL) and python programming
- Explore large datasets and database management/design

## Projects at axialHealthcare

Assessing behavioral health factors associated with risk of poor patient outcomes during opioid therapy

Identifying patients with behavioral health diseases through pharmacy claims

Designing Centers of Excellence (COE) for Medication Assisted Therapy (MAT)

Developing geo-mapping capabilities for Centers of Pain Excellence (COPE)

Developing Charlson Comorbidity and Elixhauser Comorbidity Indices in SQL

Identify and rank behavioral health-related ICD codes that if exist in conjunction with or prior to opioid use, increase risk for poor outcomes, including opioid overdose and development of substance use disorder, among others. Tools: SQL and Python

Behavioral and mental health issues are identified as major risk factors for poor outcomes associated with opioid therapy. Because some patients may not have behavioral health diagnoses in the medical claims, we aim to identify behavioral health problems through prescribed drugs. Tools: SQL and Python

Identify and characterize prescribers who are actively providing medication assisted therapy. Inventory scientific literature for opioid use disorder treatment plans and protocols. Tools: SQL and Python

Identify gaps in health care coverage by matching the network of pain specialists to pain patients and understand the demographics of the pain population (rural vs metropolitan). Tools: Python or R using MapBox API

Study the methodology of Charlson Comorbidity and Elixhauser Comorbidity Indices and develop the two indices in SQL based on the SAS tools available. Tools: SAS and SQI

# Internship Responsibilities and Job Functions

axialHealthcare interns perform tasks such as reviewing and organizing literature, performing descriptive statistics using python, R, and SQL, brainstorming testable hypotheses, designing and implementing models, creating graphs, charts, and other visualizations for clients and leadership, creating and running quality assurance (QA) tests on code, and documenting code.

#### About axialHealthcare

axialHealthcare provides health insurers with interoperable big data advanced analytics, network solutions, and a connect platform to improve clinical and economic outcomes for patients in pain. We began as a group of physicians, scientists, technologists, and entrepreneurs passionately committed to helping patients in pain and have grown to a company of over 50 employees. We are located in downtown Nashville, TN, in Cummins Station. Visit us at axialhealthcare.com. We are also on Facebook, Twitter, and LinkedIn.