Junior Healthcare Data Analyst Position Description
Delaware Health Information Network (DHIN)

Organization Background

The Delaware Health Information Network (DHIN) is the nation's first statewide health information exchange. Established by statute as a not-for-profit public instrumentality, DHIN's primary mission is to facilitate the design and implementation of an integrated, statewide health data system to support the information needs of consumers, health plans, policymakers, providers, purchasers and researchers to improve the quality and efficiency of health care services in Delaware. Participation in DHIN by the health care community of Delaware is nearly universal, with expansion beyond state borders also having begun. DHIN is recognized as a national leader in the area of health information exchange.

Position Overview
The Junior Healthcare Data Analyst (Jr Analyst) serves as a member of DHIN's analytics service team to meet the informational needs of health care providers, payers, Delaware's State agencies, students and researchers working to improve health care for Delaware's residents. This person's primary role is to fulfill customer analytic requests by creating customer centric data visualizations using clinical, claims and operational data. Analytic work will apply descriptive and common statistical methodologies such as tests for normality, significance, and correlations.

The Jr Analyst's work will adhere to data warehouse and cloud based best practices as well as to conduct sound research and analytic methodologies. This position will work primarily within the Analytic Service team and will support internal and external analytic requests. The Jr. Analyst's analytic output will enable DHIN's mission and vision to promote useful health information to customers and to the improvement of healthcare. Output report designs will require customer centric data visualizations.

The Jr. Analyst will participate in data validation tasks and communicate with data senders for improvements in data submissions. The Jr Analyst's work will support and improve processing efficiency and data integrity for DHIN's analytic services while assuring compliance with HIPAA, HITECH, Delaware Regulation and DHIN business processes. Supporting the team's business processes requires the ability to create and maintain knowledge documentation and programmatic code for sustainable, repeatable, scalable, and automated solutions. Occasionally, there will be custom projects which are less standardized and will require data management expertise.

The ideal candidate will be prepared to step outside of traditional job boundaries to meet the needs of the moment in support of the DHIN mission, and therefore must be flexible and adaptable to changing circumstances. A strong work ethic and ability to work well within a team are essential. The ideal candidate must have strong computer skills and excellent verbal and written communication skills, be exceedingly well organized, attentive to detail, flexible, proactive, resourceful and efficient, and must remain poised and composed under pressure and maintain utmost confidentiality and professionalism in handling protected health information and information which is proprietary and confidential to DHIN's vendors and technology partners. DHIN seeks candidates who are committed to lifelong learning and growth.

The position is primarily located at the DHIN headquarters in Dover, DE. However, following a period of orientation, a great degree of flexibility in work hours and location are possible. Many of DHIN staff work from home one or more days each week.

The Data Analyst exercises responsibilities and skills at SFIA levels 4 :

Autonomy	Works under general direction within a clear framework of accountability. Exercises substantial personal responsibility and autonomy. Plans own work to meet given objectives and processes.
Influence	Influences customers, suppliers and partners at account level. May have some responsibility for the work of others and for the allocation of resources. Participates in external activities related to own specialism. Makes decisions which influence the success of projects and team objectives. Collaborates regularly with team members, users and customers. Engages to ensure that user needs are being met throughout.
Complexity	Work includes a broad range of complex technical or professional activities, in a variety of contexts. Investigates, defines and resolves complex issues.
Knowledge	Has a thorough understanding of recognized generic industry bodies of knowledge and specialist bodies of knowledge as necessary. Has gained a thorough knowledge of the domain of the organization. Is able to apply the knowledge effectively in unfamiliar situations and actively maintains own knowledge and contributes to the development of others. Rapidly absorbs new information and applies it effectively. Maintains an awareness of developing practices and their application and takes responsibility for driving own development.
Business skills	Demonstrates leadership. Communicates effectively, both formally and informally. Facilitates collaboration between stakeholders who have diverse objectives. Analyses, designs, plans, executes and evaluates work to time, cost and quality targets. Analyses requirements and advises on scope and options for continuous operational improvement. Takes all requirements into account when making proposals. Demonstrates creativity, innovation and ethical thinking in applying solutions for the benefit of the customer/stakeholder. Advises on the available standards, methods, tools and applications relevant to own specialism and can make appropriate choices from alternatives. Maintains an awareness of developments in the industry. Takes initiative to keep skills up to date. Mentors colleagues. Assesses and evaluates risk. Proactively ensures security is appropriately addressed within their area by self and others. Engages or works with security specialists as necessary. Contributes to the security culture of the organization.

Scope of Work:

Principle Duties and Responsibilities

1. Participate as a member of the Analytic Services team by participating in internal and external customer meetings, contributing to analytic service documentation, DHIN's analytic knowledge base and stored procedures.

2. Execute secure operations for personal health information during all interactions of the Analytic service processes.

3. Perform clinical and claims data analyses in support of internal and external customer requests.

4. Perform statistical tests to determine statistical significance, confidence level, validity and reliability of outcome.

5. Create and maintain a stored procedure library used for analytic services.

6. Write efficient and optimized queries to create end-user reports and extract data from source systems.

7. Participate in consultations with customers to understand business needs and determine study requirements. This includes identifying viable technological solutions/options.

8. Learn and apply study/research designs for meeting customer business needs, particularly those for population health, healthcare quality benchmarking, equity and efficacy studies.

9. Contribute to the creation of detailed specifications/record layouts and/or work flow diagrams from which reports and extracts will be created.

10. Perform necessary procedures to ensure the safety of information systems assets and to protect systems from intentional or inadvertent access or destruction;

11. May lead functional or segment teams or projects.

12. Contribute to the continuous evaluation of data quality, and efficiencies of analytic business processes.

13. Develop and support automation of reports and their distribution.

14. Establish relationships with customers and data senders serving as a subject matter expert for clinical and claims data.

15. Maintain knowledge of DHIN's analytical tools and data environments.

16. Anticipate customer needs and proactively develop solutions to meet them.

17. Contribute to DHIN's analytic service performance reporting.

18. Contribute to data validation of claims data and the Extract Transform Load process.

19. Contribute to documentation for data dictionaries.

20. Contribute to and work on process improvement opportunities. Support organizational service improvement projects with baseline and follow-up analysis of data.

21. Review analytic work performed by others and provide recommendations for improvement.

22. Contribute to and adhere to DHIN procedures for managing analytics services.

23. Serve as support to internal and external customers learning the DHIN analytics environment.

24. Solve complex problems and develop innovative solutions.

Supervision Received

- The position reports to the Director of Data Analytics.
- Confidently interacts with executive leadership.

Supervision Exercised

- The position has no direct reports, but exerts strong influencing skills
- May lead matrixed teams and provides informal coaching and mentoring to junior and/or stakeholder resources.

Job Impact

- Work significantly affects members of the health care community across the entire state.
- Budget impact is <mark>small.</mark>
- Timeline of projects is varied. Can be 2 days, 2 weeks or up to 6 months.

Key Competencies

The following are the minimum knowledge, skills, and abilities which the Junior Analyst must possess:

- Thorough understanding of database and analytics functionality and ETL tools; deep knowledge of database and data quality principles, practices, and theories.

- Thorough understanding and demonstrated ability to prepare data and perform statistical analyses. Descriptive statistical abilities a must. Advance statistical ability desired.

- Experience with and understanding of common research design models.

- Demonstrated ability to understand and develop customer requirements and business objectives; ability to translate high-level design into specific implementation steps. Profound understanding of the needs of stakeholders and the impact on end users.

- Demonstrated ability to transform ad hoc and manual processes into sustainable, repeatable, scalable, and automated solutions.

- Functional understanding of HL7 messages.

- Strong data management and operations skills with a successful track record of design and execution of analytic services.

- Demonstrated ability to establish and maintain effective relationships and partnerships with key stakeholders.

- Strong interpersonal, communication, facilitation, and presentation skills.

- Strong analytical and problem solving skills.

- Ability to work independently and with minimal supervision.

- Demonstrated ability to work effectively in a small team setting.

- Ability to prioritize and organize work effectively and under pressure.

- Organized, resourceful, and proficient at effectively multitasking to ensure competing priorities are addressed in a timely and efficient manner.

- Self-starter who pays extreme attention to detail and strives for excellence.

-

Qualifications

The successful candidate will possess the following experience and credentials:

- A Bachelor's degree in a related field is required; a Master's degree is preferred. A candidate with no degree but equivalent work experience will be considered in exceptional circumstances.

- Evidence of formal training in analytic tools and methodologies.

- 5 years' experience with health care data, clinical and claims.

- Experience in a query language or software for data manipulation and visualization such as Python, SQL, Microsoft Access, Athena, Tableau or other compatible tools. FHIR, JSON and API tools are a plus.

- Experience in statistical analyses with command of descriptive statistical tools. Experience with statistical analyses in complex research models a plus.

- At least five years of increasingly responsible database or data quality experience, with emphasis on experience in IT integration projects. Experience in health IT and knowledge of HL7 is a plus, but is not required.

- Experience managing multiple projects simultaneously in a matrixed environment is preferred

- Proficiency in the use of technology to support work activities e.g., expertise in database extraction and ETL tools, data quality analysis, and proven ability to develop charts and graphs to summarize information for reporting purposes, etc.

- All DHIN employees are expected to be certified in ITIL Foundations, or commit to becoming certified within the first year of employment. This is a condition of employment.