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|  | Shreya  Sr. Health Data Analyst | (414) 949-3199  [shreyaranga96@gmail.com](mailto:shreyaranga96@gmail.com) |

# Summary

Health Data Analyst with 7years’ experience in enterprise level data warehousing and business intelligence, in the healthcare domain in clinical, therapeutical, pharmaceutical, and insurance verticals including but not limited to medical transcription and practice management, claims processing, and customer service.

* + - * Worked across systems planning, architecture, integration and implementing standards-based solutions for enterprise-wide systems.
* Experienced in analyzing requirements and designing and reviewing various documents including the software requirement specifications (SRS), business requirements document (BRD), use case specifications, functional specifications (FSD), systems design Specification (SDS), requirement traceability Matrix (RTM) and testing documents.
* In depth knowledge in analyzing, designing, and re-engineering system applications and business processes, using structured system analysis methodologies, placing business controls, diagramming data and process mapping, applying Unified Modeling Language (UML), and implementing performance measures.
* Proficient with various data processing aspects including database and data warehouse modeling, data profiling, data migration, data conversion, data integration, data analysis, data governance, metadata management services and configuration management.
* Worked with different data sources such as SQL server, DAX, Excel, JSON, XML, DB2, CSV, TXT, and flat files.
* Developed and SQL queries for implementing ETL procedures on the raw data, querying data, preparing, and validating test data, and creating tables, views, and triggers.
* Expertise in designing and developing visualizations and dashboards with Tableau Desktop and publishing on Tableau Server/Public/Reader and external websites.
* Extensive experience with Tableau Desktop objects such as Measures, Dimensions, Folder hierarchies, Extract, Filters, Table calculation, Calculated fields, Sets, Groups, Parameters, Forecasting, Blending and Trend lines.
* Developed multiple reports/dashboards using histograms, box and whisker plots, tree, filled and geo-maps, dual axes, bubble, line, bar and stacked bar charts, and custom charts such as donut, pareto, spider and waterfall.
* Developed entity relation (ER) and UML diagrams (use case, activity, sequence) using MS Visio and IBM Rational Clear Case.
* Experienced in carrying out HIPAA EDI Transactions 837, 835, 820, 824, 808, 1104, 276, 277, 278 code sets testing in health insurance.
* Proficient with EDI HIPAA 4010 - 5010 Project to convert EDI X12 Healthcare HIPAA 4010 transactions into HIPAA 5010 complaint transactions.
* Experienced in system conversions (mapping) such as HIPAA, ICD-9 codes to ICD-10 and PCS codes, and claims processing.
* Well versed with Patient Protection and Affordability Care Act (PPACA), Medicare & Medicaid services, Medicaid Management Information Systems (MMIS), and excellent working experience with billing, claims, commission, finance and CRM applications.
* Proven ability to work effectively on multiple tasks simultaneously and meet project deadlines
* Excellent analytical, problem-solving, communication, and interpersonal skills, with the ability to interact with individuals at all levels. Ability to work efficiently as part of a team and as an individual. Enthusiastic, innovative, and challenge oriented
* Possess a strong ability to adapt and learn new technologies and new study lines rapidly

Technical Expertise

**Business Intelligence:** Tableau Desktop 10.x, 9.x/8.x, Server, Reader, and MS Power BI

**Databases:** MS Access,MS SQL Server**,** MySQL, IDM Db2, Oracle Database

**Management Tools:** MS Office (Excel, PowerPoint, Word, Project, Visio, Outlook, SharePoint), Google Data Studio

**Programming Languages:** SQL, SAS,Python

**Statistical Tools:** SAS® (SAS® STAT, SQL, MACROS, PROC'S, V8/V9 and GRAPH)

**OS:** Linux (Ubuntu, CentOS, Manjaro), Windows 10, 7, XP

**Certifications:** SAS Certified Professional; Advanced Programming Using SAS 9.4, Base Programming Using SAS 9.4, Python Data Structures from University of Michigan, MySQL – From MySQL Beginner to Expert

# Professional Experience

**Client Sr. Health Data Analyst Duration**

* Analyzed and interpreted clinical, financial, EHR, CRISP and other source data using knowledge of healthcare claims, including various coding guidelines such as CPT, HCPCS, ICD-10, healthcare finance, and regulatory agency guidelines
* Implemented ETL procedures and accounted for problem identification, and resolution with respect to accessing, accumulating, and processing various source data
* Performed data integration from various sources to build the required infrastructure for support operations
* Prepared a wide range of universally understandable, easily interpretable, and compelling reports, briefs, presentations, and visualizations presenting copious amounts of complex information to inform decision making and support quality and safety related improvement projects
* Prepared ad-hoc, monthly and quarterly reports to answer business questions on a timely basis
* Undertook high level data analysis and provided commentary for reports
* Collaborated with multidisciplinary staff and senior management to design, implement, and evaluate outcomes of operational and clinical improvement initiatives
* Analyzed and presented results to cross-functional teams to help shape clinical and/or business initiatives
* Identified the most appropriate analytical models/methods for medical economics and conducted research on statistical methodology as needed with the aim of improving health outcomes
* Utilized analytic solutions to measure the impact of activity on key performance and quality metrics to optimize processes and to forecast future outcomes.
* Ascertained insights from large datasets and generated appropriate communications and visual presentations enabling stakeholders to easily understand inferences.
* Employed data modeling, data mining, statistical analysis, and reporting capabilities to create targets developing predictive models to determine metric performance targets.
* Developed data visualization tools including real-time visualization care management activities across the organization, geo-mapping disease prevalence among beneficiaries, patient health utilization dashboards to direct operational management and inform strategic deployment of CTO resources
* Performed quality assurance on all data repositories to ensure quality, accuracy, and usefulness of the reporting elements
* Participated in internal and external initiatives/projects, to ensure compliance with corporate policies, HIPAA, HEDIS measurements, and regulatory compliances
* Lead and implemented improvements, enhancements, updates, and modifications to administrative, clinical, and financial data by collecting, cleaning, and summarizing operational data for use by staff to drive decision making and enhance overall business operations and effectiveness
* Contributed to the achievement of established department goals and objectives, adhered to department policies, procedures, quality standards, and safety standards, and complied with governmental and accreditation regulations.
* Participated on committees, and in meetings and multi-disciplinary quality and service improvement teams and represented the department and hospital in community outreach efforts.
* Balanced multiple simultaneous tasks, using independent judgments, and conferring with leadership when necessary, and completes assigned projects/work within specified time frame.

**Client Sr. Contract Analyst Duration**

* Assisted with the financial and administrative oversight of payer relations and contracted with payers on behalf of the clinic.
* Worked closely with Director of Managed Care and oversaw the validation of insurance reimbursement in alignment with contractual terms.
* Collaborated with the clinic’s Business Information Analytics and Information Management teams and provided impactful reporting and created actionable dashboards.
* Identified areas for opportunity with payers in terms of reimbursement and assisted in developing the strategy to realize these opportunities.
* Assisted in contract negotiations through advanced contract modeling applications.
* Ensured internal support was provided so that contracting needs are thoroughly understood and helped with developing a strategy for achieving while enhancing revenue and patient access and provided general assistance and backup support to the Director of Managed Care.
* Oversaw the building, testing, and maintenance of payer contracts utilizing the clinic’s Payer Contract Management platform.
* Facilitated problem solving of operational issues through collaboration with Managed Care team and other internal stakeholders.
* Performed scenario analysis of Payer reimbursement using patient claims data and contract terms; analyzed impact of counter and final proposals.
* Assisted in developing summary presentation of rate proposal for executive leadership with rationale and recommended options.
* Prepared contract payment terms for the Clinic’s Payer Contract Management Platform and validated correct coding for all completed contracts.
* Developed payer statistic report cards by creating dashboard analytics.
* Collaborated with the Director of Managed Care and supported payer relations business needs.
* Worked with payers as needed and ensured proper understanding of payer’s guidelines, contractual terms, and the processing of the clinic’s claims.
* Collaborated with patient accounting and compliance colleagues and resolved improper reimbursements.
* Maintained all associated documentation for all payer and third-party contracts.
* Provided administrative coordination and oversight of payer contracts in accordance with contract goals, objectives, and activities.
* Provided applicable payer reporting.
* Analyzed and coordinated the execution of single case agreements and requested contracts including communications with other teams.

**Client Sr. Clinical Data Analyst Duration**

Reported to the Director of Research Data Services and managed work with minimal guidance including requirements gathering with researchers, working with the enterprise data warehouse team on analytic repository design and implementation, and ensuring the quality of data delivered to the research community.

* Defined cancer research data needs, identifying/profiling data in clinical systems, specifying analytic repository requirements, defining data quality processes, and developing metadata.
* Collaborated with the **client** clinical research community and Informatics staff to enhance access to clinical and genomics data needed to support the cancer research.
* Worked with researchers and defined the data they need from **client**, affiliate, and external systems to support cancer research
* Determined the locale of the required data in clinical systems and profiled data to assess quality
* Developed specifications including direction on data integration, terminology use, standardization, and derived element development for creating analytic repositories in the **client** Enterprise Data Warehouse for storing clinical and genomic data
* Worked with the enterprise data warehouse team and ensured that quality of the data moved into analytic repositories.
* Collaborated with researchers and other informatics staff and developed data dictionaries, data models and other metadata to enhance data usability.
* Provided data training and support to researchers and informatics staff.
* Participated in developing data governance policies and processes and ensured that data use complies with information security and privacy standards.
* Collaborated with other informatics staff and developed processes ensuring the quality and completeness of research data being generated from all source systems.
* Maintained the security and confidentiality of private medical and financial information.

**Client Clinical Data Analyst Duration**

* Provided tactical and strategic support by mining, analyzing, and interpreting data to create basic and complex reports for distribution to leadership and others
* Performed data acquisition, qualitative and quantitative analysis, and identified the clinical implications of those assessments
* Worked with the project team and clinical CRO members under minimal supervision to identify needs, assessed the applicability of data sources to address those needs, and acquired and manipulated data using a variety of reporting and analytical tools to present information in a meaningful and actionable way
* Integrated data from disparate sources and provided new insights, and designed and developed visualizations, interactive dashboards, and other displays to communicate results effectively
* Developed databases and data sets when required to support analyses and collaborated with others in the organization to address emerging data needs including identifying and specifying the necessary changes to address data gaps in the organization
* Worked with clinical CROs to respond to and resolve data quality issues
* Analyzed and specified data structures in large and complex data sets using various modeling techniques and tools.
* Provided timely updates on overall enrollment in established and prospectively enrolling studies
* Assisted the team with queries, basic statistical analyses, reports, and technical difficulties related to data retrieval
* Presented and explained data to help others understand the impact of the information
* Maintained knowledge of the current regulations and technologies related to data management to ensure the integrity of data and quality of data processes
* Assisted with clinical operations roles, including logistics tracking, and clinical and data document review

**Client Clinical Data Analyst Duration**

* Created, developed, and maintained EDCMS clinical database including all data capture requirements and systems to ensure compliance for protocol execution, increased system productivity and data quality.
* Provided end-to-end clinical systems, regulations, standards, quality and database expertise to **CLIENT** staff and clinical study teams on clinical form data collection through reporting
* Applied appropriate regulatory and ICH compliance and provided appropriate risk assessment and mitigation related to **CLIENT** systems and related procedures and processes
* Executed and implemented strategic decisions for **CLIENT** operations related to clinical data integrity and subject/patient safety
* Executed the creation of metadata and collection tools in accordance with CDISC and appropriate Pfizer standards (i.e., assessment windows, questionnaires, global and local collection drop down windows, automated data processes)
* Provided in depth **CLIENT** and clinical database expertise to the clinical study teams to ensure protocol defined design, data capture and correct, complete, and consistent downstream reporting in terms of data quality and expected output
* Assisted as appropriate with query resolution
* Evaluated and made decisions on data collection and reporting capabilities based on the SAP (Statistical Analysis Plan), LOT (List of Tables) and Pfizer Data Standards/CDISC and achieved the desired reporting outcome for transferring data downstream reporting systems and a complete, correct, and consistent Clinical Study Report
* Contributed as appropriate to overall training programs related to EDCMS and collaborated with internal groups (pharmacy, medical, clinic coordinator, project management and laboratory) to ensure a consistent approach with minimal overlap with targeted business process specific training.
* Provided expertise in systems usage, clinical data collection processes and related **CLIENT** SOP’s.
* Worked with various **CLIENT** groups, such as SUG, GET Quality, and the LT and provided impact assessments of new procedures and process on systems and new systems on processes and procedures.
* Partnered with the **CLIENT** specific Laboratory Information Management System (e.g. LIMS, GLIMS) administrator and ensured consistent data collection and that the quality connection interfaces between the systems are producing expected quality output to all downstream review tools and reporting systems.
* Participated in recommendations to the **CLIENT** Global Clinical Systems Team on how systems will be used and impact the local business in the CLIENT by owning the evaluation, development and maintenance of system installations, configuration, procedures, and processes.
* Evaluated emerging and existing technologies and made recommendations on best practices to enhance processes to support local business requirements.
* Provided local strategic thought within the **CLIENT** and derived innovative and optimal solutions.
* Participated in exploring, coordinating, and implementing emerging technologies/techniques.
* Participated in developing and performing UAT (User Acceptance Testing) as required.
* Collaborated with and evaluated needs of internal CRU (MD’s, pharmacy, lab, clinic floor activities) and external departments (clinical, stats, CRDC, CAG) to understand their analytic objectives, business needs and provided the necessary services from a data and systems perspective
* Managed multiple complex protocols at one time, independently, all in different stages from development to active execution in the clinic to reporting and inquired on past reported studies conducted at the CRU
* Served as a SME (Subject Matter Expert) and solved highly complex system matters.
* Coordinated and directed solutions to connect the CRU clinic workers to the requirements and workflow of clinical study team members and related downstream reporting systems
* Ensured all clinical data flow is regulatory/ ICH-GCP compliant.
* Represented the **CLIENT** at SUG (Systems User Group) and EDCMS SOP global meetings
* Interfaced locally with the regulatory agencies around data warehousing projects and other clinical

**Client Clinical Data Analyst Duration**

* Reported to the Director, Medical Affairs, Safety and Publications, and worked cross-functionally with internal and external leaders
* Executed on hypothesis testing internally, cross-functionally with Biostat, ClinOps, Data Analytics, Marketing, Data Science, and others utilizing internal and external databases
* Integrated highly complex datasets from heterogeneous sources and maintained databases current
* Worked with Medical Directors and derived meaningful insights and high impact publications and analyses
* Retrieved data, formatted, and prepared files for analysis, and collected, managed, and cleaned datasets
* Used system reports and analyses and identified potentially problematic data, made corrections, and determined root cause for data problems from input errors or inadequate field edits, and suggested possible solutions
* Documented all data sources and processing
* Employed new and existing tools to interpret, analyze, and visualize multivariate relationships in data
* Developed reports, charts, graphs and tables for use by investigators and for publication and presentation