POSITION DESCRIPTION *(Please Read Instructions on the Back)*

1. Agency Position No.
99489-T

2. Reason for Submission		3. Service		4. Employing Office Location	5. Duty Station	6. OPM Certification No.
☐ Redescription	☒ New	☐ Hdqtrs	☒ Field	TBD	TBD	
☐ Reestablishment	☐ Other					

Explanation *(Show any positions replaced)*
For use with Schedule B or MSA for Research Authorities

7. Fair Labor Standards Act
☒ Exempt ☐ Nonexempt

8. Financial Statements Required
☐ Executive Personnel Financial Disclosure ☐ Employment and Financial Interest

9. Subject to IA Action
☒ Yes ☐ No

10. Position Status
☐ Competitive
☒ Excepted *(Specify in Remarks)*
☐ SES (Gen.) ☐ SES (CR)

11. Position Is
☐ Supervisory
☐ Managerial
☒ Neither

12. Sensitivity
☒ 1--Non-Sensitive ☐ 3--Critical
☐ 2--Noncritical Sensitive ☐ 4--Special Sensitive

13. Competitive Level Code
X01

14. Agency Use
BUS: Eligible

15. Classified/Graded by	Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
a. Office of Personnel Management						
b. Department, Agency or Establishment						
c. Second Level Review	Data Scientist	GS	1560	13	TB	12/22/2022
d. First Level Review	Data Scientist	GS	1560	13	BP	09/28/2022
e. Recommended by Supervisor or Initiating Office	Data Scientist	GS	1560	13	WT	08/29/2022

16. Organizational Title of Position *(if different from official title)*

17. Name of Employee *(if vacant, specify)*

18. Department, Agency, or Establishment
Department of Veterans Affairs

a. First Subdivision
Veterans Health Administration

b. Second Subdivision
Office of Research and Development

c. Third Subdivision
Regional Research Office or Research and Development Service

d. Fourth Subdivision

e. Fifth Subdivision

19. Employee Review-This is an accurate description of the major duties and responsibilities of my position.

Signature of Employee *(optional)*

20. Supervisory Certification. *I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that* this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.

a. Typed Name and Title of Immediate Supervisor

b. Typed Name and Title of Higher-Level Supervisor or Manager *(optional)*
Wendy Tenhula, PhD
Deputy CRADO

Signature	Date	Signature	Date
		Wendy N Tenhula 109297 *Digitally signed by Wendy N Tenhula 109297 Date: 2022.08.29 16:13:26 -04'00'*	08/29/2022

21. Classification/Job Grading Certification. *I certify that this position has been classified/graded as required by Title 5, U.S. Code, in conformance with standards published by the U.S. Office of Personnel Management or, if no published standards apply directly, consistently with the most applicable published standards.*

22. Position Classification Standards Used in Classifying/Grading Position
JFS for Professional Work in the Mathematical Sciences Group, GS-1500, 09/2005. PCF for Data Science Series, GS-1560, 12/2021.

Typed Name and Title of Official Taking Action
Tracie L Bennett
Human Resources Specialist (Class) - HRCoE

Signature	Date
Tracie L. Bennett 183259 *Digitally signed by Tracie L. Bennett 183259 Date: 2022.12.22 09:16:18 -08'00'*	12/22/2022

Information for Employees. The standards, and information on their application, are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or the U.S. Office of Personnel Management. Information on classification/job grading appeals, and complaints on exemption from FLSA, is available from the personnel office or the U.S. Office of Personnel Management.

23. Position Review	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date
a. Employee *(optional)*										
b. Supervisor										
c. Classifier										

24. Remarks
Statement of Difference to the Full Performance Level Data Scientist, GS-1560-14, PD# 99489-T; Supv Code: 0; Cyber Security Code: 000. Position Risk Level = High Risk (Tier 4); Exc appt - Schedule B 213.3227(a), MSA Excepted authorities

25. Description of Major Duties and Responsibilities *(See Attached)*

STATEMENT OF DIFFERENCE (SOD)
POSITION DESCRIPTION (PD)
DEPARTMENT OF VETERANS AFFAIRS
VETERANS HEALTH ADMINISTRATION
OFFICE OF RESEARCH AND DEVELOPMENT
REGIONAL RESEARCH OFFICE
OR
RESEARCH AND DEVELOPMENT SERVICE
DATA SCIENTIST
GS-1560-13 target 14
PD # 99489-T

TERMS OF USE

This position description is intended for use without modification in accordance with Veterans Health Administration (VHA) Directive 1605.03 para 5c(2). Because of the detailed and complex duties associated and required of this specialized position, any changes to the duty statements, factor level descriptions, or benchmarks may adversely jeopardize the classification determination along with records management program initiatives and mandates. Material changes or modifications are not allowed.

INTRODUCTION

The Department of Veterans Affairs (VA) Research Program strives to promote Veteran-centered care to improve patient experience and outcomes across VA healthcare and community settings, and to advance value-driven care by providing Veterans the highest quality care at the lowest financial burden. The position is vital within the Office of Research and Development (ORD) and the facilities where research programs are conducted. Data Scientist prove the link between veterans and highly innovative projects. This position will be located in various research offices within the VHA.

BACKGROUND

This is a multi-incumbent standardized position description (PD) for the ORD developed by Workforce Management and Consulting for use by facilities with research programs. In order to use this standardized PD, all associated duties and responsibilities must be performed.

This a standardized PD for use within the VA, VHA, at a VA Medical Center (VAMC), other research facilities within the Research and Development (R&D) Service. The incumbent serves as the subject matter expert (SME) in the highly technical and specialized area of data science serving as a Data Scientist with specific technical expertise in health sciences data. They will act as a key advisor to the VAMC R&D service and senior leadership, as well as internal and external stakeholders on all matters related to data science.

The incumbent is responsible for providing high-level technical expertise on the aggregation, collation, and the analyzation of data from databases including, but not limited to the development, implementation and updating of data extraction queries, data mining and, developing strategies, action plans, data queries modification and maintenance, quality control and validation of collected data.

The incumbent is responsible for the development of methodological approaches, study design, and advanced written, verbal, and visual communications of study/analysis output. The incumbent additionally contributes to the development of the design for advanced data systems, software, and complex programming specifications.

Analyses generally inform decisions about how to design, implement, and evaluate administrative orders in the healthcare setting including, but not limited to analyzing electronic health record data to develop predictive analytics and medical image processing; high-impact AI technologies such as deep learning, trustworthy AI, privacy preserving AI, explainable AI, and multi-scale AI Analysis.

Position requires work experience with use of large longitudinal medical databases, statistical/analysis software platforms (e.g., Statistical Analysis System (SAS), familiarity with queries using structured query language (SQL) and visual programming tools, SQL development tools, or others. Performs statistical and quantitative analysis utilizing specially developed software models or procedures.

Interpersonal communications and outreach, acquisitions and procurement, information technology, and financial management are the functional skills that will supplement those primary tasks. The incumbent leads or consults with cross-functional teams, staffed by federal civil servants and contractors, composed of professionals skilled in policy analysis, information technology, data engineering, and project management disciplines, in order to develop data-driven solutions that address the Department of Veterans Affairs (henceforth referred to as "Agency") program and business challenges. The above areas are subject to change as program emphasis and priorities change.

Factor Level Descriptions

Factor 2-4 Supervisory Controls (450 pts)

The incumbent works under the administrative direction of the supervisor, who outlines the resources and objectives for work assignments based on mission or functional goals. The incumbent has responsibility for independently planning, designing, and carrying out programs, projects, studies, or other work. Considerable tact, personal initiative, resourcefulness, independence, and professional judgment are used with respect to resolve most of the conflicts that arise.

Interprets policy and regulatory requirements; manages progress and potentially controversial problems, concerns, and issues; develops changes to plans and/or methodology; and provides recommendations for improvements to meet program

objectives. Work is reviewed in terms of their soundness and approach to work assignments, adherence to requirements, and achievement of desired results based on the practicality of recommendations. As such the supervisor will not generally review the methods used to complete work assignments.

Factor 3-4 Guidelines (450 pts)

The guidelines include general policy statements, basic legislation, recent scientific findings, Federal and State law, Agency and departmental program and evaluation policies, and professional literature regarding analytic methods. These guidelines are frequently evolving and involve many interrelated programs, with new standards or methods often rendering existing guidelines inapplicable. As such guidelines for work assignments may be scarce or have limitations that would require considerable adaptation to be used to address issues or problems being confronted.

The incumbent must exercise considerable resourcefulness, self-motivation, and inventiveness, and must show discretion in working on sensitive assignments; when modifying or adapting guidelines; dealing with issues; developing new methods; and/or proposing new policies and practices. The incumbent is a technical authority at the program and group level, and frequently contributes to Agency-wide or even government-wide standards; consults with other experts in the organization, and outside the agency, to define and establish possible approaches to unprecedented problems. However, the incumbent must often deviate from past approaches to develop, initiate, and lead new project to read in, store, and analyze Agency data more effectively.

Factor 5-4 Scope and Effect (225 pts)

The work assignments include the formulation, definition, and interpretation of data to be used for presentation, planning and policy development. The development of new standards will be used to analyze, test, and assess new emerging technology or scientific methods. The origination of these new applications and strategies will be used to complement existing or new scientific data concepts and principles. The incumbent will provide consultation and advise top management at the VAMC. The results of the work assignments will result is the improved efficiency and credibility of applications to meet ORD, VHA, VA, and scientific community standards. The work will allow for management and other key decision-makers to adopt and accept new approaches, technology, etc. to be used as safe and effective approaches to system compatibility or other uses.

Position Qualification Requirements

All other factors of the position remain essentially the same. This developmental position is established with known promotion potential to the targeted full performance level described at the GS-14 level without further competition upon successful completion of administrative, statutory requirements, and minimum qualification requirements, as well as demonstrated satisfactory job performance.

This statement of difference is authorized for use only when used in connection with the full performance level position description, Data Scientist, GS-1560-14, PD# 99490-T.

Total Points: 3190
GS-13 Point Range: 3155-3600

POSITION DESCRIPTION *(Please Read Instructions on the Back)*

1. Agency Position No.	99490-T

2. Reason for Submission	3. Service	4. Employing Office Location	5. Duty Station	6. OPM Certification No.
☐ Redescription ☒ New ☐ Reestablishment ☐ Other	☐ Hdqtrs ☒ Field	TBD	TBD	

Explanation *(Show any positions replaced)*
For use with Schedule B or MSA for Research Authorities

7. Fair Labor Standards Act	8. Financial Statements Required	9. Subject to IA Action
☒ Exempt ☐ Nonexempt	☐ Executive Personnel Financial Disclosure ☐ Employment and Financial Interest	☒ Yes ☐ No

10. Position Status	11. Position Is	12. Sensitivity	13. Competitive Level Code
☐ Competitive ☒ Excepted *(Specify in Remarks)* ☐ SES (Gen.) ☐ SES (CR)	☐ Supervisory ☐ Managerial ☒ Neither	☒ 1--Non-Sensitive ☐ 3--Critical ☐ 2--Noncritical Sensitive ☐ 4--Special Sensitive	X01 **14. Agency Use** BUS: Eligible

15. Classified/Graded by	Official Title of Position	Pay Plan	Occupational Code	Grade	Initials	Date
a. Office of Personnel Management						
b. Department, Agency or Establishment						
c. Second Level Review	Data Scientist	GS	1560	14	TB	12/22/2022
d. First Level Review	Data Scientist	GS	1560	14	BP	09/28/2022
e. Recommended by Supervisor or Initiating Office	Data Scientist	GS	1560	14	WT	08/29/2022

16. Organizational Title of Position *(if different from official title)*	17. Name of Employee *(if vacant, specify)*

18. Department, Agency, or Establishment	
Department of Veterans Affairs	**c. Third Subdivision** Regional Research Office or Research and Dev. Service
a. First Subdivision Veterans Health Administration	**d. Fourth Subdivision**
b. Second Subdivision Office of Research and Development	**e. Fifth Subdivision**

19. Employee Review-This is an accurate description of the major duties and responsibilities of my position.	Signature of Employee *(optional)*

20. Supervisory Certification. *I certify that this is an accurate statement of the major duties and responsibilities of this position and its organizational relationships, and that the position is necessary to carry out Government functions for which I am responsible. This certification is made with the knowledge that* *this information is to be used for statutory purposes relating to appointment and payment of public funds, and that false or misleading statements may constitute violations of such statutes or their implementing regulations.*

a. Typed Name and Title of Immediate Supervisor	b. Typed Name and Title of Higher-Level Supervisor or Manager *(optional)*
	Wendy Tenhula, PhD Deputy CRADO
Signature _____ Date _____	Signature _Wendy N Tenhula 109297_ (Digitally signed by Wendy N Tenhula 109297 Date: 2022.08.29 10:15:23 -04'00') Date 08/29/2022

21. Classification/Job Grading Certification. *I certify that this position has been classified/graded as required by Title 5, U.S. Code, in conformance with standards published by the U.S. Office of Personnel Management or, if no published standards apply directly, consistently with the most applicable published standards.*

22. Position Classification Standards Used in Classifying/Grading Position

JFS for Professional Work in the Mathematical Sciences Group, GS-1500, 09/2005. PCF for Data Science Series, GS-1560, 12/2021.

Typed Name and Title of Official Taking Action
Tracie L Bennett
Human Resources Specialist (Class) - HRCoE

Signature	Date
Tracie L. Bennett 183259 (Digitally signed by Tracie L. Bennett 183259 Date: 2022.12.22 14:56:12 -08'00')	12/22/2022

Information for Employees. The standards, and information on their application, are available in the personnel office. The classification of the position may be reviewed and corrected by the agency or the U.S. Office of Personnel Management. Information on classification/job grading appeals, and complaints on exemption from FLSA, is available from the personnel office or the U.S. Office of Personnel Management.

23. Position Review	Initials	Date	Initials	Date	Initials	Date	Initials	Date	Initials	Date
a. Employee *(optional)*										
b. Supervisor										
c. Classifier										

24. Remarks
Full Performance Level. Cyber Security Code: 000. Position Risk Level = High Risk (Tier 4); Supv code: 0; Exc appt - Schedule B 213.3227(a), MSA Excepted authorities

25. Description of Major Duties and Responsibilities *(See Attached)*

POSITION DESCRIPTION (PD)
DEPARTMENT OF VETERANS AFFAIRS
VETERANS HEALTH ADMINISTRATION
OFFICE OF RESEARCH AND DEVELOPMENT
REGIONAL RESEARCH OFFICE
OR
RESEARCH AND DEVELOPMENT SERVICE
DATA SCIENTIST
GS-1560-14
PD # 99490-T

TERMS OF USE

This position description is intended for use without modification in accordance with Veterans Health Administration (VHA) Directive 1605.03 para 5c(2). Because of the detailed and complex duties associated and required of this specialized position, any changes to the duty statements, factor level descriptions, or benchmarks may adversely jeopardize the classification determination along with records management program initiatives and mandates. Material changes or modifications are not allowed.

INTRODUCTION

The Department of Veterans Affairs (VA) Research Program strives to promote Veteran-centered care to improve patient experience and outcomes across VA healthcare and community settings, and to advance value-driven care by providing Veterans the highest quality care at the lowest financial burden. The position is vital within the Office of Research and Development (ORD) and the facilities where research programs are conducted. Data science provides the link between highly innovative projects and the care that Veterans receive. This position will be located in various research offices within the VHA.

BACKGROUND

This is a multi-incumbent standardized PD for the ORD, developed by Workforce Management and Consulting for use by facilities with research programs. To use this standardized PD, all associated duties and responsibilities must be performed.

This a standardized PD for use within the DVA, VHA, at a VA Medical Center (VAMC), other research facilities within the Research and Development (R&D) Service. The incumbent serves as the subject matter expert (SME) in the highly technical and specialized area of data science serving as a Data Scientist with specific technical expertise in health sciences data. They will act as a key advisor to the VAMC R&D service and senior leadership, as well as internal and external stakeholders on all matters related to data science.

The incumbent is responsible for providing high-level technical expertise aggregating, collating, and analyzing data from databases including, but not limited to, the

development, implementation and updating of data extraction queries, data mining and, developing strategies, action plans, data queries modification and maintenance, quality control and validation of collected data. The incumbent is responsible for the development of methodological approaches, study design, and advanced written, verbal, and visual communications of study/analysis output.

The incumbent additionally contributes to the development of the design for advanced data systems, software, and complex programming specifications. Analyses generally inform decisions about how to design, implement, and evaluate administrative orders in the healthcare setting including, but not limited to analyzing electronic health record data to develop models that advance predictive analytics and causal inference. Position requires work experience with use of large longitudinal medical databases, statistical/analysis software platforms (e.g., R, Python, Stata, Statistical Analysis System (SAS), and structured query language (SQL)). Performs statistical and quantitative analysis utilizing specially developed software models or procedures.

Interpersonal communications and outreach, acquisitions and procurement, information technology, and financial management are the functional skills that will supplement those primary tasks. The incumbent leads or consults with cross-functional teams, staffed by federal civil servants and contractors, composed of professionals skilled in policy analysis, information technology, data engineering, and project management disciplines, to develop data-driven solutions that address the Department of Veterans Affairs (henceforth referred to as "Agency") program and business challenges. The above areas are subject to change as program emphasis and priorities change.

Major Duties and Responsibilities

Data Science Lifecycle - 50%

Serves as a senior Data Scientist and advisor to Agency leadership with the responsibility for the overall development, management, control, coordination, storage, retrieval and execution of data acquisition requirements and the efforts of other Agency professionals and contractors in solving complex and far-reaching data management issues and problems for a wide range of systems, applications, and customers. Issues include data interface and storage, and require application of data management principles, procedures, and tools such as modeling techniques, data backup, data recovery, data dictionaries, data warehousing, data mining, data disposal, and data standardization processes.

The incumbent requires expertise in and management of end-to-end data processes in the data life cycle. Mastery experience with data science tools to execute duties is required; these duties including programming, statistics, machine learning, causal inference, and data visualization. Constructs data pipelines using complex tools and techniques to handle data at scale. Conceives, plans, and conducts projects to support enterprise analytics, with the ability to advance methodological designs through collaborations with industry, government, and academia. The goal is to advance science through leading edge methods that may result in establishing new theories and a deeper

understanding of phenomena; examples of data accessed include health data, health images, demographic data, administrative data, claims data, programmatic data, and patient behavior, provider activities, economic indicators, and expenditure data.

Demonstrates expert level understanding of diverse data science techniques including data pooling, machine learning, natural language processing, deep learning, advanced visualizations and has the ability to demonstrate how ensembles of these techniques can be harmonized into user-centric solutions.

Translates complex concepts, findings, and limitations into language for scientific and lay audiences. Closely ties findings and conclusions into the Agency mission, original problem statement, and team objectives. Research and designs presentations and interpretations of analytical outputs tailored to specific audiences including the use of interactivity and narrative storytelling where appropriate. Collaborates with teammates, customers, and stakeholders in a reproducible and organized manner.

Consults with stakeholders and customers to identify the appropriate data, methodological approach, design, and validation. Conducts observational analysis using software and/or programming languages such as R, Python, Stata, or SAS to explore/group data, test hypotheses, predict outcomes, and inform decisions. Has the ability to distinguish analyses that provide predictions versus those that inform causal inference with strong counterfactual analyses. Derives meaning from big data (i.e., datasets that may be large, disparate, unstructured, and/or complex), including structured, loosely structured, and unstructured data. Comfortable working with large datasets and numerous confounding variables.

The incumbent uses these tools to transform, combine, and clean data in preparation for analysis. Works with teams to develop data products and definitions. Uses appropriate analytic and statistical software to programmatically prepare data for analysis and clean imperfect data such as probabilistic matching and imputation of missing values. Translates the results of analysis into clear, actionable communications that equip Agency decision makers to make informed, data-driven decisions. Articulates findings through data visualization, reports, and operationalized constructs. Solves technical problems by choosing the appropriate tools and explaining data architecture and design to both technical and non-technical audiences and delivers reports and relevant information to support the needs of leadership and policy/ project teams.

Has experience with prediction and causal inference methods, such as difference in differences, instrumental variables, regression discontinuity. Has experience testing assumptions in causal inference models, and can explain the differences between average treatment effects, average treatment effect on the treated, and local average treatment effects.

Presents the results of quantitative analysis to technical and non-technical audiences. Has mastery knowledge about chart typologies, mapping stories to appropriate chart types. Works with customers to create useful presentations and interpretations of analytical outputs. Independently synthesizes findings and turns them into actionable

insights. Adheres to applicable style guides. Is responsive to a variety of stakeholders and team members with varying technical skills.

Collaborates with other SMEs or stakeholders to select the relevant sources of information, as needed, to perform job duties and makes strategic recommendations on data collection, integration, and retention requirements incorporating business requirements and knowledge of best practices. Provides strategic and technical guidance and hands-on support in the transfer of any required data needed for ad-hoc and ongoing analyses. Assures regulatory compliance in conjunction with relevant Institutional Review Boards and ensures completion of required documentation/approvals (e.g., data sharing agreements, memorandums of agreement, etc.). Develops memorandums of agreement (MOAs) and memorandums of understanding (MOUs) to include data sharing agreements with external and or internal agencies for the acquisition and use of data or the sustainment of data use agreements.

Identifies, adapts, and manages changes to data analysis tools in response to evolving user needs. The incumbent documents data definitions and issues for future reference. Develops usage and access control policies and systems in collaboration with Agency contractors and system security design staff and partners with stakeholders in continuous improvement process by developing data set processes and using programming language and tools. Impacting reliability, efficiency and quality for missions, goals, and future planning, performance enhancements, and overall user experience. Offers expertise when participating in discussions with non-technical internal customers to understand the problem and identify required data sets, collection mechanisms, and other key stakeholders required to solve the problem. Independently analyzes data, applying and explaining the statistical and mathematical principles used. Is familiar with methods of exploratory data analysis, selecting appropriate models and identifying when data is insufficient to reach conclusions.

Consults with customers and applies analytical processes to the planning, design, and implementation of new and improved information systems to meet the business requirements of customer organizations. Ensures the safe and reliable integration of different elements of a system, including schedules, configurations, and resources. Develops contingency and long-range plans, and responses to unexpected/unplanned, externally driven requirements.

Data Science Consultant and Advisor - 25%

Provides technical advice serving as a SME in the development of new methods to automate reports, rapid analysis of pilot initiatives and applications and makes recommendations to management on the use of such technology as it relates to Agency data. Participates on cross-functional teams in the development, implementation, and oversight of new technologies and statistical methods related to data science and collaborates with government, academic, and industry partners. Provides advice and guidance to team members on project decisions and recommendations in support of IT security plans to ensure compliance with Agency security requirements specific to data.

Provides technical advice to the Center Director or Deputy Director in the collecting, optimizing, analyzing, interpreting, and communicating insights from data. Serves as a mentor to staff to manage projects and provide direction and support. Provides technical recommendation in the modernization of existing services. Advises other scientists on appropriate data elements to use for studies.

Directs internal and external process or system reviews, studies, projects, and data validation efforts, which provide a mean for evaluating system performance and vulnerabilities. Accesses, merges, cleans, standardizes, and develops derived metrics on multiple structured datasets; has familiarity with appropriate software and automation tools. Also serves as a resource to junior analysts and contractor staff, as directed by supervisor.

Prepares and delivers written reports and oral presentations, e.g., briefings, training sessions, and consultations. Regularly provides authoritative advisory discussions with command and Agency leadership, supervisors, customers, and co-workers and conducts or leads conferences as an expert representative of the organization and command. Attends meetings, conferences, briefings, and seminars related to data science, advanced data storage technologies, and statistical and analysis support system concepts. Consolidates research finding and conclusions into completed products for review by the investigative teams, and subsequent publication and or oral presentations to interagency and both internal and external stakeholders.

Project Leadership Related to Data Analytics and Technical Liaison - 25%

Serves as a resource and leader to Federal and contractor staff on implementing, managing, tracking, and evaluating large scale and extremely complex data analysis projects and their associated requirements and risks. Has the ability to weigh the tradeoffs between more complicated analyses with more assumptions and simpler analyses that involve obtaining additional data, thereby guiding Agency decisions on which approach is preferrable to meet the scientific needs and deadlines.

Applies system architecture principles to develop and, manage technical requirements and achieve formulating, planning, stakeholder needs and constraints, clarifies objectives, develops resource requirements and the appropriate balance among resources, schedule, and technical requirements. Develops and manages an efficient project organizational structure and applies system architecture principles to projects.

Assumes responsibility for the development of project planning, coordination of overall team efforts, and maintaining appropriate lines of communication. Develops project plans to ensure logistics are handled efficiently, identifying potential bottlenecks, and resolving issues within the scope of authority. Develops and implements advanced systems for the Agency data management program. These systems are being designed, or redesigned, to utilize new technology such as national database management systems. Creates and maintains the preparation and maintenance of procedures for the Agency's data systems. Recommends policy changes and provides data to support recommended changes. Develops system proposals and coordinates the efforts necessary to translate business

requirements into effective IT data systems solutions. Develops, codes, tests, and maintains database programs.

Assures effective operations and achievement of contractual requirements and program objectives. May serve as a Business Function Lead (BFL), SME, or Contracting Officer's Representative (COR) on contracts, task orders, or other projects related to data science issues or initiatives.

May develop procurement support materials, such as acquisition plans, procurement strategies, cost estimates, statements of work, and schedules of deliverables as needed to support data science initiatives. May establish and maintain tracking systems and records for grant and contract activities in the program.

Designs, develops, and operates systems for ingesting, storing, and analyzing data at scale. Uses data parallelization techniques or streaming technologies to process data. Monitors data flows and stored datasets to make improvements to data collection and ingestion mechanisms. Ensures that data sources are fit for their intended purpose through assessment of potential bias in data ingestion and transmission mechanisms, current data quality, monitoring for incoming changes in data quality, and improvement of data quality. Recommends improvements to upstream processes to improve data quality.

Performs other duties as assigned.

Factor Level Descriptions

Factor 1-8 Knowledge Required by the Position (1550 pts)

The position has mastery knowledge of concepts, theories, designs, and interactions of database systems is required so the incumbent can design systems and conduct studies which will offer solutions to complex data problems where precedents have not been developed.

Detailed mastery knowledge of advanced analytical techniques is needed to perform extensive technical evaluation in order to provide expert advice and guidance to Agency management regarding database design feasibility.

Serves as technical expert in the application of data analytic tools for Agency data systems and projects on matters related to new IT/data concepts and other plans of significant impact and importance. Furnishes expert technical advice and recommendations on major problem areas in assigned fields of specialization. May represent the component or Agency at resource management planning meetings.

Develops, coordinates, and promotes interagency cooperative efforts in the management, utilization, and operation of data processing and data communication resources. Participates on department, Federal, and non-governmental national standardization committees relative to data management issues.

Extensive knowledge of project management and data security principles to provide expert guidance to IT application personnel, clinicians, and scientists.

Mastery knowledge and experience in system interrelationships, sources of data, flow of information and availability of data among various users, governmental agencies, private sector organizations, and the States.

Comprehensive knowledge of communication and negotiation techniques, to establish and maintain effective working relationships with representatives of other Federal, State, and local governmental agencies, and private sector organizations.

Mastery knowledge of, and skill in, applying principles and approaches to collecting, analyzing, and interpreting government, state, and commercial healthcare data. Expert knowledge of working with complex datasets defined as long datasets with millions of observations and/or wide datasets with variables measured at different units. Expert knowledge necessary to identify data that are available and relevant to the development of products including internal and external data sources and in leveraging new data collection processes performing all phases of the systems development lifecycle require in the design, development, and implementation of new product initiatives and features.

Mastery knowledge of data warehouse technology and skill in applying such knowledge to provide technical guidance to a team of data analysts, data scientist and relevant product team members on the collecting, analyzing and interpretation of Agency data. The incumbent has a working knowledge in the integration of multiple products that will leverage this data.

Mastery knowledge of quantitative analysis techniques sufficient to utilize the results of research and analytics to influence product planning, design, and the prioritization of product features. Expert knowledge in estimating robust standard errors and the influence of clustering on biasing standard errors. Has expertise in identifying key assumptions and methods for addressing these limitations.

Comprehensive skill and ability in applying forward-thinking design and development principles developing, delivering, and managing products or services.

Extensive skill and ability in using data visualization and both written and verbal communication techniques to provide visibility into project progress, communicate blockers, and practice human-centered design throughout the stages of the project lifecycle.

Mastery of at least one of the following data programming languages or statistical tools (or their successors or analogues), as well as significant experience with at least one additional language or tool (or their successors or analogues), in the development maintenance, and support of data ingestion, analysis and interpretation in Python, SAS, SQL, JavaScript (full stack), R, and/or Stata.

Mastery of business and data requirements as well as working knowledge of implementing best practices, standards, and procedures in support of data collection, analysis, and interpretation. Knowledge of common open source and other commercial data ingestion, data storage, and data transmission products. Proficiency in data collection, integration, and retention requirements, and incorporating business requirement into implementation.

Mastery of system analysis techniques and methods of programming to determine the types of technologies and programming required, and the best methodology and procedures to deliver Agency data products to stakeholders.

Mastery knowledge, skill, and ability to analyze, develop, and clearly express complex issues both orally and in writing to individuals at all levels of an organization, including those Agency or program officials several managerial levels removed from the employee.

Factor 2-5 Supervisory Controls (650 pts)

The incumbent works under the administrative direction of the supervisor, who sets broadly defined objectives for work assignments based on mission or functional goals of ORD, Office of Discovery, Education and Affiliate Networks and VHA. The incumbent has responsibility for independently planning, designing, and carrying out programs, projects, studies, or other work. The incumbent works with a high degree of independence and technical authority, utilizing, extensive latitude and judgement in choosing and completing projects.

Considerable tact, personal initiative, resourcefulness, independence, and professional judgment are used with respect to resolve most of the conflicts that arise and to interpret policies and their effect on the Agency. Interprets policy and regulatory requirements; manages progress and potentially controversial problems, concerns, and issues; develops changes to plans and/or methodology; and provides recommendations for improvements to meet program objectives. Work is reviewed in terms of fulfillment of strategic objectives, funding requirements, and consistency with Agency mission and functional goals. The work of the position is considered technically authoritative and is normally accepted without significant changes.

Factor 3-5 Guidelines (650 pts)

The guidelines include broad policy statements, basic legislation, recent scientific findings, Federal and State law, Agency and departmental program and evaluation policies, and professional literature regarding analytic methods. These guidelines are frequently evolving and involve many interrelated programs, with new standards or methods often rendering existing guidelines inapplicable. In such cases, considerable judgment must be used in interpreting and applying guidelines and new or additional approaches or methods must be developed to attain required objectives.

Within the context of broad regulatory guidelines, the incumbent must use analytical, program and regulatory knowledge and experience in refining or developing specific

guidelines to ensure their applicability to Agency information technology and datasets. The incumbent must exercise considerable resourcefulness, self-motivation, and inventiveness, and must show discretion in working on sensitive assignments, intent of new or revised guidelines, the development of policy, and the interpretation of policy, regulations, and methods for development.

The is a technical authority at the program and group level, and frequently contributes to Agency-wide or even government-wide standards. Incumbent consults with other experts in the organization, and outside the Agency, to define and establish possible approaches to unprecedented problems. However, the incumbent must often deviate from past approaches to develop, initiate, and lead new project to read in, store, and analyze Agency data more effectively.

Factor 4-5 Complexity (325 pts)

The work concerns areas of research and analysis where precedents within government are not always available to assist in problem solving, where progress is difficult and where new techniques and approaches need to be devised drawing upon leading practices from academia and the private sector.

The work consists of duties such as synthesizing program and mission-oriented goals into developing new work; reviewing unresolved issues; synthesizing and simplifying complicated information; defining, describing, and comparing policy and operational alternatives; assessing political and institutional constraints; summarizing study results/ and selecting the most appropriate course of action, making recommendations, and presenting findings to aid managerial and executive stakeholders in making operational policy and program operation decisions.

The duties are highly technical in nature and work involves substantial depth, breadth, and intensity of effort involving numerous interrelationships. Determinations of approaches and planning of projects require the selection of new or significantly modified methodologies, theories, and research in the appropriate Agency program subject area(s).

The incumbent communicates orally and in writing, onsite or remote, to achieve resolution of problems or issues relating to work assignments and will require knowledge sufficient to prepare and analyze complex technical documents, make recommendations, and present them in written or oral reports and orally to technical and lay audiences. Devises new techniques and approaches to improve program operation efficiency and effectiveness, and to improve IT systems security.

The responsibilities of the specialist are extremely broad and critical to the effective operation of Agency-wide projects assigned. Provides IT technical expertise which is factored into top management decisions both within the Agency and in the private sector. Incumbent provides expertise guidance in specialized IT areas. Systems projects developed have a direct effect on the efficient operation of the Agency's IT systems and the satisfaction of the users and the development of Agency policy and long-rang plans.

Factor 5-5 Scope and Effect (325 pts)

Work involves originating ideas for the projects at the individual and at the group of departmental level. The analyses conducted or facilitated by the incumbent often have impact that extends beyond the immediate organization. Work may provide the scientific, quantitative, and qualitative basis for critical Agency decisions, policy, and subsequent regulatory actions; influences the direction and scope of studies conducted by partners and other organization; answers important questions about Agency programs or operations; opens significant new avenues for further study; or results in important changes to existing or proposed systems. Results of the work are critical to the mission of the Agency and affect large numbers of people on a long term, continuing basis. The work of the position effects other experts in ORD; development of Federal policy; and program mission, performance, and necessity.

Factors 6 & 7 (3-C) Personal Contacts and Purpose of Contacts (180 pts)

Personal contacts are with a wide variety of executive, managerial, and operational personnel across a range of federal agencies as well as managers and employees of businesses and organizations involved in program planning, implementation, and evaluation, such as contractors and academic institutions. Contacts also include national, state, and local professional organizations, consultants, and business executives. Powers of persuasion, awareness and tact are essential to problem recognition and resolution, as is appreciation of various responsibilities facing officials with whom the incumbent is collaborating with.

Contacts include those that take place at frequent meetings and conferences, briefing, presentation, and professional symposia. Prepares and delivers written reports and oral presentations, e.g., briefings, training sessions, and consultations. Regularly provides authoritative advisory discussions with command and Agency leadership, supervisors, customers, and co-workers and conducts or leads conferences as an expert representative of the organization and command. Attends meetings, conferences, briefings, and seminars related to data science, advanced data storage technologies, and statistical and analysis support system concepts. They often require extensive preparation of briefing materials and up to date technical familiarity with complex subject matters.

The incumbent recommends involvement with respect to potentially controversial projects and activities related to data collection and sharing and provides technical assistance and mentoring to the Agency. Participates in meetings to influence and persuade on problems or issues of considerable importance to the activities of the Agency and deals effectively with persons or organizations with intense opposition or significant philosophical conflict.

Factor 8-1 Physical Demands (5 pts)

The work is primarily sedentary and does not require any special physical effort.

Factor 9-1 Work Environment (5 pts)

Work is performed in typical office environment that poses everyday risks or discomforts, and which requires normal safety precautions typical of offices or meeting rooms.

Other Significant Factors

Customer Service

Meets the needs of customers while supporting VA missions. Consistently communicates and treats customers (veterans, their representatives, visitors, and all VA staff) in a courteous, tactful, and respectful manner. Provides the customer with consistent information according to established policies and procedures. Handles conflict and problems in dealing with the customer constructively and appropriately.

ADP Security

Protects printed and electronic files containing sensitive data in accordance with the provisions of the Privacy Act of 1974 and other applicable laws, federal regulations, VA statutes and policy, and VHA policy. Protects the data from unauthorized release or from loss, alteration, or unauthorized deletion. Follows applicable regulations and instructions regarding access to computerized files, release of access codes, etc., as set out in the computer access agreement that the employee signs.

Total Points: 3690
GS-14 Point Range: 3605-4050

FLSA EXEMPTION WORKSHEET

Employee Name: _____

Position Title/Pay Plan/Series/Grade: _Data Scientist, GS-1560-13T14_____

Position Number/Agency/Unit: _____

SPECIAL SITUATIONS (Entire groups of employees/positions considered nonexempt)

☐ Annual rates of basic pay less than $23600

☐ Equipment operating or protective occupations

☐ Clerical occupations

☐ Technician work below GS-9

☐ Technician at GS-9 or above, where purpose of job is to support, not create

☐ Federal Wage System (or comparable systems), non-supervisory

☐ Position requires lengthy technical training, specialized skills, e.g., Air Traffic Control, Aircraft Operation

If **any of above boxes** are checked, position is nonexempt and Specific Exemption criteria need not be considered.

Notes:

SPECIFIC EXEMPTIONS (If employees/positions meet the criteria below they are FLSA exempt)

Review criteria for each of three categories below—Executive, Administrative, Professional—to determine if employee/position should be considered exempt from the FLSA. Failure to meet the criteria for what could be considered the most appropriate category does not preclude exemption under another category.

Executive Exemption (5 CFR 551.205)

☐ Primary duty is to manage a federal agency or any subdivision thereof.

☐ Employee customarily and regularly directs the work of two or more other employees. Does not include those who merely assist the manager or supervise in the manager's absence.

☐ Employee has authority to hire or fire other employees

OR

Particular weight is given to employee's suggestions/recommendations on hiring, firing, advancement, promotion or other changes in employee status. Consider:

- Whether it is part of the employee's job duties to make suggestions/recommendations
- Whether suggestions/recommendations are made and listened to on a regular, recurring basis

If **all of above boxes** are checked, position is exempt (not covered) under the Executive Exemption.

Notes:

Administrative Exemption (5 CFR 551.206)

☐ Primary duty is the performance of office or non-manual work directly related to the management or general business operations of the employer/employer's customers

☐ Primary duty requires the exercise of discretion and independent judgment on matters of significance. Must be *more* than skill in applying well-established techniques, procedures, or standards. Consider intent for the position with regard to whether the employee:

- Has authority to make independent choices free from immediate direction or supervision in:
  - Formulating, affecting, interpreting, or implementing management policies, operating practices
  - Committing the employer in matters with significant impact
  - Waiving or deviating from established policies/procedures without prior approval
  - Negotiating/binding the organization on significant matters
- Carries out major assignments in conducting organizational operations
- Performs work that affects operations to a substantial degree
- Provides consultation or expert advice to management
- Is involved in planning long- or short-term organization objectives
- Investigates and resolves significant matters on behalf of management
- Represents the organization in handling complaints, arbitrating disputes, or resolving grievances

If **all of the above boxes** under Administrative Exemption are checked, position is exempt (not covered) by the FLSA.

Notes:

Professional Exemptions (5 CFR 551.276)

Primary duty must be the performance of work requiring knowledge of an advanced type in a field of science or learning customarily acquired by a prolonged course of specialized intellectual instruction or requiring invention, imagination, originality, or talent in a recognized field of artistic or creative endeavor.

Learned Professionals (5 CFR 551.208)

Primary duty must be the performance of work requiring:

☑ Advanced knowledge (cannot be attained at the high school level). Work:

- Is predominately intellectual in character
- Requires consistent exercise of discretion and judgment
- Uses advanced knowledge to analyze, interpret, or make deductions from varying facts/circumstances

☑ Field of science or learning includes:

- Traditional professions of law, medicine and pharmacy, theology, accounting, engineering and architecture, teaching, various types of physical, chemical, and biological sciences
- Similar occupations with a recognized professional status (distinguished from mechanical arts or skilled trades)

☑ Prolonged course of specialized intellectual instruction, where specialized academic training is a standard prerequisite for entrance into the profession

- Possession of appropriate academic degree

- Appropriate for employees who have same knowledge level and perform substantially same work but who attain advanced knowledge through *combination* of work experience and academic instruction

*If **all of the above boxes** under Learned Professionals are checked, position is exempt (not covered) by the FLSA.*

Notes:

Creative Professionals (5 CFR 551.209) _____

☐ Primary duties must be work performance requiring invention, imagination, originality, or talent in a recognized field of artistic or creative endeavor

☐ For media work, must involve more than collection, organization, and recording of information that is routine or already public or if they do not contribute a unique interpretation or analysis to a news product

*If **all of the above boxes** under Creative Professionals are checked, position is exempt (not covered) by the FLSA.*

Notes:

Computer Employees (5 CFR 551.210) _____

☐ Computer systems analysts, computer programmers, software engineers, or other similarly skilled workers in the computer field. Does not include employees:

- Engaged in the manufacture or repair of computer hardware and related equipment

- Whose work is highly dependent on or facilitated by computers and/or computer software but not primarily engaged in systems analysis and programming or other similarly skilled computer-related occupations.

*If **all of the above boxes** under Computer Employees are checked, position is exempt (not covered) by the FLSA.*

Notes:

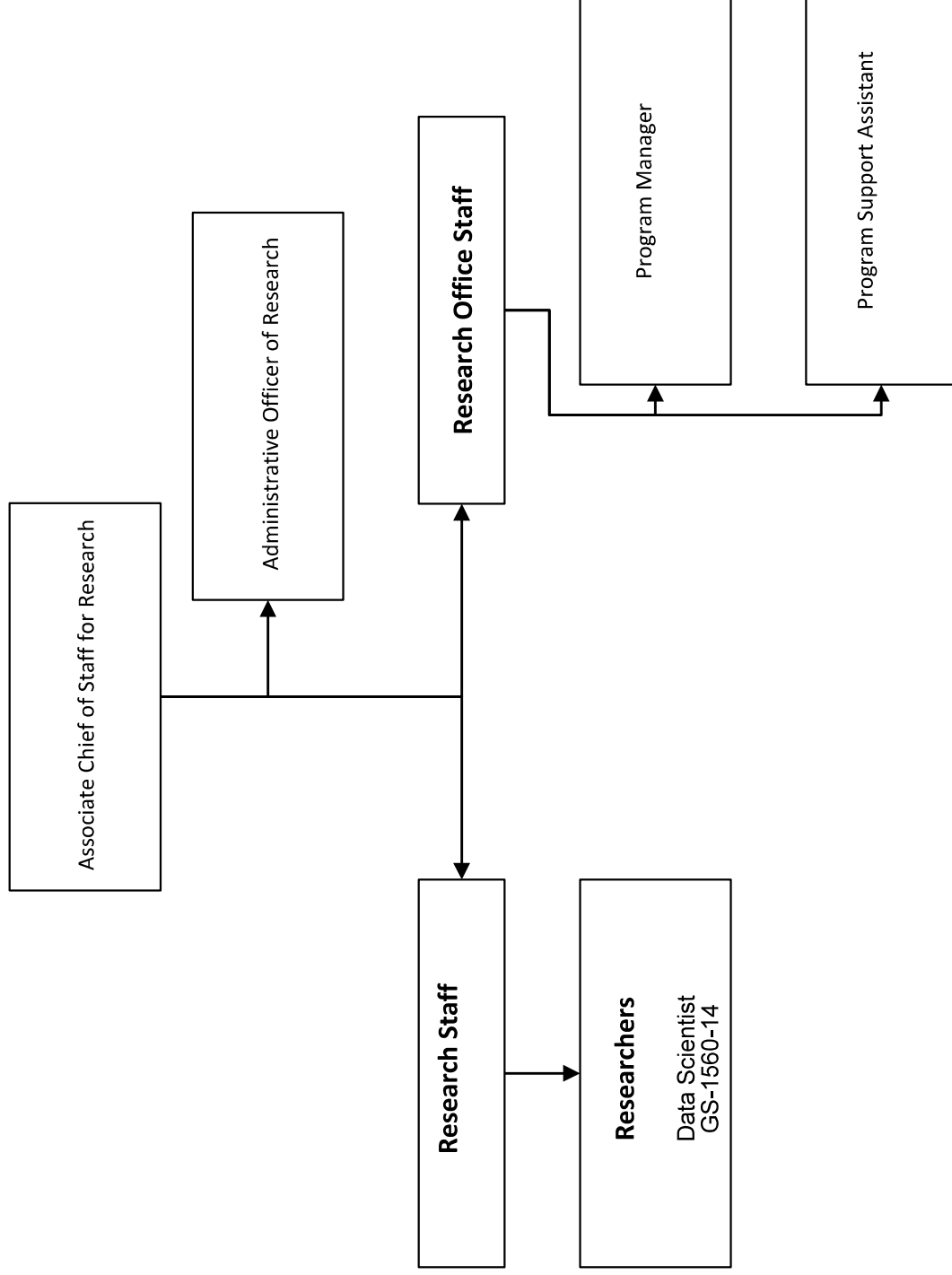Final Determination of FLSA-Exemption Status: ☑ Exempt ☐ Nonexempt

If exempt determination made, which criteria used? 5 CFR 551.208

Name/Title of Decisionmaker: Brian Penz Brian Penz Digitally signed by Brian Penz
Date: 2022.09.28 15:48:10 -04'00'

Date of Determination: 09/28/2022

Research and Development Service Line Standardization Model

Associate Chief of Staff for Research

Administrative Officer of Research

Research Office Staff

Program Manager

Program Support Assistant

Research Staff

Researchers

Data Scientist
GS-1560-14

Eddie S. Walker
231666

Digitally signed by Eddie S.
Walker 231666
Date: 2022.09.28 07:46:55 –05'00'

Director, Workforce Strategy &
Standardization