

# UW HEALTH JOB DESCRIPTION

## Data Management Principal

Job Code: 340017	FLSA Status: Exempt	Mgt. Approval: J. Long	Date: February 2022
Department: Enterprise Analytics		HR Approval: N. Lazaro	Date: February 2022

### JOB SUMMARY

The Data Management Principal is constantly developing and maturing the overall UW Health data and analytics ecosystem. The Data Management Principal leverages a variety data management methodologies and technologies to construct a robust analytics ecosystem that enables the delivery of actionable, data-driven insights that answer healthcare's most important questions. The Data Management Principal leads the evolution of a modern data and analytics platform utilizing cloud-based technologies such as Azure and Databricks. The Data Management Principal advances disciplines such as analytics architecture, data engineering, DataOps engineering, and information delivery and may specialize in one or more of these areas.

The Data Management Principal is a technical leader within UW Health IS and across the UW Health system. The Data Management Principal is conscious of advancing the data management maturity of UW Health and defining and demonstrating how data management supports the organization's overall mission and vision. The Data Management Principal leads a strong community of data and DataOps engineers, data scientists, machine learning engineers, analytic consultants and other colleagues based on his/her area of expertise via training, mentoring, and quality assurance.

The Data Management Principal is accountable for key domains within the overall data and analytics architecture at UW Health and leads initiatives that execute the technical architecture and roadmap for data management.

### MAJOR RESPONSIBILITIES

#### Develop and Mature the Analytics Ecosystem

- Develop and design data management, delivery, and interoperability architecture, capabilities, and solutions within assigned domains in the UW Health analytics ecosystem
- Increase data management and information delivery maturity for UW Health. Define and lead key initiatives aligned with UW Health, IS, and Analytics strategies.
- Drive best practices and continuous improvement in one or more domains including data engineering, data operations engineering, analytics architecture, business intelligence and visualization, data sharing and data security.
- Assist in defining the analytics product portfolio, and support the team in the adoption of product management best practices
- Prescribe and optimize the use of cloud-native and third-party systems, services, and capabilities especially within Azure and Databricks
- Establish and monitor standards and related processes for analytics architecture, data engineering or DataOps practices
- Identify and execute opportunities for improvement and advancement of the analytics ecosystem
- Design, develop and deliver data pipelines that deliver curated, value-added data assets such as data marts and other purpose-built data stores. Ensure data pipelines are optimized, highly reliable, and contain low technical debt.
- Select and administer analytics platforms and repositories
- Advance the management and automation of end-to-end the provisioning of environments, data on data platforms, deployment, testing, release, security and monitoring processes.
- Design and implement data segmentation methodologies and associated security patterns
- Design and facilitate the SDLC process across the various analytic tools and environments
- Develop and implement standards to support data governance
- Develop and grow a community of colleagues across UW Health, SMPH and our partners to build increased competency in analytics architecture, data engineering and DataOps engineering
- Use knowledge of healthcare industry, market environment, and clinical and business workflows and activities, to inform solution design and development to execute original solutions in a problem space that is unique and critical to the organization
- Independently (with minimal oversight) develop and maintain trusted advisor relationships with business, clinical, and operations leaders at the senior leadership level and with external partners, that include guidance for optimizing use of analytic capabilities and deliverables, and prioritization based on strategic vision.
- Participate in on-call rotations as needed

#### Improve Processes and Standards

- Develop and improve technical standards while reducing unnecessary technical complexity.
- Lead improvement in agility within UW Health IS and across the organization
- Lead improvement initiatives for UW Health IS and across the UW Health system.
- Lead the development and delivery of training related to analytics architecture, data engineering and/or DataOps engineering.

#### Effective Team Member

- Collaborate with IS leader colleagues to drive continuous improvement within UW Health IS.
- Consistently demonstrate a very high level of teamwork, partnership and collaboration.
- Consistently demonstrate a very high level of personal accountability and lead by example in following policies and procedures.

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- Actively mentor and teach other colleagues (formally and informally) by contributing experience and insight to the team and to UW Health.

### Leadership

- Serve, where applicable, as the business relationship manager, delivery team leader, product manager or owner, or program leader for assigned areas and initiatives.
- Serve as a thought leader and advocate across IS for data literacy and data governance.
- Be a role model for successful cross-functional team leadership and leading without direct authority
- Hold team, EA and IS responsibilities and lead large-scale initiatives

### Technical Leadership

- Plan and lead cross-functional teams to execute key, large-scale deliverables according to technical roadmap, priorities, and architecture.
- Continuously develop the comprehensive knowledge and understanding of the overall landscape of analytics architecture, data engineering and DataOps engineering.
- Continuously curate and optimize the analytics asset repository including leading retirement projects of out-of-date assets, exploring new analytics technologies etc. to achieve efficiency and increase value delivered.

**ALL DUTIES AND REQUIREMENTS MUST BE PERFORMED CONSISTENT WITH THE UW HEALTH PERFORMANCE STANDARDS.**

### JOB REQUIREMENTS

Education	Minimum	Bachelor's Degree in Healthcare, Information Systems, Computer Science, Engineering, Business, Data Science or related field. (Four years relevant work experience may be considered in lieu of educational requirement)
	Preferred	Master's degree in Healthcare, Information Systems, Computer Science, Engineering, Business, Data Science or related field.
Work Experience	Minimum	<ul style="list-style-type: none"> <li>Demonstrated success delivering multiple, significant initiatives in any of the areas of analytics architecture, data engineering or DataOps engineering including design, implementation and on-going operations</li> <li>Demonstrated technical leadership in healthcare analytics industry</li> <li>Demonstrated success implementing new processes/techniques to advance analytics</li> <li>Demonstrated success leading and coordinating cross-functional delivery teams to achieve desired outcomes at the organization level</li> <li>Demonstrated success teaching and mentoring</li> </ul>
	Preferred	<ul style="list-style-type: none"> <li>One (1) year of experience in a technical leadership role</li> <li>Ten (10) years of relevant data analysis, analytics architecture, data warehousing, data engineering, or DataOps engineering experience</li> <li>Five (5) years of experience with Epic Cogito technologies (e.g. Epic Clarity, Epic Caboodle) or other data warehousing and data transformation technologies (e.g. Azure, Databricks, Informatica, etc).</li> <li>Three (3) years of experience in healthcare (provider or payer)</li> <li>Project management experience, including agile methods</li> </ul>
Licenses & Certifications	Minimum	<ul style="list-style-type: none"> <li>None</li> </ul>
	Preferred	<ul style="list-style-type: none"> <li>Epic certifications in Cogito or other subject area</li> <li>Relevant certifications related to data warehousing concepts and technologies, ETL development, or other pertinent areas of analytics.</li> <li>Relevant certifications to agile methodologies, ITIL, process improvement, lean management, or other related activities.</li> <li>Relevant certifications related to program and project management</li> </ul>
Required Skills, Knowledge, and Abilities	<u>Information Services (IS) Core Competencies:</u> Advanced proficiency in the following: <ul style="list-style-type: none"> <li>leadership competencies including leads with integrity, maintains strategic orientation, demonstrates business &amp; financial acumen, champions innovation, manages execution and leads &amp; develops people.</li> <li>technical leadership of applicable products or platforms</li> <li>leading without direct authority</li> <li>communication</li> <li>being an effective team member</li> <li>critical thinking</li> <li>mentoring and teaching</li> </ul>	

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	<p>Intermediate proficiency in the following:</p> <ul style="list-style-type: none"> <li>• ability in leading highly empowered, self-directed teams including cross-functional teams</li> <li>• applying lean management tools</li> <li>• applying agile methodologies</li> </ul> <p><u>Position Specific Competencies:</u>            Advanced proficiency in one of the following: Analytics Architecture, Data Warehouse Administration, or ETL.            Advanced proficiency in at least 2 and intermediate proficiency in at least 4 competencies such as:</p> <ul style="list-style-type: none"> <li>• Analytical Solutions Development</li> <li>• Analytics Architecture</li> <li>• Big Data</li> <li>• Data Modeling</li> <li>• Data Governance</li> <li>• Data Quality - Analysis &amp; Improvement</li> <li>• Data Querying</li> <li>• Data Stewardship &amp; Curation</li> <li>• Data to Information to Action</li> <li>• Data Warehouse Administration</li> <li>• Enterprise Automation</li> <li>• Enterprise Security, Privacy, &amp; Info Sharing</li> <li>• ETL</li> <li>• Metadata</li> <li>• Platform Administration</li> <li>• Project Management</li> <li>• Software Development Lifecycle (SDLC)</li> <li>• Strategic Technology Planning</li> <li>• Technology Awareness</li> <li>• Technological Leadership</li> <li>• Testing / Software Testing / QA</li> <li>• Web Services</li> </ul> <p><u>Other Required Skills, Knowledge, Abilities:</u></p> <p>Delivering Analytic and Data Management Solutions:</p> <ul style="list-style-type: none"> <li>• Multiple successful large analytic and/or data management initiatives, with significant role in development and implementation.</li> <li>• Demonstrates professional maturity surrounding data access, data security, data sensitivity and data confidentiality</li> </ul>
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### PHYSICAL REQUIREMENTS

**Indicate the appropriate physical requirements of this job in the course of a shift.** *Note: reasonable accommodations may be made available for individuals with disabilities to perform the essential functions of this position.*

Physical Demand Level	Occasional Up to 33% of the time	Frequent 34%-66% of the time	Constant 67%-100% of the time
<b>X Sedentary:</b> Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as docket, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	<b>Up to 10#</b>	<b>Negligible</b>	<b>Negligible</b>
<b>Light:</b> Ability to lift up to 10 pounds maximum and occasionally lifting and/or carrying such articles as docket, ledgers and small tools. Although a sedentary job is defined as one, which involves sitting, a certain amount of walking and standing is often necessary in carrying out job duties. Jobs are sedentary if walking and standing are required only occasionally and other sedentary criteria are met.	<b>Up to 20#</b>	<b>Up to 10#</b> or requires significant walking or standing, or requires pushing/pulling of arm/leg controls	<b>Negligible</b> or constant push/pull of items of negligible weight

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<b>Medium:</b> Ability to lift up to 50 pounds maximum with frequent lifting/and or carrying objects weighing up to 25 pounds.	<b>20-50#</b>	<b>10-25#</b>	<b>Negligible-10#</b>
<b>Heavy:</b> Ability to lift up to 100 pounds maximum with frequent lifting and/or carrying objects weighing up to 50 pounds.	<b>50-100#</b>	<b>25-50#</b>	<b>10-20#</b>
<b>Very Heavy:</b> Ability to lift over 100 pounds with frequent lifting and/or carrying objects weighing over 50 pounds.	<b>Over 100#</b>	<b>Over 50#</b>	<b>Over 20#</b>
List any other physical requirements or bona fide occupational qualifications:			