

VACANCY	
Job title:	Data Systems and Analytics Manager
Type:	Permanent ☒ Fixed Term ☐ Temporary ☐
Main purpose of the job:	To design, develop, manage, and continuously improve data systems, analytics, reporting, and automation solutions that support research and operational projects by ensuring data quality, integrity, accessibility, and actionable insights for effective decision-making.
Location:	57 Klein Street Hillbrow, Johannesburg
Closing date:	02 October 2026
Submit detailed CV to:	Vacancy34@wrhi.ac.za
Advert reference number:	RM01-2026
In accordance with our Employment Equity goals and plan, preference will be given to suitable applicants from designated groups as defined in the Employment Equity Act 55 of 1998 and subsequent amendments thereto.	

Key performance areas

Data Systems Design, Development and Management

Translate research and operational requirements into appropriate technical data solutions.

Design, develop, test, implement and maintain REDCap databases and other fit-for-purpose data systems.

Develop electronic forms, data structures, branching logic, calculated fields, validation rules and longitudinal workflows as required.

Configure and maintain appropriate user access and permissions.

Develop and maintain system specifications, data dictionaries and technical documentation.

Test and validate new systems and structural changes prior to implementation.

Maintain and enhance systems in response to project amendments and changing operational requirements

Programming, Automation and Systems Integration

Develop and maintain R scripts and other relevant programming solutions for data extraction, transformation, cleaning, validation, analysis and reporting

Develop reproducible and automated data-processing and reporting workflows.

Integrate REDCap and other project data sources with reporting, analytical and visualisation platforms.

Use SQL, APIs and other appropriate technologies to support data integration and automation.

Develop reusable scripts, tools and processes that can be applied across projects.

Apply appropriate testing, documentation and version-control practices.

Identify repetitive/manual processes suitable for automation and develop appropriate technical solutions.

Performance Analytics, Reporting and Decision Support

Develop and maintain interactive dashboards and automated management reports.

Develop cross-project and site-level comparative reporting where appropriate

Analyse performance against agreed targets, timelines and milestones.

Identify trends, exceptions, emerging risks, bottlenecks and areas of underperformance.

Develop forecasts and projections where appropriate

Conduct additional analysis to understand drivers of performance.

Translate complex data into clear, actionable information for management and project teams.

Data Quality, Validation and Research Data Integrity

Design and implement automated and manual data-quality controls.

Develop validation rules, edit checks and exception reports to identify missing, inconsistent or potentially erroneous data.

Develop and monitor data-quality indicators and trends.

Support project teams in investigating and resolving data-quality issues.

Identify systemic data-quality problems and recommend corrective or preventative solutions.

Ensure appropriate documentation and traceability of data transformations and system changes.

Support monitoring activities, audits and inspections as required.

Ensure data systems and processes comply with applicable protocols, SOPs, GCP, ethics, governance and data-protection requirements.

Technical Support, Innovation and Continuous Improvement

Participate in project planning and protocol development to advise on appropriate data capture, monitoring and reporting approaches.

Train and support users on REDCap, dashboards and other relevant data tools.

Develop appropriate user guides and technical documentation.

Proactively identify opportunities to improve existing databases, dashboards, reporting processes and analytical workflows.

Evaluate emerging technologies, analytical approaches and tools relevant to research and operational data management.

Develop innovative solutions to new project and portfolio requirements.

Promote standardisation and reusable solutions across projects where appropriate.

Collaborate with IT, Data Management, Biostatistics and other technical stakeholders as required.

Required minimum education and training

Bachelor's degree in Computer Science, Information Systems, Data Science, Health Informatics, Epidemiology.

Required minimum work experience

A minimum of 3 years' experience in data systems development, database management, analytics, reporting, and data quality management.

Demonstrated proficiency in Redcap, SQL, R programming, dashboard development, and database design.

Experience with public health/ health informatics or epidemiological datasets.

Desirable additional education, work experience and personal abilities

Enhanced Data Visualization.

Statistical Analysis.

Experience with clinical trials, healthcare, or regulated data environment will be advantageous.

Should you be interested in applying for this vacancy, please send an email to vacancy34@wrhi.ac.za. The subject heading of the email must read **RM01-2026** and the job title of position applying for. Please include the following documentation:

- A cover letter (maximum one page) that clearly states which vacancy you are applying for
- A detailed CV