

**UNIVERSITY OF OTAGO
ŌTĀKOU WHAKAIHU WAKA**

JOB DESCRIPTION

ROLE TITLE:	Systems Analyst / Developer
DEPARTMENT:	Paediatrics and Child Health - Dunedin
SCHOOL / DIVISION:	Faculty of Medicine – Dunedin
REPORTS TO:	NZMRDG Operations Director
DIRECT REPORTS (FTE):	Nil
INDIRECT REPORTS (FTE):	Nil

1. PRIMARY PURPOSE OF THE ROLE:

The Mortality Review information system is housed by the New Zealand Mortality Review Data Group (NZMRDG) and collates data from organisations and individuals to provide up-to-date, comprehensive information and websites for the National Mortality Review Committee | He Mutunga Kore (NMRC) under contract to the Health Quality & Safety Commission | Te Tāhū Hauora (HQSC). The NZMRDG also supports and participates in research activities relating to mortality data, public health and the wider health community.

The System Analyst is the technical expert responsible for maintaining an efficient, secure information management system. They also support NMRC, HQSC and research by providing appropriate custom design, delivery and management of project-specific databases and extracts, the import, cleaning and collating of health-related and other data and working with researchers to prepare data for analysis.

2. ACCOUNTABILITIES:

The main objectives of this position are:

- Ongoing design and development of the New Zealand Mortality Review information system and other projects.
- Manage testing and release implementation, including documentation.
- Be one of a team to provide technical support for the national mortality review network.

The key tasks of this position may include but are not limited to:

- Understand the existing mortality review information systems, health and other data collections.
- Ensure access to the data and systems is secure and compliant with legislation and University standards while meeting user needs.
- Investigate options and recommend improvements to fit the changing needs of users, and/or improve the configuration and performance of the web applications and MySQL database.
- Design, develop, maintain and enhance systems for managing the reporting requirements of the unit.
- Lead or work with the project leader to design and develop information system additions and upgrades that meet the data collection needs of mortality review system users.
- Lead or work with the project leader to design, develop and deliver project-specific databases and other technical solutions for principal investigators and others in health research.

Examples of specific projects may include:

- Redesign/rebuild aspects of the NMRC systems; build and implement the agreed design.
- Migration of existing systems to a new framework including redesign and build.
- Design, build and maintain secure sites for approved mortality review and other researchers.
- Ensure that all development work is fully documented.

The technical tasks of this position include but are not limited to:

- Be part of team to manage development and monitoring of the mortality review issue management system.
- Design and develop solutions for technical issues that arise.
- Provide technical support to the HQSC National Mortality Review Management Group and mortality review agents.
- Be part of team to manage development and monitoring of the mortality review issue management system.
- Be part of team to manage database servers and routine backups.
- Create and maintain documentation and specifications for all technical developments within the mortality review system. Documentation includes, but is not limited to, user requirements, data maps, systems specifications, test plans, and change control documentation.
- Perform regular audits of system usage.
- Provide feedback and reporting to colleagues as appropriate, and recommend changes to systems and processes.
- Be available to provide technical support to the Department as a whole.

The release management tasks of this position include but are not limited to:

- Develop and maintain distinct development, test, and production environments.
- Ensure that there is satisfactory complete system testing prior to releasing changes into production.
- Plan and schedule upgrades and configuration changes.
- Work with HQSC National Mortality Review Management Group to preview system changes.

The general tasks of this position include but are not limited to:

- Work as a team and provide backup for NZMRDG as necessary.
- Assist where possible with other research projects within the Department.
- Participate in Departmental activities, such as research group meetings, seminars and outings.

3. KEY RELATIONSHIPS:

Internal:

- Head of Department, Paediatrics & Child Health – Dunedin.
- Operations Director, NZ Mortality Review Data Group.
- New Zealand Mortality Review Data Group.
- University of Otago Information Technology Services (ITS) staff.
- Department of Paediatrics & Child Health – Dunedin staff.
- Faculty of Medicine – Dunedin staff.

External:

- External data suppliers, predominantly government ministries.
- HQSC National Mortality Management group members.
- Child and Youth Local Mortality Review Group Co-ordinators.
- Perinatal Mortality Rapid Reporters, Lead Maternity Carers and Local Co-ordinators
- Mortality Review agents and approved researchers

4. QUALIFICATIONS & EXPERIENCE:

Essential:

- A degree majoring in Computer or Information Science.
- Demonstrated experience in designing and developing web applications using PHP, Python, Javascript, MySQL and RedCap.
- Proficiency in writing and reviewing logical, clean and efficient code.
- Strong analytical skills, with a proven ability to analyse information needs and to propose and execute appropriate developments.
- A proven ability to plan and work within set timeframes.
- A professional, accountable, pro-active and strongly customer service-oriented approach.
- A proven ability to work effectively as part of a team.
- A proven ability to communicate clearly, concisely and effectively, both verbally and in writing.
- The ability to handle emotionally-challenging information with discretion, sensitivity and confidentiality.

Preferred:

- A proven ability to develop and maintain productive relationships with principal investigators and their research teams.
- Experience with Government and Health IT standards would be an advantage.

5. TECHNICAL SKILLS & KNOWLEDGE:

Essential:

- Experience in Python scripting.
- Knowledge of the New Zealand health sector, particularly health data collections, their associated datasets and health data coding.

Preferred:

- Proven success in national information systems design, systems development and systems support.

6. SPECIAL REQUIREMENTS:

N/A

7. DIRECT BUDGET ACCOUNTABILITY:

N/A

8. MĀORI STRATEGIC FRAMEWORK:

Act in a manner consistent with the principles and implications, as well as the University's commitment to the Treaty as articulated in the Māori Strategic Framework.

9. PACIFIC STRATEGIC FRAMEWORK:

Act in a manner consistent with the strategies and goals contained in the University's Pacific Strategic Framework, role-modelling and promoting Pacific values, equity and diversity principles and cultural safety practices.

10. HEALTH & SAFETY:

Act and work in a manner compliant with current health and safety at work legislation and University procedures, frameworks and guidelines. Role model safe behaviour and practices, share the responsibility to prevent harm and contribute to a safe campus and work environment, including raising workplace health and safety concerns for self, students, visitors and other staff.

11. SUSTAINABILITY:

Act in a manner consistent with the University's sustainability commitments; role-modelling sustainable practices, with a particular emphasis on minimising the environmental impact of day-to-day activities.

12. EQUITY AND DIVERSITY:

Act in a manner consistent with the University's commitment to anti-racism and the co-creation of accessible, safe, respectful, and welcoming environments where all students and staff are supported to achieve their full potential.