



SFI Public Service Fellowship 2023

1. Name of Governmental Department or Agency

National Health Service Improvement Team, Public Health, Health Service Executive.

2. Title of the Project

HSE2 Dashboard Design for HSE Quality Improvement Reports.

3. **Description of the Project**

The National Health Service Improvement Team will work in partnership with HSE Operations teams, patient partners and other internal and external partners to enable health services to deliver high quality of care. Good improvement efforts are built on good information but currently people working in services find it difficult to both access and analyse the data that will inform their improvement efforts.

This project aims to produce information that:

- 1. Uses available healthcare data to measure healthcare quality.
- 2. Addresses quality concerns.
- 3. Learns from instances of good quality in the Irish Healthcare System.

The project will establish dashboards that analyse and display quality and operational data from multiple different datasets in one place so that stakeholders across the health and social care system can maximize their insights on the quality of services. These stakeholders will include the Department of Health, regulators, academics, the public, the press, patients, service users, front line staff, health service managers, QPS leads, national executives and the Health Service Executive Board.

The goal of establishing these dashboards is to improve the quality of patient care, by providing access to the right information to understand the quality of services provided, and thereby enable the Health and Social Care System to improve this care when and where needed.

4. Project Scope

The successful applicant will work on the UI/UX design of PowerBI dashboards for Quality Improvement reports. This will include:

- Development of Design Principles and Guidelines for dashboards in line with best practice
- Development of UX/UI engagement strategy for users
- Gathering user requirements
- Illustrating user requirements through the development of personas to capture the user journey or similar methods



- Illustrating design ideas to meet user needs via production of storyboards, process maps or similar methods
- Researching the appropriate visualisation for measures
- Developing UI mockups and prototypes in PowerBI that clearly illustrate how dashboards function and appear; to include
 - Visualisation of analytics
 - o Interactive design elements
 - o Navigation
- Testing and refinement of dashboard prototypes/layouts based on user feedback.
 Dashboards may include
 - Static Reports
 - Interactive Dashboards
 - Visualisations of narrative data

This research fellowship offers the following opportunities:

- Involvement with the design, development, testing and implementation of dashboards that have the capacity to improve and optimise quality of care in the Irish Healthcare Service.
- Work and collaborate with a diverse team of researchers and clinicians regarding the development of dashboards.
- Develop research skills in UI/UX methodology.
- Engage with academic stakeholders in the field of health service improvement, health intelligence and quality and patient safety.
- Opportunity to public peer reviewed publications.

5. Skills/Expertise Required

Required:

- Research or service experience in UI/UX design for data analytics (dashboards), ensuring delivery of a system that is fit for purpose for diverse users
- Expertise in eliciting the needs of users for purpose driven design
- Expertise in the testing of design with user groups
- Experience in creating prototypes or wireframe dashboard design
- Experience in visualisation design/selection for the display of data
- Excellent Communication Skills (Oral, Written, Presentation etc.) in order to liaise effectively with stakeholders in the research project.
- Excellent organisational and administrative skills including a proven ability to work to deadlines.
- Experience in setting own research agenda.
- Demonstrated understanding of operational requirements for a successful research project and managing resources.
- Evidence of research activity (publications, conference presentations) and future scholarly output (working papers, research proposals and ability to outline a research project).

Desirable but not a requirement:

• Previous research experience in healthcare.



- Previous experience in the realm of health care quality improvement.
- Expertise in the assessment of user acceptance, readiness and capability to adopt new systems.
- Experience working within a multi-disciplinary research team.
- Expertise in quantitative and/or qualitative research methodologies.

6. Expected Outputs of Project

- Design Principles and guidelines for Quality Improvement Dashboards
- User Personas or Similar
- UX/UI engagement strategy
- Recommendations for appropriate visualisations of measures within Quality Improvement Reports
- Iterative Porotypes/Wireframes of dashboards, based on user requirements
- Development of a best-fit dashboard for each user group

7. Working Arrangements

The placement will be located at the Health Service Improvement Team at Stewarts Hospital, Palmerstown, Dublin. Hybrid working such as remote and in office working will be accommodated.

8. Expected Timeline

The researcher would be expected to be involved with this project on a full or part time basis over a period of 12/24 months respectively.

9. Contact Details

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