

Research Proposal Outline

Project Title: Cyber Threat Detection in Medication Safety Analysis

Significance/Contribution to the discipline/Research Problem (200 words)

- Strengthens the reputation of cybersecurity and health organisations
- Contributing to medical research in the health industry
- Protects future patients and prevents victims

Research Question (100 words)

- How has the implementation of cybersecurity techniques such as cyber threat detection techniques (e.g. vulnerability scanning) contributed towards analysing the safety of medication in health organisations (e.g. hospitals) and what are key gaps in the use of cybersecurity technology in the future of health industry?

Aims and Objectives (200 words)

- Evaluate the existing body of literature that explores the implementation of cyber threat detection in medication safety analysis.
- Examine the strengths, limitations, and gaps in the current research
- Effectiveness and potential challenges of integrating cybersecurity detection techniques into the digital medical system, specifically in the area of analysing the safety of medications

Key literature related to the project (400 words)

- Cyber threat detection – cyber vulnerabilities and exposures
- Tech use in medical systems
- Medication safety

Methodology/Development strategy/Research Design (400 words)

- Secondary quantitative and qualitative analysis

**Ethical considerations and risk assessment (as part of ethical approval application)
(300 words)**

- GDPR
- HIPAA

Description of any applicable artefact(s) that will be created (200 words)

- Coded qualitative analysis data

Timeline of proposed activities (200 words)

- Gantt chart detailing phases
 - Phase 1: Data collection
 - Phase 2: Data analysis / synthesis
 - Phase 3: Report write-up

References