# **Literature Survey**

#### Introduction

The healthcare landscape is evolving rapidly, with an increasing emphasis on improving patient care and optimising operational efficiency. CURA Healthcare Services recognizes the importance of effective drug classification and scheduling/appointment systems in ensuring seamless healthcare delivery.

This literature survey aims to explore existing studies, articles, and publications related to drug classification, scheduling/appointment systems, and their interplay within healthcare settings. By examining the strengths, weaknesses, and gaps in current systems, as well as drawing insights from previous drug classification projects, this survey seeks to inform the design and implementation of an advanced system for CURA Healthcare Services.

## **Drug Classification**

- 1. Overview of Drug Classification:
  - Investigate existing literature providing a comprehensive overview of drug classification systems.
  - Identify different methodologies and criteria employed in drug categorization.
  - Analyse the effectiveness and limitations of current drug classification models.
- 2. Integration of Artificial Intelligence (AI) in Drug Classification:
  - Explore studies that leverage AI and machine learning techniques for drug classification.
  - Assess the accuracy, scalability, and adaptability of AI-driven drug classification models.
  - Examine the potential benefits and challenges associated with integrating AI into healthcare drug classification systems.
- 3. Regulatory Compliance and Drug Scheduling:
  - Review literature pertaining to regulatory frameworks governing drug scheduling.
  - Investigate how healthcare institutions navigate compliance challenges in drug scheduling.
  - Identify key considerations for integrating regulatory compliance into drug classification systems.

## **Scheduling/Appointment Systems**

- 1. Current Models of Scheduling/Appointment Systems:
  - Examine existing scheduling and appointment systems in healthcare settings.
  - Evaluate the strengths and weaknesses of prevalent models.
  - Investigate patient and provider perspectives on current scheduling practices.
- 2. Technology Integration in Scheduling Systems:
  - Explore literature on the integration of technology, such as mobile applications and online platforms, in scheduling systems.
  - Analyse the impact of technology on improving accessibility, efficiency, and patient satisfaction in healthcare scheduling.
- 3. Optimization Strategies for Scheduling Systems:
  - Investigate methods and techniques employed to optimise scheduling systems.
  - Assess the effectiveness of predictive analytics and data-driven approaches in improving appointment management.
  - Identify challenges and potential solutions in optimising scheduling for healthcare services.

#### **Bridging the Gap and Future Directions:**

- 1. Identified Gaps in Current Knowledge:
  - Summarise the gaps and limitations identified in current drug classification and scheduling/appointment systems.
  - Highlight areas where improvements and innovations are needed.
- 2. Recommendations for CURA Healthcare Services:
  - Synthesise findings to provide actionable recommendations for enhancing drug classification and scheduling/appointment systems at CURA Healthcare Services.
  - Propose a roadmap for the implementation of cutting-edge technologies and methodologies based on the literature review.

#### Conclusion

This literature survey serves as a foundational exploration of the current state of drug classification and scheduling/appointment systems in healthcare. The survey aims to inform the design and implementation of an advanced system tailored to the unique needs of CURA Healthcare Services, fostering improved patient care and operational efficiency.