MANIKAM RAMASWAMI COLLEGE OF ARTS AND SCIENCE

BACHELOR OF DATA SCIENCE AND ANALYTICS

BY

A.Aishwarya Suruthi (C3S48852)

UNDER THE SUPERVISION OF Dr. K.P. SUBIKSHA DURATION: 18.06.24 – 26.06.24

Acknowledgement

I would like to express my sincere gratitude to everyone who supported and contributed to my internship experience. Firstly, I extend my heartfelt thanks to for providing me with this valuable opportunity to gain practical experience. The knowledge and skills I have acquired during this internship have been immensely beneficial.

I am particularly grateful to my supervisor Dr. Subiksha, for their guidance, support, and encouragement throughout the duration of my internship. Their expertise and patience were invaluable in helping me navigate and learn from various challenges.

My special thanks to the college for providing me this internship opportunity.

Content

- Introduction
- Health care data collection at community health care
- Key activities
- Skills developed
- Challenges faced
- Contributions made

Introduction:

The Health Care Data Collection Project at the Community Health Centre aimed to gather comprehensive health data from patients to improve the quality of care and inform future health initiatives. This report highlights the key activities undertaken, skills developed, challenges faced, and contributions made during the project.

Key Activities:

The project began with thorough planning and preparation. We developed clear project objectives and goals, designed data collection tools and questionnaires, and conducted training sessions for staff and volunteers on data collection methods. The data collection phase involved conducting interviews and surveys with patients, gathering detailed information on demographics, medical history, and current health status. Ethical considerations were paramount, ensuring that patient confidentiality was maintained throughout.

Data management was another critical activity. Collected data was entered into a secure database, which was regularly updated and maintained to ensure data integrity. Rigorous data quality checks were implemented to identify and correct errors. The data analysis phase involved using statistical tools to interpret the data and generate meaningful reports. Collaborating with healthcare professionals helped contextualize the findings. Finally, we prepared detailed reports summarizing key findings and presented data insights to the Community Health Centre staff and stakeholders, providing actionable recommendations based on the analysis.

Skills Developed:

Throughout the project, various skills were honed. Data collection and management skills were significantly enhanced, with proficiency developed in designing and administering surveys, using data entry and management software, and maintaining data accuracy and integrity. Analytical skills were also strengthened, with experience gained in statistical analysis and interpretation of health data, effective use of analytical tools and software, and problem-solving related to data challenges. Communication skills were improved as well, with better patient interaction for accurate information collection, effective presentation of data findings to non-technical audiences, and enhanced report-writing skills to clearly convey project outcomes.

Challenges Faced:

Several challenges were encountered during the project. Patient engagement was a significant hurdle, as many patients were either reluctant or too busy to participate in surveys. Building trust and explaining the project's importance helped overcome this challenge. Ensuring data accuracy was another issue, with human error during data entry being a primary concern. This was addressed through rigorous quality checks and validation procedures. Resource limitations in terms of staff and technology impacted data collection efficiency, necessitating optimization of existing resources and seeking additional support. Managing patient privacy and data confidentiality was crucial, leading to the establishment of strict data handling protocols to protect patient information.

Contributions Made:

The project's contributions were substantial. It led to improved patient care by providing valuable insights into patient health trends, enabling the Community Health Centre to

tailor healthcare services more effectively. Informed decision-making was facilitated by a data-driven foundation for policy development and resource allocation. The project also contributed to capacity building, with staff and volunteers trained in data collection and analysis techniques, and a sustainable data management system established for future projects. Additionally, it fostered stronger relationships between the Community Health Centre and the local community, raising awareness about the importance of health data in improving care quality.

Conclusion:

The Health Care Data Collection Project at the Community Health Centre was a significant initiative that enhanced the understanding of patient health needs and improved service delivery. Despite facing challenges, the project successfully developed essential skills, contributed to better patient care, and informed strategic decision-making. The lessons learned and the data collected will continue to benefit the Community Health Centre and the broader community.