The topic and title should be acute exacerbation of chronic bronchitis (AECB). The research should show the effort that has direct effect on the field of respiratory therapy. This may be through exploration of a specific pathology such as AECB. The successful capstone will focus and apply the various elements discussed throughout the program.

For example, inclusive in the capstone will be ethical considerations of the topic discussed. Answering and developing an ethical framework for your topic will be expected. This may be decisions of continuing care or the level of aggressive care, how the topic expresses and applies ethics to the outcome, or as a guarantor of equity.  There should also be an explanation of how the topic will be communicated to all the stakeholders of the initiative. An educational framework should be developed that conveys the essential elements of the proposed topic or hypothesis. If applicable, there should be inclusion of any pharmacological interventions, nutritional aspects, further research, or developments. therapy such as airway maintenance, monitoring, and nutritional support should be included to effectively care for and treat the patient. Your topic should also explore the community impact of your outlined topic or hypothesis, such as how is the community affected, benefited, or safety ensured. Apply the necessitates associated with the topic as it applies to emergency operational plans and the outreach required for effective management. Consider how to advance your selected topic or hypothesis through critical thinking, clinical judgement, and/or evaluative skills, or additional research.

Below are references with annotated bibliography used in the work...............
Price, D., Jones, R., Pfister, P., Cao, H., Carter, V., Kemppinen, A., ... & Mastoridis, P. (2021). Maximizing Adherence and Gaining New Information For Your Chronic Obstructive Pulmonary Disease (MAGNIFY COPD): Study Protocol for the Pragmatic, Cluster Randomized Trial Evaluating the Impact of Dual Bronchodilator with Add-On Sensor and Electronic Monitoring on Clinical Outcomes. Pragmatic and Observational Research, 12, 25.

The article by Prince et al. demonstrates that the leading cause of the disease burden across the globe is linked to Chronic Obstructive Pulmonary Disease (COPD). The source outlines that patients who are subjected to COPD experience exacerbations together with worsening symptoms that lead to hospitalization as well as disease progression. The author describes that inhaled therapies in COPD are effective in the reduction of symptoms, severity, and frequency of exacerbations, as well as leading to an improvement in the quality of life for the exacerbating patients. The source also illustrates that having poor adherence to inhaled therapy medications contributes to problems in COPD patients. Non-adherence to inhaled treatment contributes to the reduction of health-related quality of life for the patients. The source also describes the significance of having a dual action bronchodilation by incorporating a steroid with the aerosolized treatment.

McKechnie, T., Dabaja, A. A., Illg, Z., Fourtounis, J., Stoyak, B., Biringer, K., ... & McKeown, T. (2019). Assessment of Provider Compliance Using an ED Protocol to Improve Care of COPD.

McKechnie et al. discuss the topic of the assessment and compliance using the Emergency Department (ED) for the improvement of care of Chronic Obstructive Pulmonary Disease (COPD). The article illustrates that the concept of controlling COPD determines the outcome of the patient’s overall health. This is highlighted by the fact that poorly controlled COPD can contribute to high patient mortality and morbidity rates with it having issues involving financial burden on the health care sector. The article also demonstrates that the management of COPD patients leads to improved health care outcomes together with having reduced hospital admission that will lead to reduced costs. The source also describes Respiratory Therapy Driven Protocol’s (RTDP’s) as an effective approach for the assessment of the use of medication for patients together with enrollment in the outpatient COPD program. The article illustrates that the program enables improved emergency departments as well as excellent management of outpatient patients' chronic obstructive pulmonary disease.

Shah, P., McWilliams, A., Howard, D., & Roberge, J. (2019). A comparison of methodologies for the real-time identification of hospitalized patients with acute exacerbations of COPD. International Journal of Chronic Obstructive Pulmonary Disease, 14, 693.

This source by Shah et al. focuses on the comparison of methodology of real-time to identify patients hospitalized with acute exacerbations of COPD to ensure that effective measures are taken for the control of chronic diseases. The article highlights that COPD presents with irreversible airway obstruction that will lead to acute exacerbations of COPD. This source outlines the incorporation of methodologies that are based on proactive innovations that enhance care delivered to at risk populations to ensure that there are improved outcomes. A data-driven model is described by the source as an essential methodology for the identification of patients with COPD during their admission to the hospital. The article illustrates the significance of a testing model and how it performs on local data in healthcare as it contributes to the improvement in the quality-of-service delivered to COPD patients.

Siddharthan, T., Pollard, S. L., Jackson, P., Robertson, N. M., Wosu, A. C., Rahman, N., ... & Kirenga, B. (2021). Effectiveness of low-dose theophylline for the management of biomass-associated COPD (LODOT-BCOPD): study protocol for a randomized controlled trial. Trials, 22(1), 1-9.

Siddharthan et al. describe the source involving the topic based on the way the management of biomass-associated COPD can be effective through low-dose theophylline. The source describes COPD as a leading cause of death across the globe, in which most of the mortality and morbidity rates occurs in low-income countries. The article also demonstrates that tobacco smoking contributes to COPD in high-income settings affecting the individuals living in those areas. The sources define that the use of an inhaler for COPD is usually unavailable and cannot be afforded in low-income countries. It is recommended from the source that the application of low-dose theophylline is effective in the care of patients from low-income countries. The article outlines that low-dose Theophylline is an essential therapy for the management of biomass-associated COPD due to its efficacy and cost-effectiveness in low-income settings. The source is important since it demonstrates the management of COPD with cost-effectiveness and efficacy in low-income countries establishing the therapy as significant for curbing exacerbations.