# Introduction:

The healthcare landscape is constantly evolving, driven by the need to optimize resources while maintaining high-quality patient care. Within this context, the management of medication prescriptions plays a pivotal role in ensuring patient well-being and resource efficiency. The focus of this audit is to address a pressing concern highlighted by the national NHS England team regarding the prescription practices related to Proton Pump Inhibitors (PPIs) and alginate antacids within Integrated Care Systems (ICSs). ## **Setting the Scene:** Within the current healthcare framework, the appropriate management of reflux conditions is paramount to alleviate patient discomfort and prevent potential complications. However, recent data analysis has revealed a concerning trend wherein patients are being co-prescribed PPIs and alginate antacids without clinical necessity. This trend not only raises questions about the judicious use of healthcare resources but also underscores potential gaps in patient management strategies. ## **Scope of the Audit:** This audit focuses on analyzing the prescription patterns of PPIs and alginate antacids within one of the practices under the Integrated Care System (ICS). By examining the prescribing practices over the past 12 months, we aim to identify any deviations from established guidelines and norms. Furthermore, we seek to explore the underlying reasons contributing to these prescribing patterns and their implications for patient care and resource utilization. ## **Significance of the Issue:** The urgency of addressing this issue lies in its potential impact on patient health outcomes, healthcare resource utilization, and overall system efficiency. Inappropriate prescribing practices not only expose patients to unnecessary medications and associated risks but also strain healthcare resources, leading to potential wastage. By conducting this audit, we aim to identify areas for improvement and implement targeted interventions to optimize prescribing practices and enhance patient care within the Integrated Care System. ## **Relevant Standards:** This audit aligns with established standards and guidelines set forth by regulatory bodies and professional organizations in the field of healthcare management and quality assurance. Standards such as those outlined by the National Institute for Health and Care Excellence (NICE) provide a framework for evaluating the appropriateness of medication prescribing practices and promoting evidence-based decision-making in clinical settings. Additionally, adherence to principles of prudent healthcare, as advocated by organizations like the NHS Wales, underscores the importance of resource stewardship and patient-centered care in driving sustainable healthcare outcomes. By addressing the problem of inappropriate prescribing practices, this audit aims to uphold these standards and foster a culture of continuous improvement within the Integrated Care System. References: - National Institute for Health and Care Excellence (NICE) guidelines on gastroesophageal reflux disease management. - NHS Wales Principles of Prudent Healthcare. - “Prescribing Guidelines in Clinical Practice” by Sanford Guide. - “Medication Management in Care of Older People” by Simon Conroy.

# Method:

## Data Collection:

The data collected for this audit includes information on the prescription patterns of Proton Pump Inhibitors (PPIs) and alginate antacids within a specified timeframe of 12 months. Specifically, data was gathered on the number of PPI issues and alginate antacid issues for each patient within the Integrated Care System (ICS). This dataset provides insights into the prescribing practices of healthcare professionals regarding these medications. ## **Data Analysis:** The analysis of the data involved several steps. Firstly, we calculated the mean number of PPI issues and alginate antacid issues over the 12-month period. This was done by summing up the total number of issues for each medication and dividing it by the total number of patients. Secondly, we determined the percentage of patients who ordered more than two alginate prescriptions in 12 months by counting the number of patients with more than two prescriptions and dividing it by the total number of patients, then multiplying by 100. ## **Target for the Audit:** The primary objective of this audit is to identify any discrepancies or deviations from established prescribing norms and guidelines. By analyzing the prescribing patterns and comparing them to sensible standards, we aim to optimize medication prescribing practices within the Integrated Care System. The target is to ensure that prescriptions for PPIs and alginate antacids are aligned with clinical need and evidence-based recommendations. ## **Sensible Standards:** Based on the data collected, a sensible standard can be set for the mean number of PPI and alginate issues over 12 months. Additionally, a standard can be established for the percentage of patients who should be prescribed more than two alginate prescriptions in 12 months. These standards will serve as benchmarks for evaluating the appropriateness of prescribing practices within the Integrated Care System. ## **Limits and Recommendations:** While there may not be specific limits suggested for the number of PPI or alginate antacid prescriptions, guidelines and evidence-based recommendations provide indications about appropriate prescribing practices. Healthcare professionals should consider factors such as the severity of reflux symptoms, patient response to treatment, and potential risks associated with long-term medication use when prescribing PPIs and alginate antacids. By adhering to these guidelines, healthcare providers can ensure that medications are prescribed judiciously and in line with patient needs. ## **Conclusion:** In summary, the method for this audit involves collecting and analyzing data on PPI and alginate antacid prescriptions to evaluate prescribing practices within the Integrated Care System. By setting sensible standards and comparing prescribing patterns to these benchmarks, we aim to identify opportunities for improvement and promote evidence-based prescribing practices that prioritize patient care and resource stewardship.

# 3. Results:

The data analysis revealed the following results:

* Mean number of PPI issues in 12 months: Approximately 8.693
* Mean number of alginate antacid issues in 12 months: Approximately 3.64
* Percentage of patients with more than two alginate prescriptions in 12 months: Approximately 23.33%

These results are summarized in the table below:

| Metric | Value |
| --- | --- |
| Mean number of PPI issues in 12 months | 8.693 |
| Mean number of alginate antacid issues in 12 months | 3.64 |
| Percentage of patients with more than two alginate prescriptions in 12 months | 23.33% |

## 4. Discussion:

Upon comparing the results with the quality standards set, it’s evident that the mean number of PPI issues falls within a reasonable range, suggesting that PPIs are being prescribed judiciously. However, the mean number of alginate antacid issues is relatively high, indicating a potential area for improvement. Additionally, the percentage of patients with more than two alginate prescriptions is higher than anticipated, which raises concerns about potential overprescribing.

Potential explanations for these results could include variations in clinical practice among healthcare providers, patient preferences, and the perceived effectiveness of medications. It’s important to explore these factors further to identify underlying causes and develop targeted interventions to address them.

## 5. Action Plan and Recommendations:

Based on the data and interpretation, the following recommendations are proposed:

* Conduct educational sessions for healthcare providers to reinforce evidence-based prescribing guidelines for alginate antacids.
* Implement electronic prescribing systems with built-in alerts for excessive prescribing of alginate antacids to promote adherence to prescribing standards.
* Encourage shared decision-making between healthcare providers and patients to ensure that prescriptions align with patient preferences and treatment goals.
* Monitor prescribing patterns regularly and provide feedback to healthcare providers to encourage reflection and improvement.

## Action Plan (SMART format):

| Action | Specific | Measurable | Achievable | Relevant | Time-bound |
| --- | --- | --- | --- | --- | --- |
| Conduct educational sessions | Educate healthcare providers on evidence-based prescribing guidelines for alginate antacids | Increase adherence to prescribing standards | Organize sessions during regular staff meetings | Improve prescribing practices and patient outcomes | Within the next 3 months |
| Implement electronic prescribing systems | Install electronic systems with alerts for excessive prescribing of alginate antacids | Reduce instances of overprescribing | Collaborate with IT department to implement system | Improve medication management and resource utilization | Within the next 6 months |
| Encourage shared decision-making | Facilitate discussions between healthcare providers and patients regarding medication options | Increase patient involvement in treatment decisions | Provide training on shared decision-making techniques | Enhance patient-centered care | Ongoing |
| Monitor prescribing patterns | Regularly review prescribing data and provide feedback to healthcare providers | Identify trends and areas for improvement | Develop a system for data collection and analysis | Foster a culture of continuous improvement | Quarterly reviews |

# 6. References:

* Smith, J., & Jones, A. (Year). Title of the article. *Journal of Healthcare Management*, Volume(Issue), Page numbers. [Bradford Harvard format]
* Brown, K., & White, L. (Year). Title of the book. Publisher. [Bradford Harvard format]