Title: Development of an Evidence-Based Treatment Pathway to Improve Dyspnea Management and Oxygen Utilization in a Hospice Organization

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Statement of the Problem: Dyspnea is complex, multifactorial, and common in patients approaching end of life. Oxygen is commonly prescribed as part of comfort care in hospice organizations despite the lack of strong evidence for its efficacy.

Background: Opioids for the palliation of dyspnea are well-established and evidence based. Multiple studies have demonstrated that oxygen is not superior to air via nasal cannula in the treatment of breathlessness in patients without significant hypoxemia. Additionally, there is a lack of clear evidence for oxygen use in patients who are hypoxemic. Evidence-based interventions, such as handheld fans and opioids, should be considered as first line interventions for dyspnea.

Purpose/Aims: This quality improvement project's purpose is to improve dyspnea management and decrease inappropriate reliance on palliative oxygen at the end of life through implementation of an evidence-based practice pathway with an emphasis on appropriate palliative oxygen use.

Methods/Measures: An evidence-based literature review informed the creation and implementation of a dyspnea management pathway. A 9-item knowledge and beliefs survey about dyspnea management and palliative oxygen was administered to hospice clinical staff (N=17) before and after a 1-hour educational session in May 2022. The number of new oxygen orders per patient census was compared for the month pre/post pathway implementation and educational intervention.

Findings: Analysis revealed statistically significant improvement in survey responses post intervention. The number of oxygen orders per patient decreased from 0.28 to 0.20 post intervention suggesting a trend towards lower oxygen utilization.

Conclusion/Future Direction: An evidence-based pathway and educational session can improve clinical staff knowledge and beliefs about dyspnea management and number of oxygen orders per patient. An ongoing review of oxygen orders by clinical staff will be used to target additional education. Going forward, an audit of clinical note documentation about oxygen therapy will provide feedback in real time.