Title:
Multidrug-Resistant Pneumonia: A Clinical Pathway From Diagnosis to Resolution

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Session Title:
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Keywords:
healthcare associated pneumonia, multi-drug resistant pneumonia and multi-drug resistant risk factors

References:


Abstract Summary:
The purpose of this project is to create and implement a high-risk multi-drug resistant pneumonia pathway, based upon guidelines from the Infectious Disease Society of America and the American Thoracic Society 2005/2016 guidelines. The goal is to improve 30-day readmission rates and length of stay.

Learning Activity:

<table>
<thead>
<tr>
<th>LEARNING OBJECTIVES</th>
<th>EXPANDED CONTENT OUTLINE</th>
</tr>
</thead>
<tbody>
<tr>
<td>The learner will be able to differentiate between community acquired, healthcare associated/multi-drug resistant pneumonia.</td>
<td>Describe the differences to the learner to meet objective</td>
</tr>
<tr>
<td>The learner will be able to identify the risk factors for multi-drug resistant pneumonia.</td>
<td>Describe the risk factors to the learner to meet the objective</td>
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</table>

Abstract Text:
Despite advancement in antimicrobial therapy, lower respiratory tract infections and pneumonia are a major cause of morbidity and mortality throughout the world and within the United States. The clinical impact of pneumonia has created a major financial burden to both the patient and the healthcare industry. It is estimated that the United States healthcare system dedicates about $6 billion annually to the direct costs related to patients diagnosed with pneumonia. According to the World Health Organization, the fourth leading cause of death in the world in 2012 was due to lower respiratory infections, comprising 3.1
million cases in total. A 2010 survey demonstrated that 1.1 million annual hospital inpatients were discharged after an average of 5.2 days length of stay for lower respiratory infections. It has become evident through hospital quality data that there is a need for a clinical pneumonia pathway, in a northeastern Pennsylvania hospital network. The purpose of this project is to create and implement a high-risk multi-drug resistant (MDR) pneumonia pathway. This pathway is based upon the 2005/2016 guidelines from the Infectious Disease Society of America (IDSA) and the American Thoracic Society (ATS) for patients who have been admitted to a northeastern Pennsylvania hospital network with the diagnosis of high-risk multi-drug (MDR) resistant pneumonia, with the goal of improving 30-day readmission rate and length of stay. The study will use a quasi-experimental non-equivalent posttest design with historical controls to assess the impact of the high-risk MDR pneumonia pathway on length of stay and readmission rates among patients presenting to the emergency room. An unpaired t-test will be used to compare average length of stay (ALOS) between those patients receiving the pathway and the historical controls while a chi-square test of homogeneity between the groups will be conducted to evaluate differences in readmission rates between the two groups.