Clarify Health models derive the denominator of the CMS Risk Standardized Readmission Rate (RSRR) and Risk Standardized Mortality Rate (RSMR).

Clarify Health provides insights into Medicare patients beyond the inpatient discharge (e.g., patients discharged to SNF, Hospice, IRF).

CMS published data is for the 3-year period 7/1/13-6/30/16; Clarify Health incorporates more recent patient-level data from NCHA into their models to produce expected mortality (and readmission rates). Unless otherwise noted, data are from 9/1/16-8/31/17.

Patient population of interest is Medicare patients with a principal diagnosis of Pneumonia or Sepsis.
Hospitals in Coastal Region Included in this Analysis*

• The Outer Banks Hospital
• J Arthur Dosher Memorial Hospital
• Vidant Edgecombe Hospital
• Vidant Duplin Hospital
• Martin General Hospital
• Vidant Roanoke Chowan Hospital
• Sampson Regional Medical Center
• Vidant Medical Center
• Carolina East Medical Center
• Wilson Medical Center
• Vidant Beaufort Hospital

• Carteret General Hospital
• Onslow Memorial Hospital
• Halifax Regional Medical Center
• Nash General Hospital
• Southeastern Regional Medical Center
• Lenoir Memorial Hospital
• New Hanover Regional Medical Center
• Novant Health Brunswick Medical Center
• Columbus Regional Healthcare
• Sentara Albemarle Medical Center

*minimum of 20 cases between 9/1/16-8/31/17
CMS Pneumonia Mortalities

North Carolina
- 1,587 (18.1%)
- 8,746

Coastal Region
- 384 (17.7%)
- 2,169
CMS PNE Mortalities by Discharge Location

North Carolina
- Home: 777 (48.9%)
- Hospice: 587 (37.0%)
- Inpatient: 118 (7.4%)
- SNF: 105 (6.6%)

Coastal Region
- Home: 172 (44.8%)
- Hospice: 162 (42.2%)
- Inpatient: 28 (7.3%)
- SNF: 22 (5.7%)
CMS PNE Mortality Trends – Coastal vs NC
CMS PNE Mortality Trends - Urban vs Rural in Coastal Region

Rural designation based on CMS Provider of Service data.
NC Expected PNE Mortality By Discharge Location

A red dot indicates higher mortality rates than expected if the same patients were treated at an average facility.

A green dot indicates lower mortality rates than expected if the same patients were treated at an average facility.

A yellow dot indicates no difference in mortality rates from expected.
Coastal Region Expected PNE Mortality by Discharge Location

A red dot indicates higher mortality rates than expected if the same patients were treated at an average facility.
A green dot indicates lower mortality rates than expected if the same patients were treated at an average facility.
A yellow dot indicates no difference in mortality rates from expected.
Patient Journey with CMS PNE Mortality – Coastal Region

Starting from the inpatient admission (blue at the center of the circle), the patient journey for patients who die after a PNE admission can have many steps (identified by the legend below).

The two most common journeys for patients who die after a PNE admission are:

- Inpatient → Hospice → Expired 29.7%
- Inpatient → Expired 34.6%
NC: Expected Mortality for PN by Comorbidities Present on Admission

Minimum volume: 100 cases

A red dot indicates higher mortality rates than expected if the same patients were treated at an average facility.
A green dot indicates lower mortality rates than expected if the same patients were treated at an average facility.
A yellow dot indicates no difference in mortality rates from expected.
Coastal Region: Expected Mortality for PN by Comorbidities Present on Admission

<table>
<thead>
<tr>
<th>Metric</th>
<th>Model</th>
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</thead>
<tbody>
<tr>
<td>CMS Mortality %</td>
<td>CMS Expected</td>
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</tbody>
</table>

![Graph showing expected versus actual mortality rates for various comorbidities.]

- A red dot indicates higher mortality rates than expected if the same patients were treated at an average facility.
- A green dot indicates lower mortality rates than expected if the same patients were treated at an average facility.
- A yellow dot indicates no difference in mortality rates from expected.

Minimum volume: 100 cases
A red dot indicates higher mortality rates than expected if the same patients were treated at an average facility.
A green dot indicates lower mortality rates than expected if the same patients were treated at an average facility.
A yellow dot indicates no difference in mortality rates from expected.
Coastal Region: Mortality Outcomes by Patient Age Category

A red dot indicates higher mortality rates than expected if the same patients were treated at an average facility.
A green dot indicates lower mortality rates than expected if the same patients were treated at an average facility.
A yellow dot indicates no difference in mortality rates from expected.