Investigating high mortality among patients offered NIV in BSUH, Brighton[1,2]

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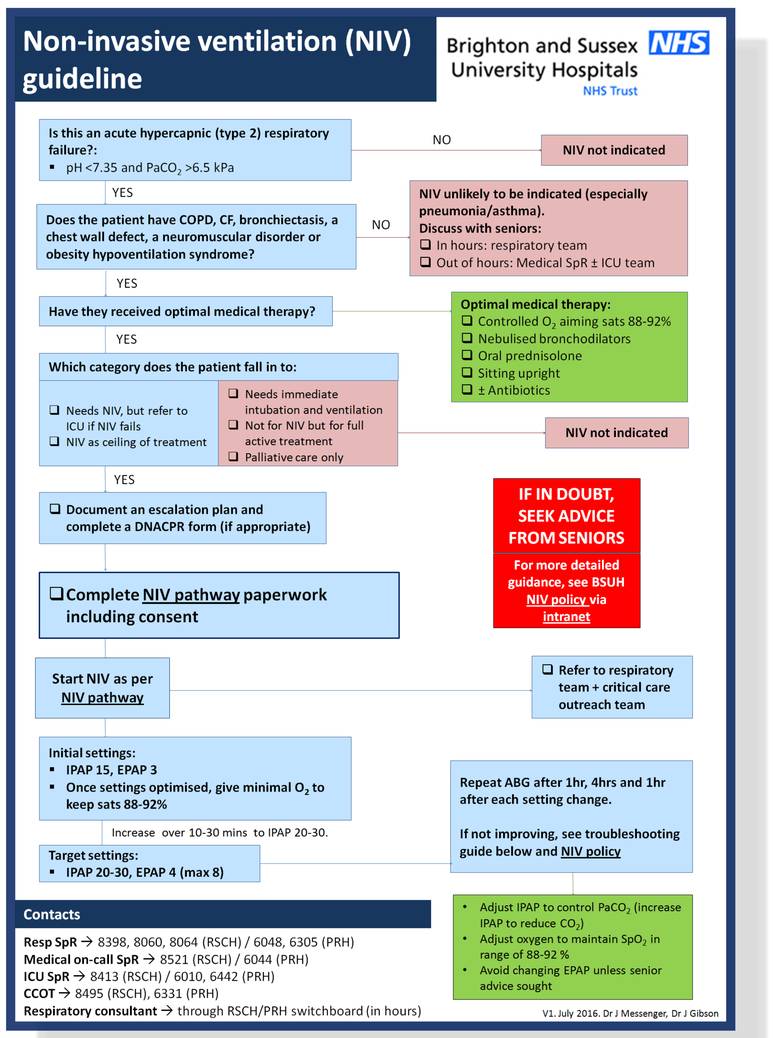
Aim

To investigate the causes of apparent excess mortality among patients offered Non-Invasive Ventilation (NIV) within Brighton and Sussex University Hospitals NHS Trust.

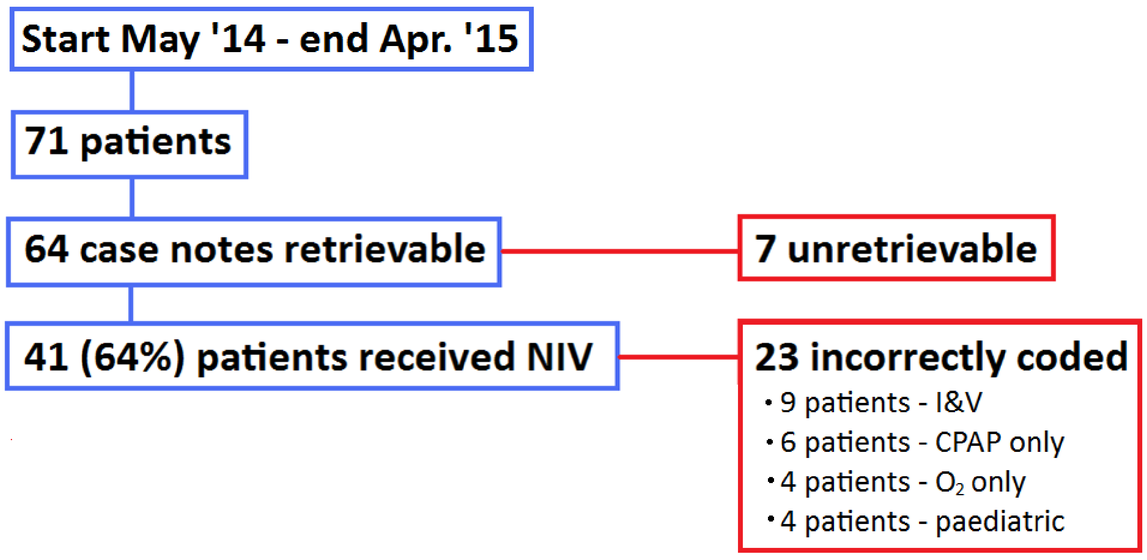
Method

A retrospective audit was performed on the case notes of patients coded as having received NIV during a hospital admission from 01/05/2014 to 30/04/2015, during which they died.

Data was collected using a spreadsheet modified from the BTS NIV Data Collection Sheet (https://audits-brit-thoracic.org.uk/ (2013)) with the inclusion of additional data collection points.



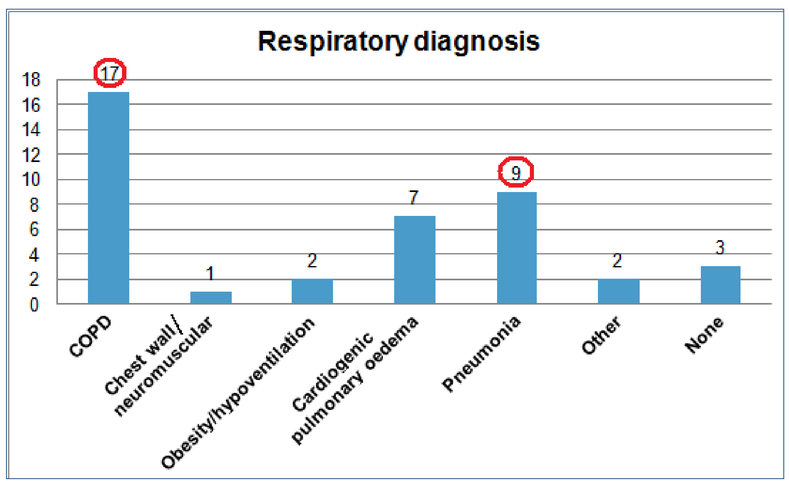
Results



- Most patients were started on NIV out-of-hours (n =30, 73%) and in the Emergency Department (n=22, 54%) compared with all other clinical areas.

- A total of 51% of patients (n=21) had evidence of consolidation on plain chest radiographs.

- Only 54% (n=22) had the Trust NIV pathway document present in their notes. In only 12 cases was it completed appropriately (29% of all patients)



Conclusion

1. Coding error in 36% of cases contributed to the erroneous red flag warnings that led to the outlier status of mortality on receiving NIV.

2. Many patients were commenced on NIV who did not meet selection criteria

3. There is significant scope to improve the adequacy of documentation within the Trust