

Improving quality in ward-based advanced respiratory support

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Background

After the publication of the NCEPOD report, "Inspiring Change", and national quality standards for non-invasive ventilation (NIV), it was clear that patients requiring ward-based support for respiratory failure were not receiving care meeting national quality standards. This was due to a variety of factors. This resulted in challenging working conditions and compromised quality of patient care, with a risk of increased inpatient length of stay and potentially higher inpatient mortality.

Aims

- Before the end of November 2019 to improve compliance with specific quality measures for delivery of advanced respiratory support to >70%; escalation plan completion prior to starting treatment, prescription of treatment and discussion with respiratory consultant prior to starting treatment.
- To reduce average length of stay for those receiving ward-based NIV and nasal high flow oxygen (HFNO) by 2 days by March 2019.
- To reduce inpatient mortality with acute NIV to <20% by December 2019.

Methods

Having identified poor compliance with quality measures including escalation plan completion (85%), respiratory consultant involvement in decision making (22%) and recommended nursing ratios (0%), a project of work was started in May 2018 to address these concerns. Interventions have been designed following stakeholder con-

sultation and refined by through use in several areas of work.

Supported decision making

- Rewritten guidelines for use of NIV and HFNO
- Prescriptions and checklists for ward-based NIV and HFNO
- Respiratory consultant-controlled admission to High Acuity Bay on 8B
- Mandated Respiratory consultant discussion prior to commencing NIV/HFNO
- Education programme for doctors-in-training

Nursing environment and experience

- Dedicated Respiratory High Acuity Bay on 8B introduced
- Nursing experience and confidence survey
- Checklists for initiation of NIV/HFNO

We have also been involved in the establishment of a regional QI collaborative (Bristol/Bath/Gloucestershire/Swindon) for sharing of experience and peer benchmarking

Further work is currently in planning:

- Patient and carer information leaflet
- Patient experience survey
- Real time data and outcome monitoring and publicity to raise awareness within

Results

This is an ongoing project, however some early results have been seen:

- Improved escalation plan completion from 81% to >95%
- Improved senior involvement in decision making from 25%, but not yet >70%
- Introduction of dedicated High Acuity Bay has led to a more controlled nursing environment

There are many ongoing challenges, including improving prescription completion and the need to confirm an improved working environment through repeating the survey of nursing staff.

Implications:

- Reductions in length of stay may be possible
- Supported decision making has led to improved senior clinician involvement
- The causes of low prescription completion rates remain unclear
- It will not be possible to assess impact on patient experience as no baseline data collection was possible

Next Steps

- Continued engagement and education of doctors-in-training
- Dashboard publication for quality measures to drive improvements
- Nursing training and support
- Patient and carer experience survey and information leaflet
- Continued regional collaboration to share improvements and seek new innovations for the overall aim of reducing mortality

References

"Inspiring Change", NCEPOD Report, 2017
BTS Quality Standards for NIV, 2018

