



Western Health  
and Social Care Trust

# Emergency Oxygen Quality Improvement Project

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# Introduction/Rationale

- Oxygen is a drug and should be prescribed in accordance with the hospital oxygen policy
- Recent modifications to the trust kardex have incorporated oxygen prescription
- Potential for adverse events with inappropriate use of oxygen therapy
- Recent British Thoracic Society audit highlighted poor adherence to oxygen prescription and monitoring.

# Aims

- To improve use and monitoring of oxygen within the hospital and ensure that oxygen is appropriately prescribed to adult patients.

# Objectives

- To provide ward based teaching on the use of emergency oxygen
- To monitor the effect on oxygen prescription

# Methodology

- Medical and nursing staff were invited to attend respiratory medicine teaching sessions held on wards 1, 2, 3 and A&E.
- This included all clinical areas involved in the management of acutely ill medical patients within the hospital.

# Inclusion Criteria

- All adult patients on Ward 3 (Respiratory ward) using oxygen therapy were audited prospectively on a weekly basis.
- Collection of data on the prescription of oxygen and whether target saturations were achieved when last assessed.
- Project conducted over an eight week period in conjunction with weekly ward based teaching sessions as above.

# Intervention

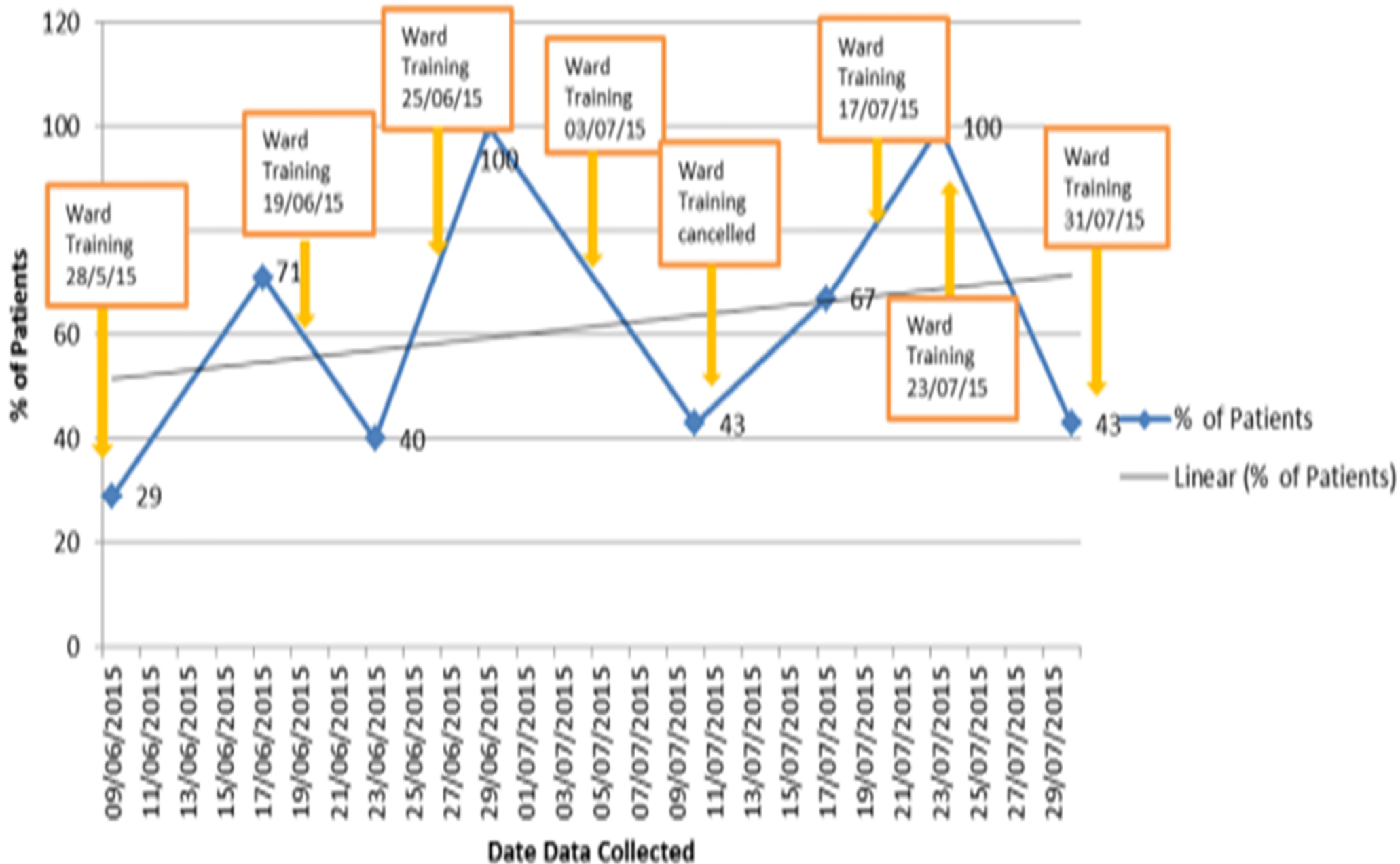
- Teaching sessions were held on each of the units listed above and advance notice given of sessions. Each session lasted 30 minutes consisting of 10 minutes teaching from each team;
- **1] Outline on emergency oxygen use and example scenarios doctor**
- **2] Practical demonstration of oxygen use and devices**
- **3] Practical demonstration of non-invasive ventilation equipment & Oxygen**
- Staff feedback of teaching sessions was audited separately.

# Results

- The percentage of patients prescribed oxygen with a target range had improved following the introduction of ward based teaching sessions [29% week 1 and 43% week 8].
- 100% prescription of oxygen was achieved as shown in weeks 4 and 7.
- The majority of patients [67 -100%] with oxygen prescribed with a target range were achieving their target saturations.



# Patients Using Oxygen with Target Sats Documented



# Conclusions

1] Significant improvement in practice in the prescription of oxygen was achieved following ward based teaching sessions.

2] A dip in oxygen prescription at week 5 [44%] after a teaching session was deferred suggests that ongoing training is required in order to maintain these results.

## Evidence of Implementation of Recommendations

- Ward based training sessions on oxygen use are now being extended to include all areas of oxygen use within the hospital. There is ongoing prospective audit of emergency oxygen use.

## Impact to Patient/Client care through the success of Innovation/Implementation

- Ward based teaching sessions improve the clinical knowledge of staff on the practical use and monitoring of oxygen administration.
- Appropriate prescription and monitoring of oxygen reduces patient morbidity and mortality.
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# Staff Feedback

- 1] Significant improvement in practice in the prescription of oxygen was achieved following ward based teaching sessions.
- 2] This teaching sessions were well received with predominantly positive feedback in all areas.
- 3] Audit standards were achieved with over 80% of respondents grading the teaching as good or excellent.