

# Improving oxygen Prescribing

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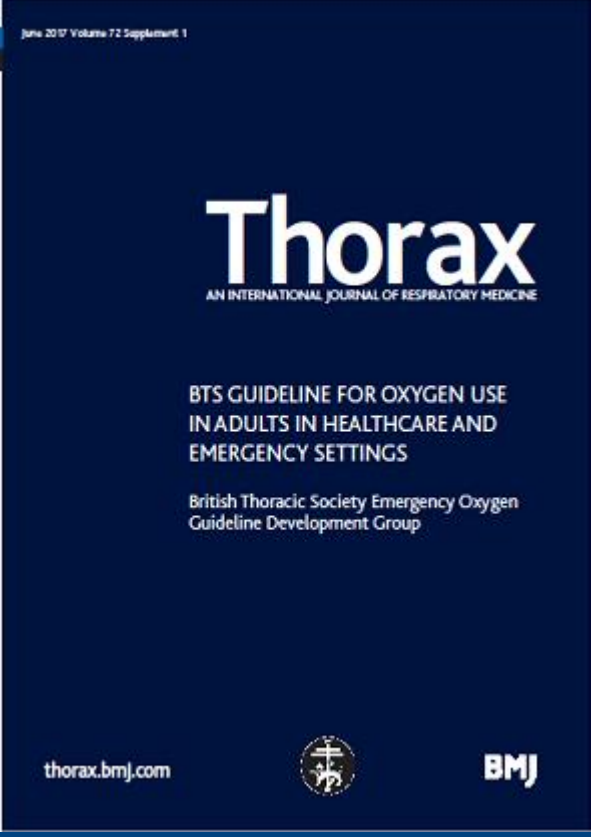
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## Background

National BTS Guidelines for Oxygen use in Adults in Healthcare and Emergency Settings 2008, Updated 2017  
Recommendations on how oxygen is prescribed and administered safely in hospitals.  
Oxygen is a medicine which needs to be prescribed and careful monitoring to avoid harm.



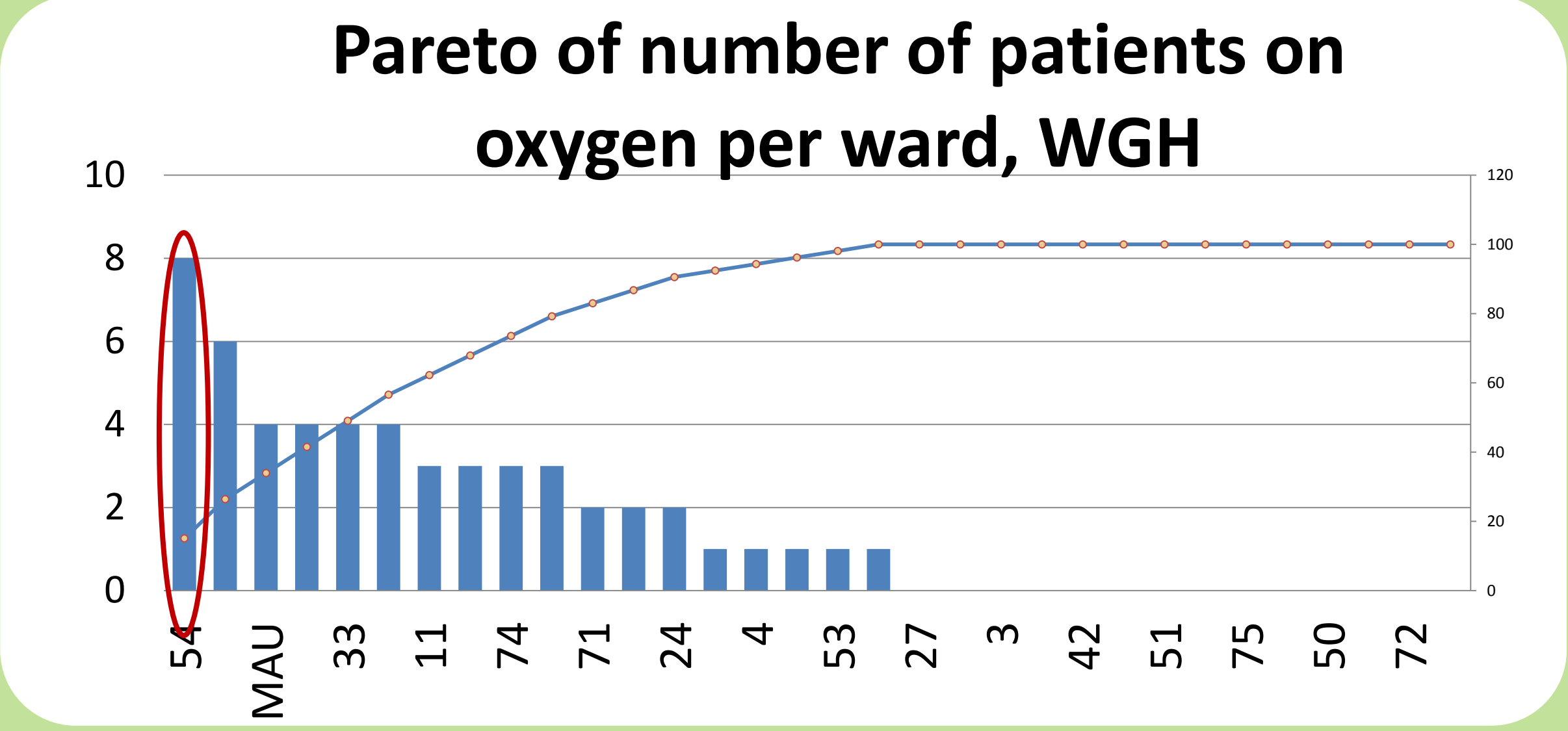
## Problem

Baseline audit results – 1 day snapshot of all wards WGH

- 5 out of 53 patients on oxygen had a prescription (9%)
- 1 prescription was valid as per BTS Guidelines (1.9%)
- This patient was only within target oxygen saturation 50% of the time

Most patients on oxygen do not have a valid prescription.  
Ward 54 is where most patients are receiving oxygen at WGH.

Primary drivers: lack of suitable paperwork in NHS Lothian, staff education and training, staff engagement, culture of acceptance of poor practice.



## Intervention

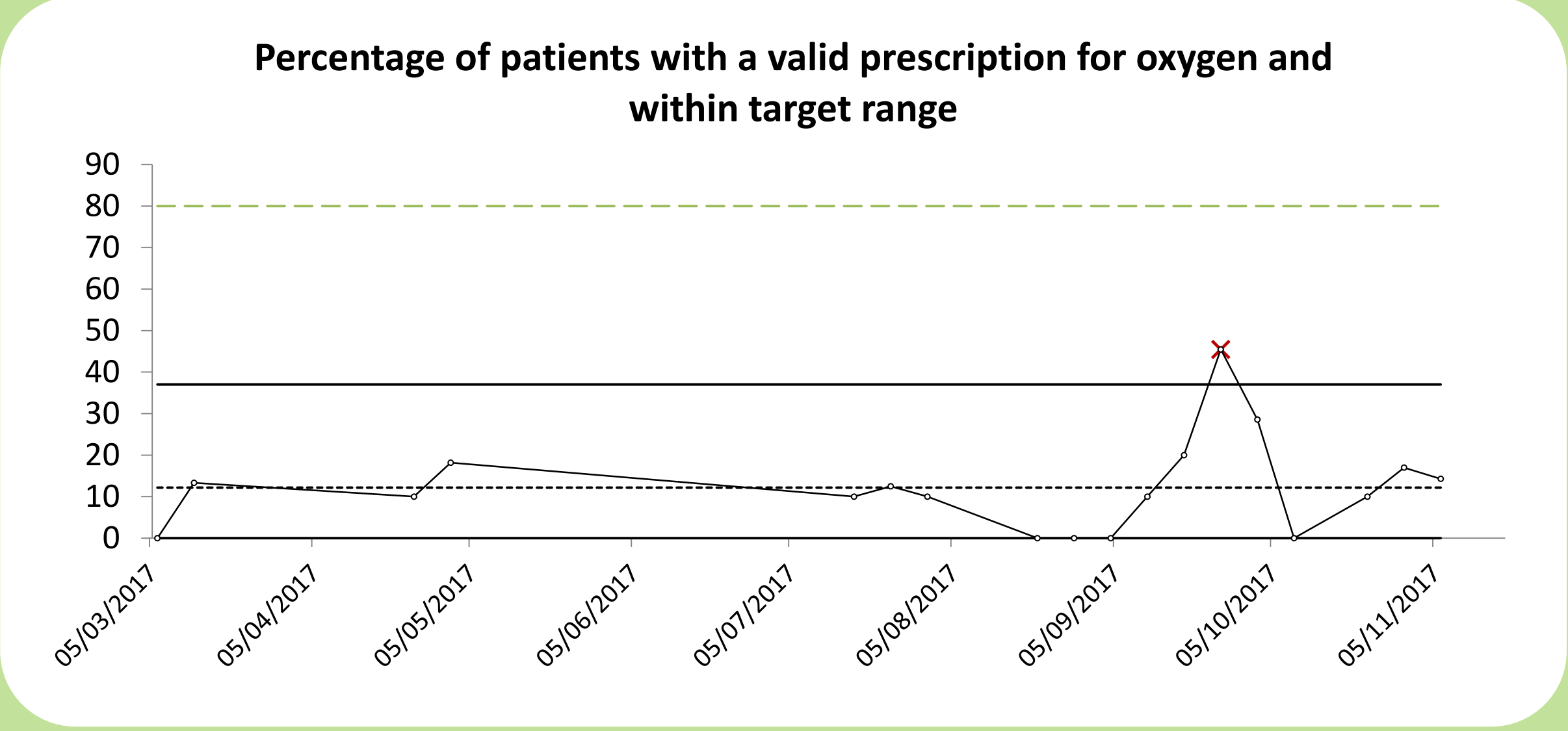
- Aim:** 80% of respiratory patients receiving oxygen therapy on ward 54, WGH have a valid prescription and are within their target saturation range, as per BTS Guidelines for Oxygen Use in Adult in Healthcare and Emergency Setting, by March 2018
- Ideas for change:** awareness sessions for staff, stickers for prescription chart, explore new NEWS chart, staff training package with local guideline + policy

## Strategy for change

- Measure oxygen prescribing and administration process on ward 54 each week.
- Test change with increased awareness with presentation at weekly education meeting to respiratory team.
- Develop staff questionnaire to measure training needs and use this to determine educational needs.

## Measurement of improvement

- Process measures:** percentage of patients with a valid prescription, percentage within target saturation range, percentage appropriately adjusted when out with range
- Outcome measure:** overall compliance with above measures
- Explore ways to measure harm caused by oxygen and if this could be used as an outcome measure.
- Baseline data collected on ward 54 for 10 weeks (non-consecutive).
- Weekly data collected continuously from August 2017, ward 54.



## Effects of change

Changing the prescription and monitoring charts as recommended in the guidelines will provide the framework for the correct process to take place. Then staff awareness, training and education and ongoing feedback sessions will be required. A change in culture is also required throughout the organisation to one that believes in the need for safe oxygen prescribing and administration and does not accept poor practice. This requires change in policy and for all staff involved to buy into the process. In order to sustain the change the whole team must be involved and it must not be dependant on a few individuals. In order to change culture it is hoped that recording instances of harm and presenting cases to teams will help to highlight the problems with poor oxygen practice and to gain support for change in practice.

## Lessons learnt and message for others

It is important to first understand the process in detail, drivers involved and to devise a reliable way to measure before trying any solutions. Any change should be tested first, adapted and then tried out using PDSA methodology. Moving forward, the challenge is sustainability of change and empowering whole team to get on board so it is not dependant on a small number of personnel. Roll out to other wards will be challenging as non-respiratory wards will have different priorities and attitudes towards oxygen.