

Oxygen Prescription: Hit Your Target



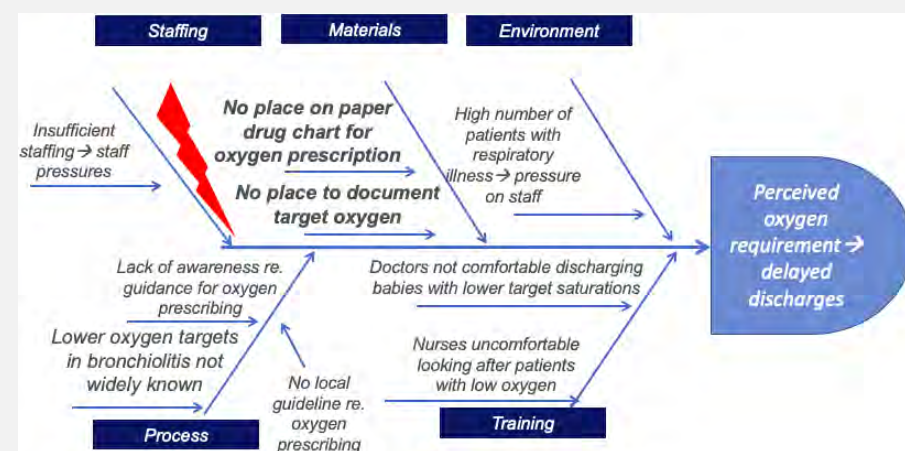
Dr. Sophie Timmis, Dr. Abigaile Whitehouse, Junel Ahmed
Royal London Hospital, Barts Health NHS Trust

BACKGROUND

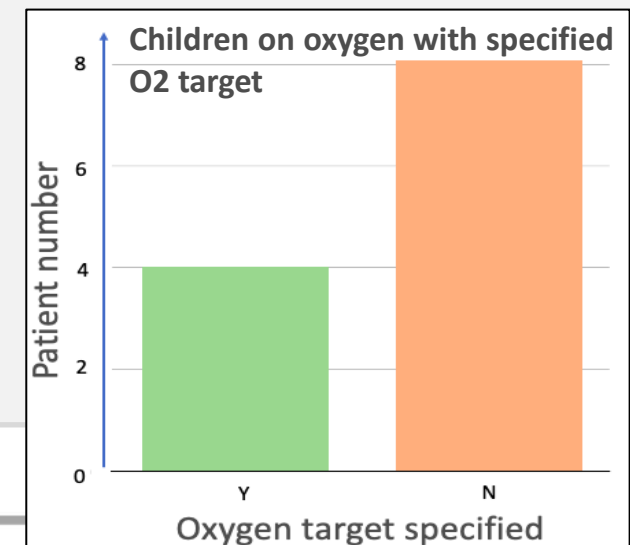
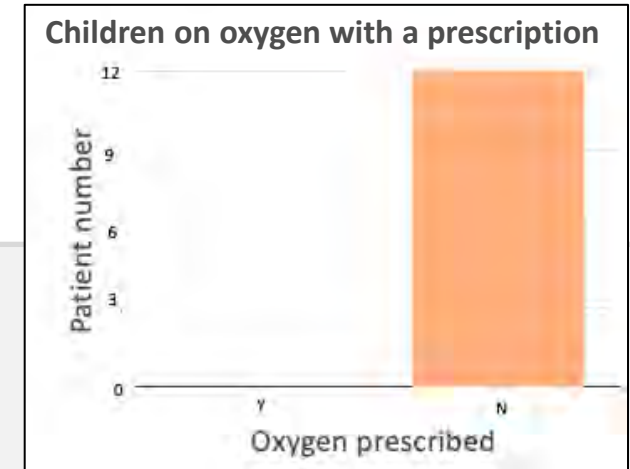
National guidelines are clear that oxygen should be prescribed with documented target saturations.

Oxygen is often given to children without a prescription and when it's not needed. This **delays** discharges, causes **distress** for parents and **risks** hospital acquired **infections** in vulnerable children.

DIAGNOSTICS



0% of children on oxygen have it prescribed



AIM & MEASUREMENT DEFINITION

Aim
By August 2022, 8 out of 10 paediatric inpatients with an oxygen requirement will have oxygen prescribed along with specified target saturations

Measure

Number of paediatric inpatients with an oxygen requirement who have oxygen prescribed on their drug chart.

Scoring:

- 0 = Not prescribed and no target saturation documented
- 1 = Prescribed but with no target saturation documented
- 1 = Not prescribed, but with a documented target saturation in the notes
- 2 = Prescribed with documented target saturation

Inclusions:

Any paediatric inpatient who has required oxygen during their inpatient stay.

Exclusions:

- Paediatric inpatients on LTV
- Paediatric inpatients without an oxygen requirement
- Children admitted for sleep study

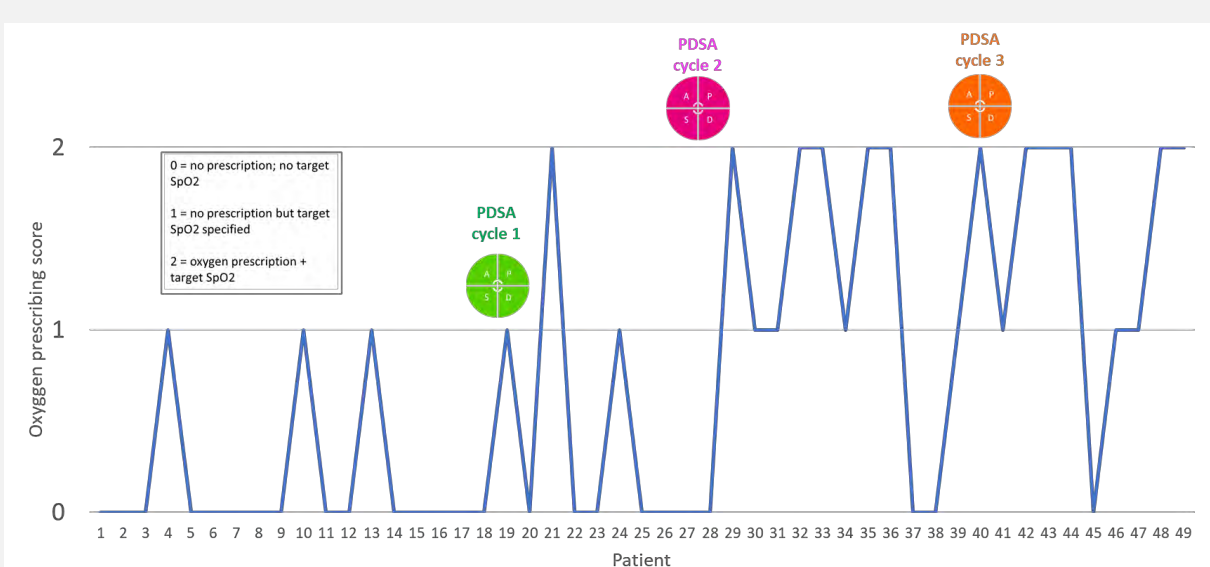
CHANGE IDEAS: sticker creation

PDSA cycles

PDSA	PLAN	Do	STUDY	ACT
PDSA cycle 1: sticker design				
1.1	Create oxygen prescribing sticker to stick in the drug charts of paediatric inpatients with an oxygen requirement.	Discuss sticker design with senior pharmacist	Advised to ensure sticker design and dimensions match those of existing drug chart to ensure user familiarity and ease of use. Advised to place sticker in same locations as drug charts so they are easily accessible	Adaptation of sticker according to advice. Stickers located in same drawer as the drug charts.
1.2	Further review of oxygen prescribing sticker	Discuss sticker design with critical care outreach team nurse (CCOT)	Advised to include desired oxygen flow rate on sticker, in addition to target saturations	Adaptation of sticker according to advice
1.3	Further review of oxygen prescribing sticker	Discuss sticker design with respiratory paediatrician, with particular focus on complex children on long term ventilation (LTV)	Advised to include section on sticker to highlight children on LTV, which will be useful for respiratory patients	Adaptation of sticker according to advice Agreement to exclude children on LTV from analysis due to complexity
PDSA cycle 2: sticker introduction and uptake				
2.1	Increase sticker use through teaching session for junior doctors	Presentation in junior doctor teaching and in doctor handover to raise awareness of sticker and need for oxygen prescribing	Agreement among doctors to use sticker. Advised would be important to also hold teaching sessions with nurses	Continue to encourage doctors to prescribe oxygen. Teach nursing staff about the stickers
2.2	Increase sticker use through teaching session for nurses	Presentation in nursing handover to raise awareness of sticker and need for oxygen prescribing	Agreement that nurses will bleep doctors if they have patients with an oxygen requirement who do not have oxygen prescribed	Nurses to check for oxygen prescriptions and contact doctors if oxygen is not prescribed
2.3	Increase sticker use by ensuring pharmacists are checking for oxygen prescriptions	Pharmacy involvement throughout QI project. Email contact to all pharmacists to ensure checking drug charts for oxygen prescriptions	Pharmacists agreed to check for oxygen prescriptions as they do for all other drugs	Pharmacists to monitor oxygen prescriptions and flag when they are being missed

PDSA cycle 3: Continued sticker use				
3.1	Encourage ongoing oxygen prescription through reminder posters	Posters designed to be eye catching and placed where they will be seen regularly by doctors and nurses	Increased awareness of project, particularly on days when project leads might not be at work to remind people	Eye catching posters in nurses break rooms, doctors mess and drug rooms
3.2	Encourage ongoing oxygen prescription through weekly emails to staff	Weekly emails to staff during project to remind them to continue oxygen prescribing and encourage them by showing the improvements already seen	Staff were encouraged by quick improvement in oxygen prescribing rates and this helped to ensure continued prescribing	Continue to encourage oxygen prescribing and raise awareness for the project

RUN CHART



PASING THE BATON ON

PDSA	PLAN	Do	STUDY	ACT
PDSA cycle 4: project continuation				
4.1	New drug chart with incorporated oxygen prescribing section to allow oxygen to be prescribed without a sticker	This has been accepted by the pharmacy governance team and will be rolled out once stocks of our current drug charts are used up	Re-audit oxygen prescribing once new drug chart is rolled out	Continue to monitor ongoing oxygen prescribing once this new chart is in use
4.2	The process of changing the drug chart design will take longer than I have remaining of my current job at my hospital.	I have already emailed the incoming junior doctors to see if anyone would like to take this project on.	Detailed handover to a new doctor and pharmacist so they can takeover the project.	Handing over my project should ensure continued improvement in oxygen prescribing

REFLECTIONS

Ensure change can be implemented without creating extra work for staff e.g. first stickers were too sticky – it took too long to peel them off and stick them in

One off teaching sessions are not effective in ensuring ongoing change. Regular reminders help to make initial changes a habit!

Ensure MDT involvement – having nurses and pharmacists on board has really helped improve prescription rates