

# #02TheFix

## Swimming Between The Flags

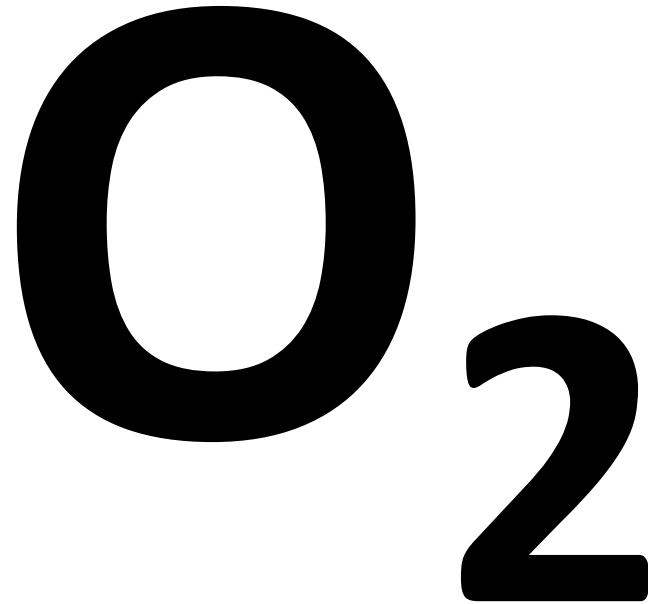


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**OXYGEN**



# Joe



# Which one?





# Confusion

O<sub>2</sub> via  
mask?

FiO<sub>2</sub>?

Controlled  
O<sub>2</sub>?

O<sub>2</sub>  
saturation  
> 96%?

CO<sub>2</sub>  
retainer?



# Evidence

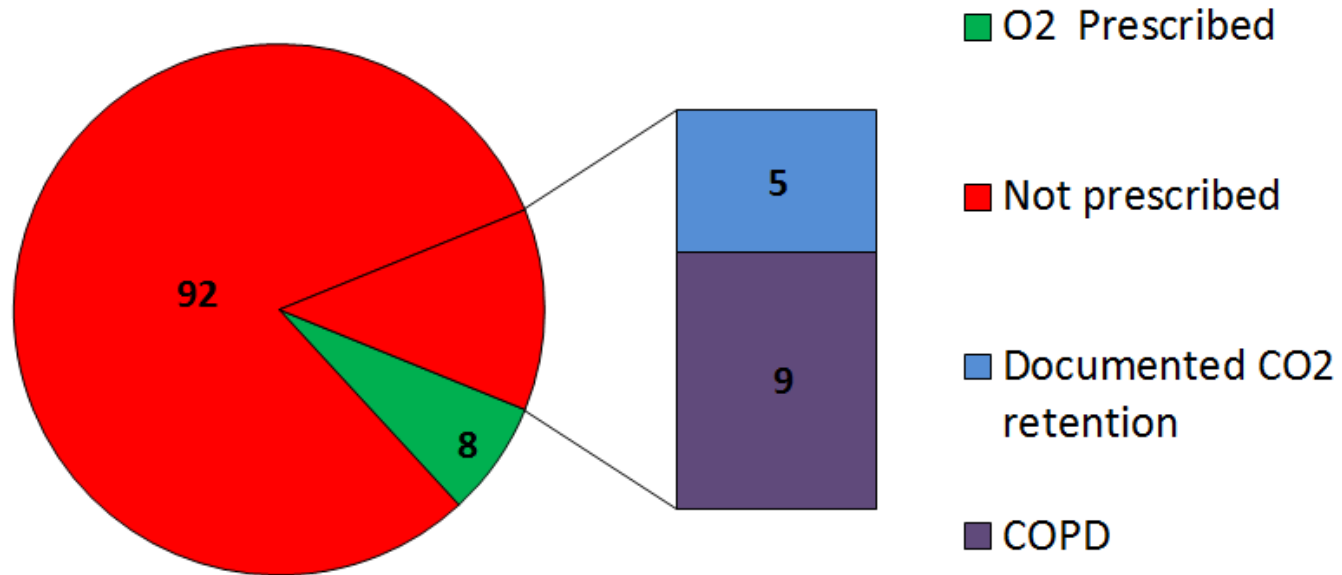
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- Oxygen titrated to a specific target saturation *saves lives*<sup>1</sup>
- TSANZ Guideline “Swimming between the flags”<sup>2</sup>



# Why does this matter to us?

- 9.7% Māori population in WDHB<sup>3</sup>
- Poor rate of prescribing<sup>4</sup>
- Unsafe administration<sup>4</sup>



# Oxygen Steering Group

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- WDH B Medication Safety Committee
- Consultant led multi-disciplinary steering group





# Aim

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- Improve understanding
- Prescribe appropriately
- Patient safety → “Swimming Between the Flags”



# 1. Baseline audit

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Patients *using* oxygen?

- Prescribed?
- Device?
- Target saturation range?



# 2. e-Prescribing

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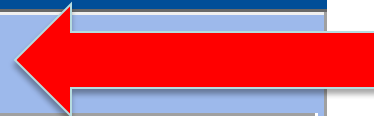


# 2. e-Prescribing

MINNIE, MOUSE TEST , NHI: 0005003, DOB:13/07/1


Allergies: Class Allergy to Penicillins - rash , Substance Aller


Name




## Single Ingredient


 Oxygen


 Oxygen via humidified high flow nasal prongs Continuous

 Oxygen via non-invasive ventilation (NIV) Continuous

 Oxygen via reservoir mask Continuous

 Oxygen via simple face mask (Hudson) Continuous

 Oxygen via standard nasal prongs Continuous

 Oxygen via Venturi mask Continuous



# 2. e-Prescribing

Medication	Details
Oxygen via standard nasal prongs Continuous Inhalation	DOSE: 0.25 to 4 L/min Inhalation PRN minimum dosage interval 1 minute Target SpO <sub>2</sub> = 88-92%
Oxygen via standard nasal prongs Continuous Inhalation	DOSE: 1 to 4 L/min Inhalation PRN minimum dosage interval 1 minute Target SpO <sub>2</sub> = 92-96%





# 2. e-Prescribing

Medication	Details
Oxygen via humidified high flow nasal prongs Continuous Inhalation	DOSE: 21 to 40 % O2 Inhalation PRN minimum dosage interval 1 minute Airflow rate 35 L/min. Target SpO2 = 88-92%
Oxygen via humidified high flow nasal prongs Continuous Inhalation	DOSE: 21 to 40 % O2 Inhalation PRN minimum dosage interval 1 minute Airflow rate 35 L/min. Target SpO2 = 92-96%
Oxygen via humidified high flow nasal prongs Continuous Inhalation	DOSE: 0 % O2 Inhalation PRN minimum dosage interval 1 minute For specialist use. Airflow rate = (prescriber to complete) L/min. Target SpO2 = (prescriber to complete) %



# 2. e-Prescribing

MINNIE, MOUSE TEST , NHI: 0005003, DOB:13/07/1942, Age:74 years, Weight:79.9 kg (01/03/2017)  
(Mosteller)

Allergies: Class Allergy to Penicillins

	Medication	Date	Time	Dose	Route	
<input type="checkbox"/>	<b>Oxygen via simple face mask (Hudson)</b> <b>Continuous Inhalation</b> DOSE: 5 to 10 L/min Inhalation PRN (11:54) minimum dosage interval 1 minute Target SpO2 = 92-96%  Jessica NAND (Pharmacist)	27/03/2017	11:55			<input type="checkbox"/> If n <input type="checkbox"/> Ne
	27/03/2017					



# 3. New oxygen policy

## Oxygen Therapy – Inpatient & STOT Ordering

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# 4. Campaign and launch week

O<sub>2</sub> the fix, aim 92-96  
If high CO<sub>2</sub>, aim 88-92



#O2TheFix





# 5. Staff education

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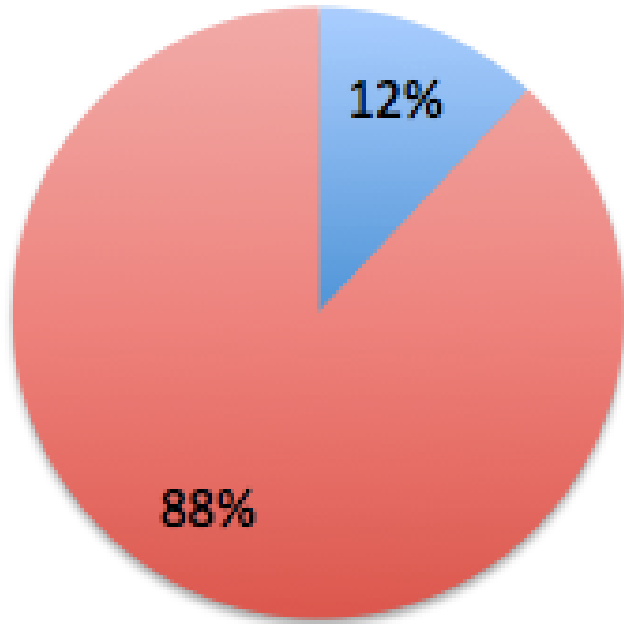


# 6. Post campaign audit

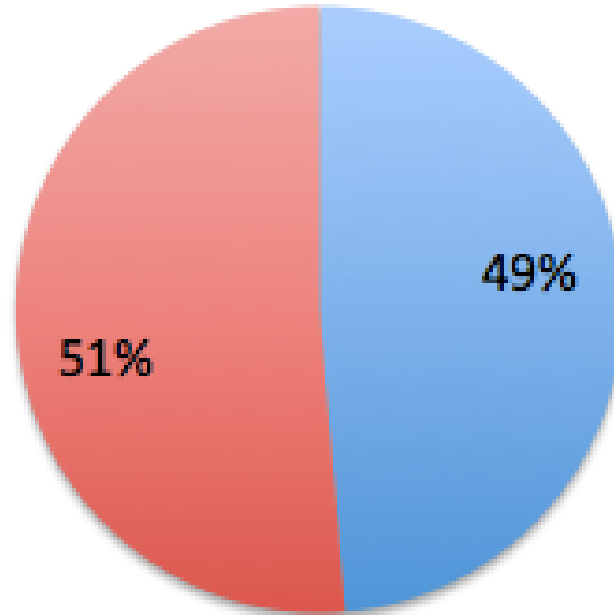
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# Results



Baseline



Post

■ Prescribed O2

■ Using O2



# Understanding

Target  
saturation  
range ✓

FiO<sub>2</sub>? ✓

Controlled  
O<sub>2</sub> devices ✓

O<sub>2</sub> masks  
vs nasal  
prongs ✓

CO<sub>2</sub>  
retainer? ✓



# Tom

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*Photo used with permission*



# Moving forward

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- Orientation & education of new staff
- Stickers
- Publication

O<sub>2</sub> the fix, aim 92-96  
If high CO<sub>2</sub>, aim 88-92



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# Conclusion

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- Better
- Best
- Brilliant



# References

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1. Austin M.A, Wills K.E, Blizzard L, Walters E.H. and Wood-Baker R. Effect of high flow oxygen on mortality in chronic obstructive pulmonary disease patients in prehospital setting: randomised controlled trial *BMJ* 2010; 341 :c5462
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3. Mortality Collection Data Set (MORT), Ministry of Health; National Minimum Data Set (NMDS), Ministry of Health
4. Boyle M, Wong J. Prescribing oxygen therapy. An audit of oxygen prescribing practices on medical wards at North Shore Hospital, Auckland, New Zealand. *NZ Med J.* 2006;119.



# Acknowledgments

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- Monica McGrath, ICU Outreach Nurse
- Jo Rogers, e-Prescribing Pharmacist
- Dr Jonathan Casement, SMO ICU
- Andrew Watson, ADU Nurse Educator
- Charlotte Chesbrough, Fisher & Paykel Healthcare



# Do the simple things well

*Best care for everyone*

O<sub>2</sub> the fix, aim 92-96  
If high CO<sub>2</sub>, aim 88-92



#O2TheFix