Oxygen prescription

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PAEDIATRIC IN-PATIENT MEDICATION ADMINISTRATION RECORD

Developed in collaboration with the All Wales Chief Pharmacists Committee

DRUG ALLERGIES & SENSITIVITIES

PLEASE CIRCLE AS APPROPRIATE:

NONE KNOWN **YES**

SIGNED..... DATE.....

NAME.....

Drug / Allergen:	Description of Reaction:

This section must be completed prior to administration of any medicine. Refer to local policies for further guidance.

HOSPITAL No: _____

SURNAME: _____

FIRST NAME: _____

ADDRESS: _____

ADDRESSOGRAPH

DATE OF BIRTH: _____

Height (m)			Weight (kg)			Surface Area (m^2)
Date	Height	Sign	Date	Weight	Sign	

DATE OF ADMISSION _____

HOSPITAL _____

WARD _____

CONSULTANT _____

MULTIPLE MEDICATION CHARTS

CHART .....

OF .....

MEDICATION ON SUPPLEMENTARY CHARTS SHOULD ALSO BE RECORDED ON THIS DRUG CHART.

DETAILS OF SUPPLEMENTARY CHARTS

TICK APPROPRIATE BOX

- ANTICOAGULANT ☐
- SUPPLEMENTARY INFUSION CHART ☐
- INSULIN ☐
- PATIENT CONTROLLED ANALGESIA/EPIDURAL ☐
- SYRINGE DRIVER ☐
- OTHER (PLEASE SPECIFY)

PRESCRIPTIONS FOR ONCE ONLY and PRE-ANAESTHETIC MEDICATION

DATE	MEDICINE (APPROVED NAME)	DOSE	ROUTE	TIME TO BE GIVEN	PRESCRIBERS SIGNATURE	PHARMACY	DATE	TIME GIVEN	GIVEN BY	CHECKED BY
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					
					bleep No					

MEDICINES MANAGEMENT

MEDICATION HISTORY OBTAINED FROM:

PATIENT ☐ GP ☐ PARENT ☐ CARER ☐

PODS ☐ OTHER .....

COMPLIANCE ISSUES .....

INITIALS ..... DATE .....

MEDICINES RECONCILED

INITIALS ..... DATE .....

COMMENTS / NOTES

GP DETAILS	COMMUNITY PHARMACY DETAILS

DISCHARGE PRESCRIPTION WRITTEN

INITIALS ..... DATE .....

PAEDIATRIC IN-PATIENT MEDICATION ADMINISTRATION RECORD

AWMR02.13

PATIENT'S NAME .... **HEALTH RECORD NUMBER** ....

MORNING (around 0800); MIDDAY (between 1200 & 1400); EVENING (around 1800); BEDTIME (around 2200)

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES	MONTH	YEAR
	DATE		

MEDICINE **OXYGEN** sign all oxygen limit boxes that you tick	**Device**	**L/min or % O_2, (you may select multiple devices and multiple oxygen limits)**			
	Nasal cannula	0.01-1 L/min	☐	1-2 L/min	☐ ....
	Headbox oxygen	<40%	☐	40-60%	☐ ....
Prescriber's Signature bleep No.	Facemask	6-10 L/min	☐	10-15 L/min	☐ ....
	Mask with reservoir bag (for high O_2 %)	10-15 L/min	☐		
	Other device..		☐		☐ ....

Target Saturations (please circle)	
	NURSE CHECK
>92%	MORNING
	MIDDAY
>95%	EVENING
Other	BEDTIME

RE-WRITE CHART

DATE →			MEDICINE (Approved Name)	SPECIAL INSTRUCTIONS	PRESCRIBER'S SIGNATURE	PHARMACIST
ROUTE →						
SPECIFY TIME IF REQUIRED ↓	DOSE ↓	SIGN / DOSE CHANGE ↓			bleep No.	SUPPLY
Morning						
Midday						
Evening						
Bedtime						

RE-WRITE CHART

DATE →			MEDICINE (Approved Name)	SPECIAL INSTRUCTIONS	PRESCRIBER'S SIGNATURE	PHARMACIST
ROUTE →						
SPECIFY TIME IF REQUIRED ↓	DOSE ↓	SIGN / DOSE CHANGE ↓			bleep No.	SUPPLY
Morning						
Midday						
Evening						
Bedtime						

RE-WRITE CHART

DATE →			MEDICINE (Approved Name)	SPECIAL INSTRUCTIONS	PRESCRIBER'S SIGNATURE	PHARMACIST
ROUTE →						
SPECIFY TIME IF REQUIRED ↓	DOSE ↓	SIGN / DOSE CHANGE ↓			bleep No.	SUPPLY
Morning						
Midday						
Evening						
Bedtime						

RE-WRITE CHART

DATE →			MEDICINE (Approved Name)	SPECIAL INSTRUCTIONS	PRESCRIBER'S SIGNATURE	PHARMACIST
ROUTE →						
SPECIFY TIME IF REQUIRED ↓	DOSE ↓	SIGN / DOSE CHANGE ↓			bleep No.	SUPPLY
Morning						
Midday						
Evening						
Bedtime						

RE-WRITE CHART

CHART MUST BE RE-WRITTEN BEFORE FURTHER DOSES ARE ADMINISTERED

NON-ADMINISTRATION OF MEDICINES

When a patient does not receive a prescribed dose, the nurse should enter one of the code numbers given below in the administration box, to explain the reason for non-administration. Please attempt to obtain any unavailable medicines.

X. Prescriber's request
2. Patient not on ward
3. Patient unable to receive medicines/or no access
4. Patient refused medicine
5. Medicine unavailable
6. See Notes

Oxygen prescription chart

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES	MONTH	YEAR
	DATE		

MEDICINE
OXYGEN
sign all oxygen limit boxes that you tick

Prescriber's Signature
bleep No.

Device	L/min or % O_2, (you may select multiple devices and multiple oxygen limits)			
Nasal cannula	0.01-1 L/min	☐	1-2 L/min	☐ .....
Headbox oxygen	<40%	☐	40-60%	☐ .....
Facemask	6-10 L/min	☐	10-15 L/min	☐ .....
Mask with reservoir bag (for high O_2 %)	10-15 L/min	☐		
Other device.....		☐		☐ .....

Target Saturations (please circle)	NURSE CHECK ↓												RE-WRITE CHART
>92%	MORNING												
>95%	MIDDAY												
Other	EVENING												
	BEDTIME												

EXCEPTION:

Oxygen may be given without a prescription in any emergency

Prescribe it as soon as possible

Example scenario
9 month child; bronchiolitis

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES	MONTH	YEAR
	DATE		

MEDICINE
OXYGEN
sign all oxygen limit boxes that you tick

Prescriber's Signature
bleep No.

Device	L/min or % O_2, (you may select multiple devices and multiple oxygen limits)			
Nasal cannula	0.01-1 L/min	☐	1-2 L/min	☐ .....
Headbox oxygen	<40%	☐	40-60%	☐ .....
Facemask	6-10 L/min	☐	10-15 L/min	☐ .....
Mask with reservoir bag (for high O_2 %)	10-15 L/min	☐		
Other device.....		☐		☐ .....

Target Saturations (please circle)	NURSE CHECK ↓												RE-WRITE CHART
>92%	MORNING												
>95%	MIDDAY												
	EVENING												
Other	BEDTIME												

Doctor's prescription

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES	MONTH July	YEAR 2014
	DATE 11		

MEDICINE
OXYGEN
sign all oxygen limit boxes that you tick

Prescriber's Signature
bleep No. Jforton 1234

Device	L/min or % O_2, (you may select multiple devices and multiple oxygen limits)				
Nasal cannula	0.01-1 L/min	☑ JF 11/7/14	1-2 L/min	☐	
Headbox oxygen	<40%	☑ JF 11/7/14	40-60%	☐	
Facemask	6-10 L/min	☐	10-15 L/min	☐	
Mask with reservoir bag (for high O_2 %)	10-15 L/min	☐			
Other device.....		☐		☐	

Target Saturations (please circle)	NURSE CHECK ↓												RE-WRITE CHART
>92%	MORNING												
>95%	MIDDAY												
Other	EVENING												
	BEDTIME												

Nurse documentation

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES						MONTH July					YEAR 2014		
	DATE	11	12											
MEDICINE **OXYGEN** sign all oxygen limit boxes that you tick	**Device**	**L/min or % O_2, (you may select multiple devices and multiple oxygen limits)**												
	Nasal cannula	0.01-1 L/min	☐	✓ JF 11/7/14				1-2 L/min	☐					
	Headbox oxygen	<40%	☐	✓ JF 11/7/14				40-60%	☐					
	Facemask	6-10 L/min	☐					10-15 L/min	☐					
	Mask with reservoir bag (for high O_2 %)	10-15 L/min	☐											
	Other device.....		☐						☐					
Prescriber's Signature bleep No. JForton 1234														
Target Saturations (please circle)	NURSE CHECK ↓												RE-WRITE CHART	
>92%	MORNING		/	BW/TF										
>95%	MIDDAY		PS/AT	SH/SL										
Other	EVENING		PS/AT											
	BEDTIME		BW/TF											

Clinical deterioration day 3
Nurse contacts doctor

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES	MONTH July	YEAR 2014
	DATE	11	12	13

MEDICINE
OXYGEN
sign all oxygen limit boxes that you tick

Prescriber's Signature
bleep No. Jforton 1234

Device	L/min or % O_2, (you may select multiple devices and multiple oxygen limits)			
Nasal cannula	0.01-1 L/min	☑ JF 11/7/14	1-2 L/min	☐
Headbox oxygen	<40%	☑ JF 11/7/14	40-60%	☐
Facemask	6-10 L/min	☐	10-15 L/min	☐
Mask with reservoir bag (for high O_2 %)	10-15 L/min	☐		
Other device.....		☐		☐

Target Saturations (please circle)

>92%

>95%

Other .....

NURSE CHECK ↓													RE-WRITE CHART
MORNING		/	BW/TF	BW/TF									
MIDDAY		PS/AT	SH/SL	SH/SL									
EVENING		PS/AT	SH/SL										
BEDTIME		BW/TF	BW/TF										

Doctor makes clinical assessment & increases oxygen prescription

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES						MONTH July					YEAR 2014		
	DATE	11	12	13										
MEDICINE **OXYGEN** sign all oxygen limit boxes that you tick	**Device**					**L/min or % O_2, (you may select multiple devices and multiple oxygen limits)**								
	Nasal cannula					0.01-1 L/min	☑ JF 11/7/14			1-2 L/min	☑ PK 13/7/2014			
	Headbox oxygen					<40%	☑ JF 11/7/14			40-60%	☑ PK 13/7/2014			
	Facemask					6-10 L/min	☐			10-15 L/min	☐			
	Mask with reservoir bag (for high O_2 %)					10-15 L/min	☐							
	Other device.....						☐				☐			
Prescriber's Signature bleep No. JForton 1234														
Target Saturations (please circle) >92% >95% Other	NURSE CHECK ↓												RE-WRITE CHART	
	MORNING		/	BW/TF	BW/TF									
	MIDDAY		PS/AT	SH/SL	SH/SL									
	EVENING		PS/AT	SH/SL										
	BEDTIME		BW/TF	BW/TF										

Clinical deterioration overnight
Nurse increases oxygen as needed
Nurse contacts doctor

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES						MONTH July					YEAR 2014		
	DATE	11	12	13										
MEDICINE **OXYGEN** sign all oxygen limit boxes that you tick	Device					L/min or % O_2, (you may select multiple devices and multiple oxygen limits)								
	Nasal cannula					0.01-1 L/min	☐ ✓ JF 11/7/14			1-2 L/min	☐ ✓ PK 13/7/2014			
	Headbox oxygen					<40%	☐ ✓ JF 11/7/14			40-60%	☐ ✓ PK 13/7/2014			
	Facemask					6-10 L/min	☐			10-15 L/min	☐			
	Mask with reservoir bag (for high O_2 %)					10-15 L/min	☐							
Prescriber's Signature bleep No. JForton 1234	Other device.....						☐				☐			
Target Saturations (please circle) >92% >95% Other	NURSE CHECK ↓												RE-WRITE CHART	
	MORNING		/	BW/TF	BW/TF									
	MIDDAY		PS/AT	SH/SL	SH/SL									
	EVENING		PS/AT	SH/SL	SH/SL									
	BEDTIME		BW/TF	BW/TF	BW/TF									

Doctor makes clinical assessment & increases oxygen prescription

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES					MONTH July					YEAR 2014		
	DATE	11	12	13	14								
MEDICINE **OXYGEN** sign all oxygen limit boxes that you tick	**Device**					**L/min or % O_2, (you may select multiple devices and multiple oxygen limits)**							
	Nasal cannula					0.01-1 L/min ☑ JF 11/7/14		1-2 L/min ☑ PK 13/7/2014					
	Headbox oxygen					<40% ☑ JF 11/7/14		40-60% ☑ PK 13/7/2014					
	Facemask					6-10 L/min ☐		10-15 L/min ☐					
	Mask with reservoir bag (for high O_2 %)					10-15 L/min ☑ EL 14/7/2014							
	Other device.....					☐		☐					
Prescriber's Signature bleep No. Jforton 1234													
Target Saturations (please circle) >92% >95% Other	NURSE CHECK ↓											RE-WRITE CHART	
	MORNING		/	BW/TF	BW/TF								
	MIDDAY		PS/AT	SH/SL	SH/SL								
	EVENING		PS/AT	SH/SL	SH/SL								
	BEDTIME		BW/TF	BW/TF	BW/TF								

Child transferred to HDU & started on nCPAP with 10L/min O_2

ENTER DOSE AGAINST TIME REQUIRED. USE ONE ROUTE ONLY FOR EACH ENTRY	REGULAR MEDICINES					MONTH July					YEAR 2014		
	DATE	11	12	13	14								
MEDICINE **OXYGEN** sign all oxygen limit boxes that you tick	Device					L/min or % O_2, (you may select multiple devices and multiple oxygen limits)							
	Nasal cannula					0.01-1 L/min ☐ JF 11/7/14			1-2 L/min ☑ PK 13/7/2014				
	Headbox oxygen					<40% ☑ JF 11/7/14			40-60% ☑ PK 13/7/2014				
	Facemask					6-10 L/min ☐			10-15 L/min ☐				
	Mask with reservoir bag (for high O_2 %)					10-15 L/min ☑ EC 14/7/2014							
	Other device.... Nasal CPAP					10L/minute ☑ PE 14/7/2014					☐		
Prescriber's Signature bleep No. Jforton 1234													
Target Saturations (please circle) >92% >95% Other	NURSE CHECK ↓											RE-WRITE CHART	
	MORNING		/	BW/TF	BW/TF	GW/TY							
	MIDDAY		PS/AT	SH/SL	SH/SL								
	EVENING		PS/AT	SH/SL	SH/SL								
	BEDTIME		BW/TF	BW/TF	BW/TF								

Is oxygen dangerous?

- In adults with chronic respiratory disease and CO_2 retention, respiratory drive may be dependant on hypoxia
- Giving oxygen to these patients may cause CO_2 narcosis.
- These ***adult*** patients are managed with regular blood gases and lower target oxygen saturations

Is oxygen dangerous in children?

- In theory, children with chronic respiratory disease may also have CO_2 retention
- CO_2 narcosis is rare in the paediatric population
- However, Pay particular attention to children with chronic lung disease of prematurity, end stage cystic fibrosis, neuromuscular weakness and obesity
- If in doubt talk to your consultant

Monitoring oxygen (nurse)

Observation chart

4 hourly observations

RR

oxygen saturations

Level of oxygen delivered

mode of oxygen delivery

Drug Chart

Double signing of oxygen prescription at each drug round

Titrating oxygen (nurse)

If sats are lower than target threshold on chart O_2 ↑

If sats are higher than target threshold on chart O_2 ↓

- Always give the minimum oxygen possible
- Monitor sats for 5 mins at every change
- Document sats after 5 mins on chart
- If oxygen delivered reaches upper extreme of range, call for medical review

Stopping oxygen (nurse /doctor)

When

- Patient stable on minimal oxygen
- Sats are within range on 2 consecutive observations

How

- Stop oxygen & monitor sats for 5mins.
- If stable, continue to monitor in air for 1 hour
- If saturation falls, then re-start oxygen
- If saturation remain stable at one hour, stay in air
- Document the changes you make
- Oxygen may still be required at night and with feeding

Responsibilities

DOCTORS

Prescribe oxygen
Target saturations
Device
Oxygen delivery limits
Sign drug chart

Review withdrawal of oxygen
Cross off oxygen on drug chart

NURSES

Start oxygen
achieve target straight away

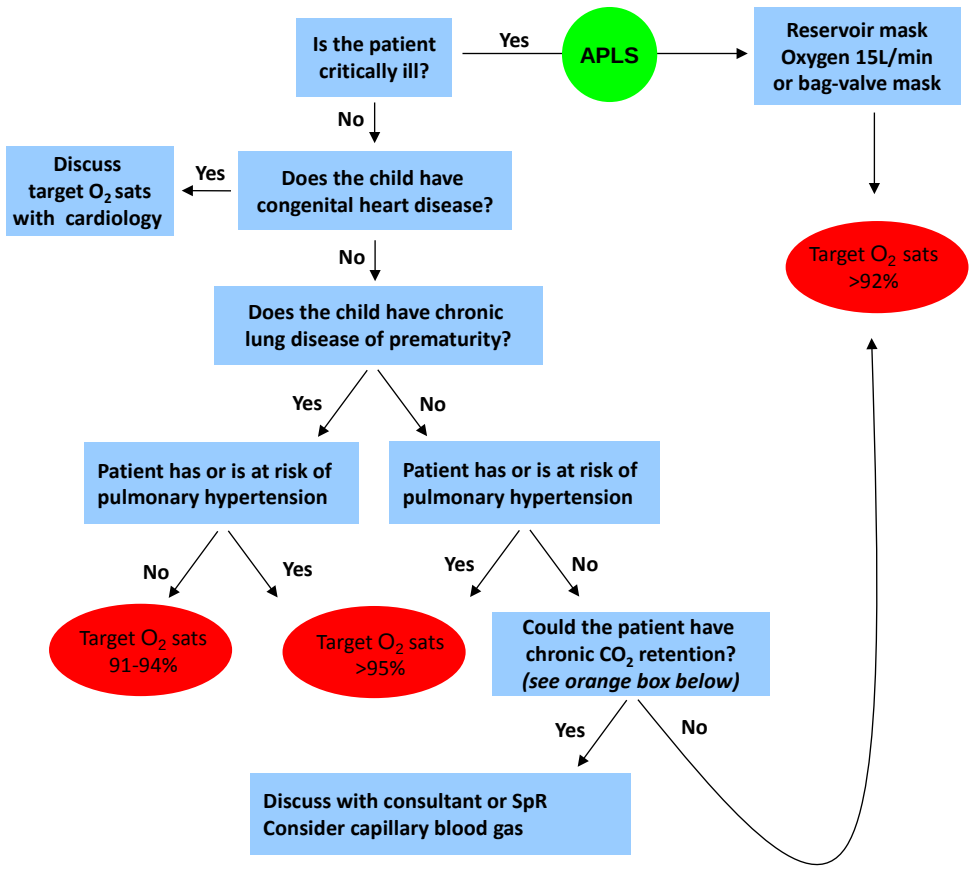
Monitor oxygen
minimum 4 hourly.

Titrate and wean off oxygen
Always give the minimum oxygen required

Record
O_2 Sats, RR, O_2 delivery, delivery device
Sign drug chart every drug round
Document all changes in oxygen requirement

Inform doctors
If limits to oxygen prescription are reached

EMERGENCY OXYGEN PRESCRIBING
PAEDIATRIC GUIDELINES IN SECONDARY CARE



Breathing in patients who have chronic CO_2 retention may be dependant on hypoxic drive

Take care with oxygen in the following patients

- Chronic lung disease of prematurity
- Neuromuscular disease
- Obesity
- End stage cystic fibrosis

Oxygen must be prescribed in the drug chart using the paediatric oxygen sticker

In an emergency, oxygen can be given without a prescription

Guidance on oxygen delivery interfaces in children

DEVICE/FiO_2	INDICATIONS	ADVANTAGES	LIMITATIONS
Headbox Humidified and warmed O2 24-60%	Suitable for infants and small children with acute episodes of respiratory illness eg bronchiolitis	• Controlled oxygen delivery • Well tolerated in infants • Easy delivery of humidified O2	• CO_2 build up may occur if flow <7l/min **OR** outflow from box is obstructed. • O_2 needs to be warmed for smaller infants as the environment inside can become cold • Access to give care can cause significant fall in oxygen delivered
Nasal cannulae Maximum flow rate 2l/min Estimated oxygen delivery 24-40%	• Long Term Oxygen Therapy (LTOT). • Minimal oxygen requirement • Recovery phase from acute episodes	• Low cost and • easy for patient to eat and talk • well tolerated • No re-breathing.	• Uncontrolled oxygen delivery • Oxygen delivery is affected by flow setting, respiratory rate, depth of breathing and geometry of nose. • Dries the nose, can cause headaches.
Facemask 5-15 litres/min Estimated oxygen delivery 40-60%	• Use for patients who need high oxygen delivery	Useful in children who • are mouth breathers • have nasal irritation • have epistaxis	• Minimum delivery 5litres/min to avoid rebreathing of expired CO_2. • Oxygen delivery is affected by flow setting, mask fitting, mask leak and patient's breathing pattern.
Non re-breathe mask 6 -15 litres/min Estimated oxygen delivery 60-100%	Often used in APLS setting (trauma, shock, severe asthma, convulsions, reduced level of consciousness)	Delivers very high concentrations of oxygen	• Minimum delivery 6 litres/min to avoid rebreathing of expired CO_2. • Oxygen delivery is affected by mask fitting and mask leak

Dr Julian Forton. Consultant in paediatric respiratory medicine

26/6/2012

GIG CYMRU NHS WALES
Bwrdd Iechyd Prifysgol Caerdydd a'r Fro
Cardiff and Vale University Health Board

Paediatric oxygen working group

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Anthony Lewis	*Directorate Pharmacist, Child Health*
Rowena McArtney	*Senior information pharmacist*
Avril Gowman	*Lead nurse, Child Health*
Mary Glover	*Senior nurse. Neonatal Unit*
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Louise Williams	*Nurse Advisor - Medicines Management*