Guideline and Procedure

HNEkidshealth Children, Young People & Families

NSW GOVERNMENT Health Hunter New England Local Health District

AIRVO™ 2 Oxygen Delivery Device – Paediatric Patients (excluding JHH/JHCH)

Sites where Guideline and Procedure applies	HNE LHD Emergency Departments and Paediatric Units
This Guideline and Procedure applies to:	
1. Adults	No
2. Children up to 16 years	Yes
3. Neonates – less than 29 days	Yes
Target audience	All clinical staff in HNE LDH facilities where infants, children and adolescent receive oxygen therapy.
Description	Use of Fisher & Pykel AIRVO™ 2 oxygen delivery device for paediatric patients in emergency departments/relevant paediatric units across HNE LHD, including indications for use and escalation of care.
Keywords	Humidified low flow oxygen, humidified high flow oxygen, optiflow cannula, nasal.

Go to Guideline

Document registration number	HNELHD GandP 21_07
Replaces existing document?	Yes
Registration number and dates of superseded documents?	HNELHD CG 18_10 from 22 February 2018 HNELHD CG 15_38 from 26 October 2015

Related Legislation, Australian Standard, NSW Ministry of Health Policy Directive or Guideline, National Safety and Quality Health Service Standard (NSQHSS) and/or other, HNE Health Document, Professional Guideline, Code of Practice or Ethics:

- AIRVO™ 2 High Flow Oxygen Device – Set Up and Disinfection. HNELHD CP20_16
- HNE LHD Assessment of Competency: AIRVO™ High Flow Oxygen Device – Set Up and Disinfection. Please see Appendix 4.
- HNE LHD Variation to the Use of High Flow Nasal Oxygen and Nebulised Adrenaline for Children during COVID-10 Pandemic in Level 1- Emergency Department HNE LHD CG 20_30.
- High flow nasal prong (HFNP) therapy. RCH Melbourne
- Humidified High Flow Nasal Cannula Oxygen Guideline for Metropolitan Paediatric Wards and EDs. NSW Health: GL2016_004.
- Humidified High Flow Nasal Cannula Oxygen (HHFNCO) Management of 2L/Kg/Min. JHH-JHCH:0133.
- Australasian Bronchiolitis Guideline. PREDICT Research Network.

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Authorising body	Children Young People & Families Network
This Clinical Guideline contains advise on therapeutics	No
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GUIDELINE SUMMARY

While not requiring mandatory compliance, staff must have sound reasons for not implementing standards or practices set out within guidelines issued by HNE Health, or for measuring consistent variance in practice.

Please refer to Algorithm: 'HHFNC Oxygen Therapy using AIRVO™ 2 in HNE LHD Emergency Departments and Paediatric Units (excluding JHCH)." Appendix 1

Introduction:

The purpose of this guideline is to provide all clinical staff, who care for sick infants and children in emergency departments and paediatric units with standard guidelines to deliver humidified high flow oxygen therapy using the AIRVO™ 2 oxygen delivery device, when clinically indicated. Recommendations are based on the best available research evidence or where there is limited research evidence on expert consensus opinion.

Situation - Risk Statement:

This guideline aims to reduce risk by standardising practice, minimising clinical variation and promoting adherence to manufacturer recommendations. Non-compliance to this guideline may result in infants and children receiving clinical care that is not based on best practice recommendations and manufacturer guidelines.

Risk Category: Clinical Care & Patient Safety

Staff Preparation:

It is mandatory for staff to follow relevant: "Five moments of hand hygiene", infection control, moving safely/safe manual handling and documentation practices. Also to use HAIDET for patient/carer communication: **H**and hygiene **A**cknowledge, **I**ntroduce, **D**uration, **E**xplanation, **T**hank you or closing comment.

It is also necessary that all relevant clinical staff read HNE LHD CP 20_16 'AIRVO™ 2 High Flow Oxygen Device – Set up and Disinfection" procedure and complete the 'HNE LHD Assessment and Competency: Cleaning and Disinfection of AIRVO™2 High Flow Oxygen Device,' prior to setting up and using the AIRVO™ 2 device for the first time. Please see Appendix 4.

GLOSSARY

Acronym or Term	Definition
Humidified high flow oxygen	Higher flow nasal cannula rates as measured by a flow rate of 2L/kg/minute to a maximum flow of 50LPM.
Low flow oxygen	Rates of up to 2 L/minute of 100% oxygen via standard nasal prongs
HHFNC	Humidified high flow nasal cannula
FiO_2	Fraction of inspired oxygen concentration
SpO_2	Oxygen saturation measure via pulse oximetry

GUIDELINE:

Background:

The AIRVO™ 2 is a humidifier with an integrated flow generator that delivers warmed and humidified respiratory gases (air and oxygen) to spontaneously breathing patients through purpose designed high flow nasal cannula (Optiflow Junior).

It is possible to provide respiratory gases at flow rates from 2-60L/min. with a Fraction of Inspired Oxygen (FIO_2) at a range from 21% to close to 100% oxygen.

Warm humidified inspired oxygen results in patient comfort and increased compliance above standard non-humidified nasal prong oxygen. It may reduce bronchoconstriction from cold dry gases and prevent epithelial injury and improve conductance and pulmonary compliance compared with cooler dryer gases. It has been shown to alleviate respiratory distress and improve oxygenation in children. Ideally HHFNC is designed to administer a heated and humidified mixture of oxygen and/or air at a flow rate that is higher than the patients inspiratory flow. (Schibler A & Franklin D., 2016, Milesi C et., al., 2014).

Patient Selection:

Infants and children that may be treated with HHFNC therapy include;

Infants (0-12 months) with moderate to severe respiratory distress from bronchiolitis who are not responding to low flow oxygen therapy. A thorough respiratory assessment must have been undertaken and documented in the clinical record.

Infants and children with acute respiratory distress from other causes, e.g. pneumonia.

Following consultation with Paediatrician /NETS.

Patient contraindications:

Nasal obstruction, e.g. choanal atresia, large polyps, adenoid hypertrophy.

Infants and children requiring intubation for airway protection e.g. reduced conscious level.

Trauma (maxillofacial/suspected base of skull)

Pneumothorax

Life threatening hypoxia

Foreign body aspiration

Open chest wound/chest wall trauma

Relative contraindication:

Infants and children with known:

Altered/decreased level of consciousness (LOC) GCS less than 15.

Chronic respiratory insufficiency

Asthma, NOTE: Nebulised medication can't be administered whilst HHFNC therapy is in progress, HHFNC will need to be briefly interrupted to achieve nebulised medication administration, this may cause increased respiratory distress, monitor patient closely. Please refer to current paediatric asthma guidelines.

Chronic hypoxia from cyanotic heart disease

Prior to the commencement of High Flow Nasal Cannula Oxygen via AIRVO™2:

ALERT: COVID-19 Considerations:

HHFNC via AIRVO™2 has the potential to generate aerosolised droplets. It may increase the risk of transmission of respiratory viruses to healthcare workers and other patients.

When High Flow Nasal Cannula Oxygen is deemed the only appropriate therapy and a respiratory viral infection is suspected or confirmed, administer in a negative or single room using contact, droplet and airborne precautions. Please review:

ACI_Respiratory-High-risk-therapies_HFNP_V3.pdf (nsw.gov.au)

http://intranet.hne.health.nsw.gov.au/__data/assets/pdf_file/0008/216197/HNELHD_CG_20_30_HFNO_and_Nebulised_Adrenaline_in_Children_for_Level_1-3_Sites.pdf

Considering the above precautions move patient to a high observation area if in ED and/or nurse 1:2 until all parameters improve and are stabilized.

If clinically appropriate low flow oxygen therapy 2L/min via standard nasal prongs with 100% oxygen should be trialled on the infant/child prior to considering the need for HHFNC therapy. Undertake a thorough respiratory assessment.

HHFNC is a medically ordered mode of respiratory support

The flow rate and oxygen concentration is determined in consultation with a Paediatrician/or NETS medical supervision.

HHFNC flow rates may be commenced under Paediatric/NETS medical supervision to 2 litres/kg/min. NOTE: The maximum capable flow rate of the Optiflow Junior nasal prongs in use may need to be changed to a larger Optiflow nasal prong, capable of facilitating the increased flow rates. Also if you are not using the combined adult/paediatric heated breathing tube – circuit (900PT561) this change in flow rates may also require a heated breathing tube circuit change, to 900PT561, capable of facilitating the increased flow rates (ie flow rates up to 50L.).

Prior to commencement of HHFNC therapy via AIRVO™ 2 consultation with your onsite Paediatrician (for Tamworth, Armidale, Manning and Maitland) or referral Paediatrician for smaller sites must have occurred. Where this is not available or appropriate consultation with NETS must have occurred.

If the infant/child is located in a rural emergency department this consultation must include escalation of care and transportation plans to a Regional Referral Hospital i.e. Tamworth, Armidale, Manning, Maitland **OR** Tertiary Referral Hospital e.g. John Hunter Children's Hospital.

Prior to commencement of HHFNC therapy using AIRVO™ 2, confirm the machine has been switched to Junior Mode, This will limit the target settings to 34°C and 2-25L/min in increments of 1L/min.

Once HHFNC therapy had been initiated all adjustments to the flow rates and/or oxygen concentration must be conducted in consultation with a Paediatrician /or NETS.

Specific risks of HHFNC using the AIRVO™2 include:

Gastric distension with diaphragmatic impairment and/or vomiting may occur. Insert a minimum FG 8 gastric tube if needed and place on free drainage. To secure the NG tube use F&P WigglewiNG (if available) see appendix 3.

Incorrect placement or displacement of the nasal cannula: this may lead to rapid loss of oxygen delivery.

Interruption of power: The AIRVO™ 2 has no internal battery power and does not operate without wall power. If power is lost an auditory warning alarm will sound for at least 2 minutes. No power = No Flow = No HHNFNC.

Fire Risk: The oxygen flow must be turned off when the unit is not operating. This ensures that oxygen will not flow through the heated breathing tube and accumulate in the unit enclosure.

Water Depletion: The check water alarm is not activated until the chamber has been dry for approximately 30 minutes. When a chamber runs dry, the chamber float may be damaged. If this occurs the water chamber and fluid bag need to be replaced.

Infection Risk: The AIRVO™2 must be cleaned and disinfected between patients. This process should take place as soon as possible after use to ensure the device is ready for the next patient use. Failure to do so can lead to the spread of nosocomial infections. Please refer to: HNE LHD Clinical Procedure 16_016 AIRVO™ 2 High Flow Oxygen Device – Set Up and Disinfection. If necessary parts for disinfection are lost see the table below:

Product	Re-order part number	Comments
Disinfection Kit (if lost)	900PT600	Supplied in a single pack with the Disinfection Manuel from Fisher & Paykel Healthcare.
Disinfection Plug (if lost)	900PT601	Supplied as a two-pack from Fisher & Paykel Healthcare.
AIRVO™2 Rear inlet filter	900PT913	Supplied as a two-pack from Fisher & Paykel Healthcare.

Patient monitoring and Documentation of HHFNC Oxygen via AIRVO™2:

Document when HHFNC is commenced and the initial AIRVO™2 settings: this includes flow rate in L/min. FiO_2 and temperature.

Document nasal cannula size selection and clearance around nares.

Assess and document patient response to therapy

Document any changes to AIRVO™2 settings

Vital signs including heart rate, respiratory rate, respiratory effort and pulse oximetry, to be monitored continuously and documented at 30 minutely intervals or more frequently according to clinical need and/or MO orders.

Target range of SPO_2 equal to or greater than 92%.

Vital signs that fall outside the between the flags criteria must be noted and escalated as per local CERS response.

Blood gas monitoring as clinically indicated.

Other considerations:

CAUTION:

AIRVO™ 2 does not have an **internal** battery for use when the unit is disconnected from the mains power supply. This device cannot deliver oxygen or flow when power supply is disconnected.

Not for use in transport situations, without an **external** battery.

Remember: No Power = No Flow

unless you have an external battery, battery operating time is 15-20 minutes.

Instructions for Use:

Switch AIRVO™ 2 to Junior mode

Follow set up instructions as outlined in: AIRVO™2 High Flow oxygen device – Set up and Disinfection. http://intranet.hne.health.nsw.gov.au/__data/assets/pdf_file/0008/347813/HNELHD_CP_20_16_AIRVO_High_Flow_Oxygen_Device_-_Set_up_and_Disinfection.pdf

Use the AIRVO™2 heated breathing tube (circuit) and chamber kit for Adult/Paediatric, (product number 900PT561). This circuit will deliver flows up to 50L

Determine appropriate sized Optiflow Junior nasal cannula (6 options). Please see Optiflow Junior Nasal Cannula Sizing Guide: Appendix 2.

When selecting appropriate sized nasal cannula; the recommended nare occlusion is approximately 50%.

Weaning:

Weaning is conducted in consultation with medical staff and necessitates a clinical examination. Weaning directions which include both flow rate and FiO_2 are recorded in the clinical record. Weaning should occur when the infant or child's clinical condition is improving as indicated by decreased work of breathing, decreasing tachypnoea, decreasing tachycardia and O2 saturations >95% in the presence of normal level of consciousness and age appropriate behaviour.

At flow rates ≥ 1L/kg/min always wean oxygen first to at least ≤60% before adjusting flow rate

Adjusting both flow rate and oxygen concentrations simultaneously is confusing and makes monitoring of clinical progress difficult to ascertain.

When flow is reduced to the minimum flow rate for weight/age and FiO2 is ≤30% consider low flow nasal prong oxygen at 100% oxygen.

For further information on weaning please refer to:JHH-JHC:0133 "Humidified High Flow Nasal Cannula Oxygen (HHFNCO) Management of 2L/KG/MIN" http://intranet.hne.health.nsw.gov.au/__data/assets/pdf_file/0003/195168/JHH_JHCH_0133_Paed_humidified_high_flow_NC_oxygen.pdf

Transfer on AIRVO 2 System:

No Power = No Flow = No HHFNC therapy.

An external battery is required as the AIRVO™ 2 has no internal battery.

If an external battery is not available additional oxygen therapy is required a Paediatric high flow mask is placed over the nasal cannula and connected to a portable oxygen source. This does not deliver HHFNC oxygen therapy.

Infants and children will be at risk of clinical deterioration during transfer while HHFNC is off.

IMPLEMENTATION and MONITORING COMPLIANCE

Dissemination of this guideline and procedure:

- This document will be communicated through the CE News and will be available on the PPG Directory.
- Communication will occur across the Children Young People & Families Network (CYP&F).
- General Managers of the Acute and Primary and Community Networks are responsible to distribute to all clinicians providing care to children and young people
- Clinicians must recognise their own accountability and level of expertise for all aspects of care related to infants receiving HHFNC.
- Rural Paediatric CNCs will provide additional support and on-site education as part of their routine clinical role as required.

- Education on the use of the AIRVO™ 2 device can also be provided to individual facilities by Fisher & Paykel representatives.
- Adult HHFNC guidelines using the AIRVO™ 2 have been implemented across HNE LHD sites.

Monitoring of compliance will occur through already established auditing that is the responsibility of the individual sites for example IMs+.

CONSULTATION WITH KEY STAKEHOLDERS

2021

Ms Sandra Babekuhl: CNC Paediatric, Children's Healthcare Networks/Northern, HNELHD

Ms Helen Stevens: CNC Paediatric, Children's Healthcare Networks/Northern, HNELHD

2015

Members HNE LHD Paediatric CPG ED Committee

Members of Emergency Department Clinical Stream and

Dr Michael Anscombe: ED JHH

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Ms Bernadette Goddard: CNC Respiratory Medicine JHCH

Ms Karissa MacGregor: CNC Rural Critical Care HNE LHD

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Ms Elizabeth Newham: Nurse Educator JHCH

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Dr Bruce Whitehead: JHCH

Ms Rhonda Winskill: CNC Paediatric, Children's Healthcare Networks/Northern, HNELHD

APPENDICES

- Appendix 1: Algorithm, 'HHFNC Oxygen Therapy using AIRVO2 in HNE LHD Emergency Departments and Paediatric Units (excluding JHCH).'
- Appendix 2: Fisher & Paykel optiflow junior 2 sizing and flow rates product information.
- Appendix 3: Fisher & Paykel WigglewiNG use and product information.
- Appendix 4: HNELHD Assessment of Competency: Cleaning and Disinfection of AIRVO 2 High Flow Oxygen Device.

REFERENCES

1. Franklin D., et., al., (2018) A Randomized Trial of High-Flow Oxygen therapy in Infants with Bronchiolitis. The New England Journal of Medicine. 378;12: 1121-1131.
2. Franklin D., et., al., (2015) Early high flow nasal cannula therapy in bronchiolitis, a prospective randomised control trial (protocol): A Paediatric Acute Respiratory Intervention Study. (PARIS). BMC Pediatrics 15, 183 (2015).
3. Kepreotoes E., et., al., (2017) High-Flow warm humidified oxygen verses standard low-flow cannula oxygen for moderate bronchiolitis (HFWHO RCT): an open, phase 4, randomised controlled trial. Lancet 4:389 (10072) ; 930-939.
4. Milesi C., et., al., (2018) A multicentre randomized controlled trial of a 3L/kg/min verses 2L/kg/min high flow nasal cannula flow rat in young infants with severe viral bronchiolitis (TRAMONTANE 2). Intensive Care Medicine. 44 (11): 1180-1870.
5. Milesi C., et., al., (2014) High Flow nasal cannula; recommendations for daily practice in paediatrics. Annals of Intensive Care. 4:29.
6. Milesi C., et., al., (2017) High Flow nasal cannula (HFNC) verses nasal continuous positive airway pressures (nCPAP) for the initial respiratory management of acute viral bronchiolitis in young infant; a multicentre randomized control trial (TRAMONTANE study). Intensive Care Medicine. 43 (2): 209-216.
7. Schibler A. (2016) Respiratory support for children in the emergency department. Journal of Paediatrics and Child Health. Vol 52, Issues 2.

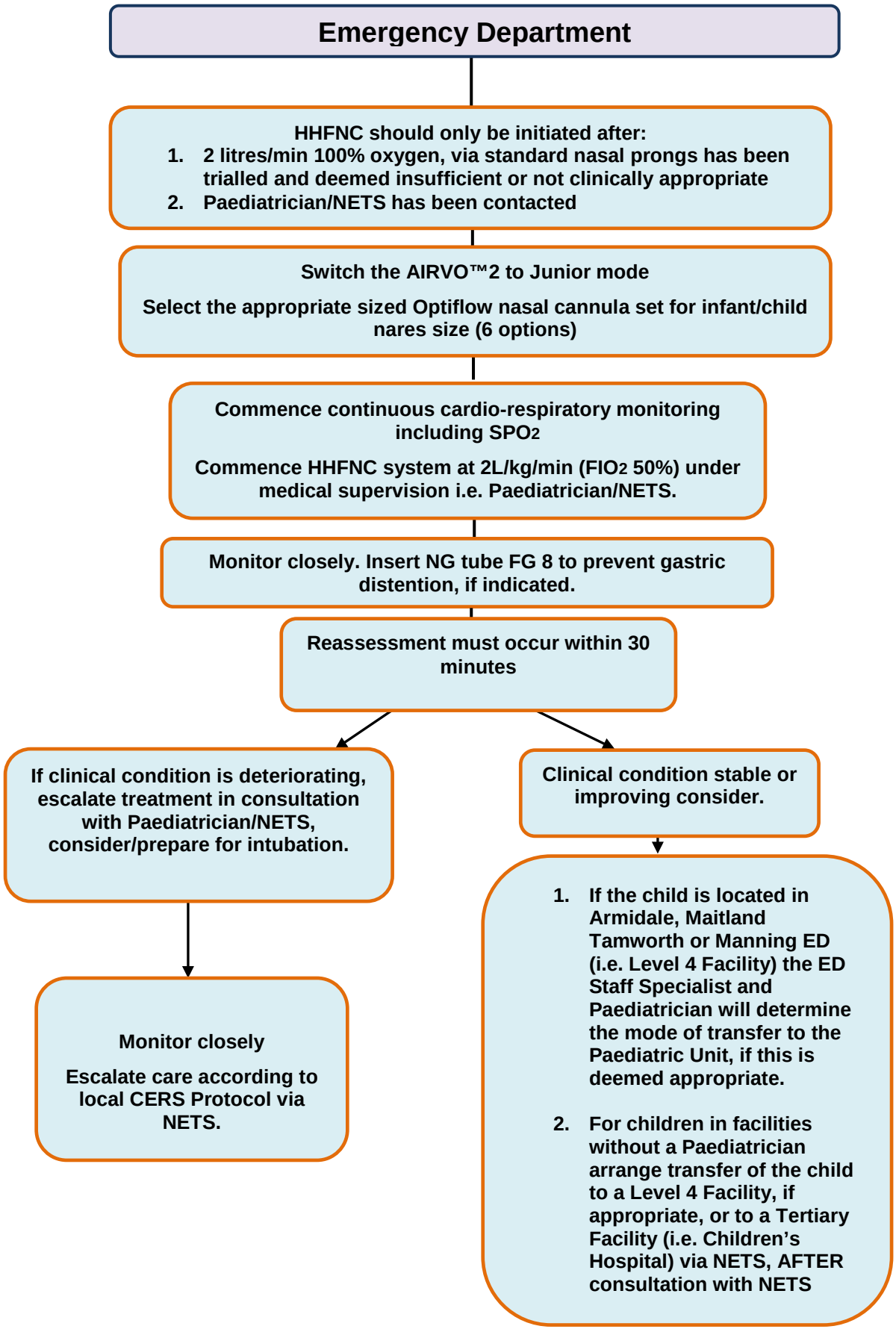
FEEDBACK

- Any feedback on this document should be sent to the Contact Officer listed on the front page

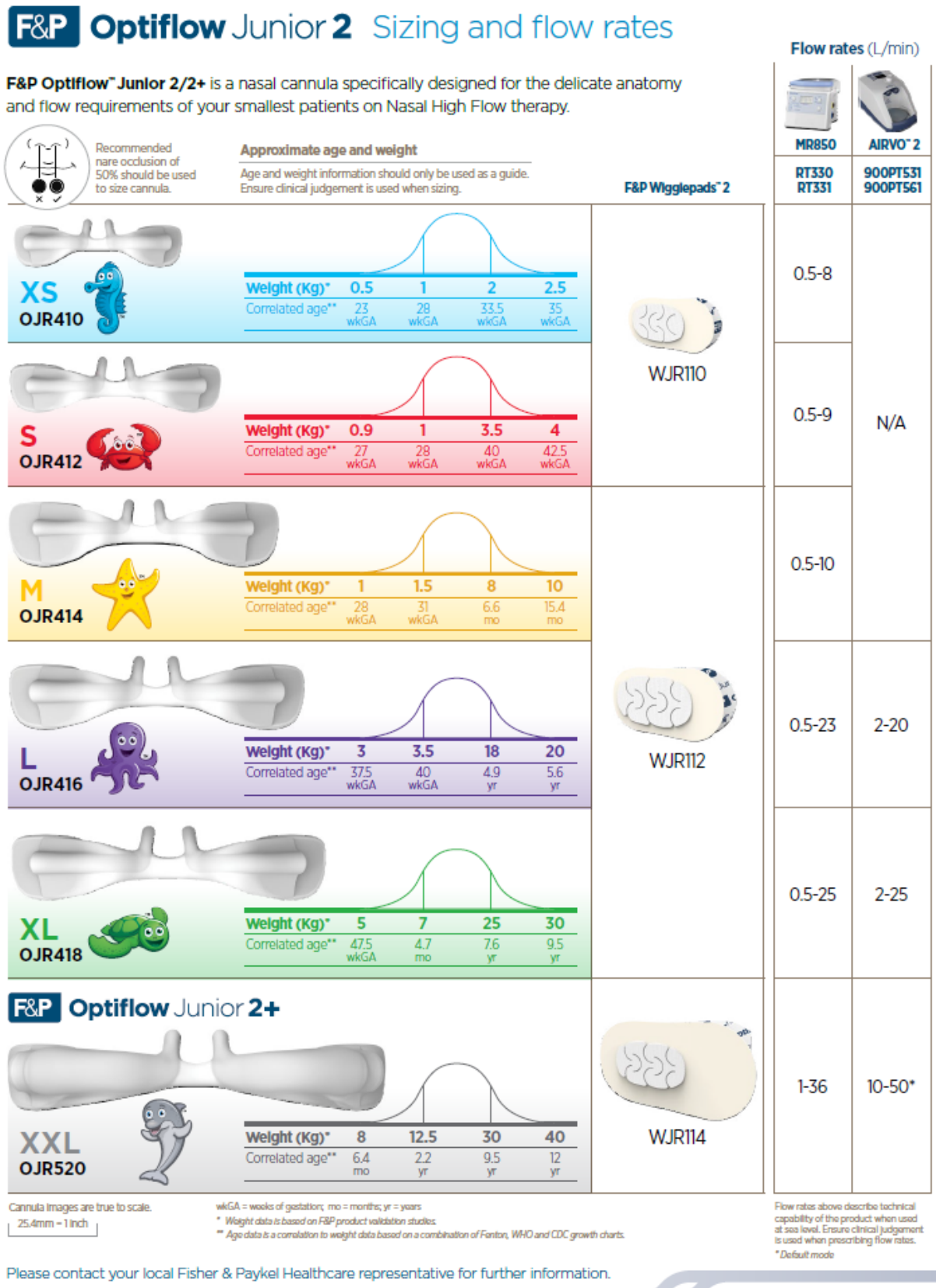
Appendix 1.

HHFNC Oxygen Therapy using AIRVO™ 2 in HNE LHD

Emergency Departments and Paediatric Units (excluding JHCH).



Appendix 2.


F&P Optiflow Junior 2 Sizing and flow rates
F&P Optiflow™ Junior 2/2+ is a nasal cannula specifically designed for the delicate anatomy and flow requirements of your smallest patients on Nasal High Flow therapy.
Recommended nare occlusion of 50% should be used to size cannula.
Approximate age and weight
Age and weight information should only be used as a guide. Ensure clinical judgement is used when sizing.
F&P Wigglepads™ 2
Flow rates (L/min)
MR850
AIRVO™ 2
RT330 RT331
900PT531 900PT561
XS OJR410
Weight (Kg)* 0.5 1 2 2.5
Correlated age** 23 wkGA 28 wkGA 33.5 wkGA 35 wkGA
WJR110
0.5-8
S OJR412
Weight (Kg)* 0.9 1 3.5 4
Correlated age** 27 wkGA 28 wkGA 40 wkGA 42.5 wkGA
0.5-9
N/A
M OJR414
Weight (Kg)* 1 1.5 8 10
Correlated age** 28 wkGA 31 wkGA 6.6 mo 15.4 mo
0.5-10
L OJR416
Weight (Kg)* 3 3.5 18 20
Correlated age** 37.5 wkGA 40 wkGA 4.9 yr 5.6 yr
WJR112
0.5-23
2-20
XL OJR418
Weight (Kg)* 5 7 25 30
Correlated age** 47.5 wkGA 4.7 mo 7.6 yr 9.5 yr
0.5-25
2-25
F&P Optiflow Junior 2+
XXL OJR520
Weight (Kg)* 8 12.5 30 40
Correlated age** 6.4 mo 2.2 yr 9.5 yr 12 yr
WJR114
1-36
10-50*
Cannula images are true to scale.
25.4mm = 1 Inch
wkGA = weeks of gestation; mo = months; yr = years
* Weight data is based on F&P product validation studies.
** Age data is a correlation to weight data based on a combination of Fenton, WHO and CDC growth charts.
Flow rates above describe technical capability of the product when used at sea level. Ensure clinical judgement is used when prescribing flow rates.
* Default mode
Please contact your local Fisher & Paykel Healthcare representative for further information.
Optiflow, Wigglepads, AIRVO, Seahorse, Crab, Starfish, Octopus, Turtle and Dolphin are trademarks of Fisher & Paykel Healthcare Limited. For patent information, see www.fphcare.com/ip
www.fphcare.com
Fisher & Paykel HEALTHCARE

Appendix 3.

F&P WigglewiNG

FITTING GUIDE

PRODUCT	OJR410	OJR412	OJR414	OJR416	OJR418	OJR520
NASAL CANNULA SIZE	XS	S	M	L	XL	XXL
F&P WigglewiNG™	WJR210		WJR212			WJR214

The following is a suggested procedure for applying the F&P WigglewiNG:

For the correct F&P WigglewiNG positioning, refer to the placement of the F&P Wigglepads™ 2 in the F&P Optiflow™ Junior 2 and F&P Optiflow Junior 2+ nasal cannula user instructions.

RIP INTO TWO

1 **Prepare skin**

Prepare the patient's skin according to hospital protocol.

Determine which nostril you would like to place the nasogastric tube in. Hold the F&P WigglewiNG over the patient's cheek on the same side as this nostril.

Face the white tabs (marked ❷) towards you and the hook pads away from you. Place the straighter edge towards the patient's nose.

❷ **RIP** off the entire upper third of the F&P WigglewiNG (distal to the patient's chin) by holding the middle section and ripping off the upper section. This will leave you with the lower 2/3 of the F&P WigglewiNG.

STICK TO FACE

❸ **Blue tab**

Peel off the blue tab (marked ①).

STICK the F&P WigglewiNG to the patient's cheek.

❹ **White tabs**

Peel off the white tabs (marked ❷ and F&P WigglewiNG). Insert the NG tube according to hospital protocol. Place the NG tube along the perforations.

Fisher & Paykel HEALTHCARE

F&P WigglewiNG

FITTING GUIDE

FOLD TO SECURE NG TUBE

5 Fold
Fold the F&P WigglewiNG over to secure the NG tube.

Apply the section removed in Step 2 as you would a Wigglepad on the opposite cheek.
Remove the existing Wigglepad from the nasal cannula.

6 Secure cannula
Secure the cannula in place so the cannula bridge rests close to the nose without touching the septum.
Do not stretch the cannula during application.

F&P WIGGLEWING REMOVAL

1 Place fingertip
Place fingertip on the outside edge of the F&P WigglewiNG and gently peel nasal cannula away.
Starting from the outside, peel towards the nose.

2 Lift the edge
Lift the edge of the F&P WigglewiNG. Use a damp cloth to wipe the patient's skin and the underside of the F&P WigglewiNG while gently peeling away from the patient's face.

3 Detach
Holding the NG tube securely between the patient's nose and the F&P WigglewiNG, detach the NG tube from the F&P WigglewiNG by tearing along the perforations.

IMPORTANT: Always refer to the user instructions supplied with the product for full setup instructions, warnings, contraindications and explanations.

www.fphcare.com

Fisher & Paykel HEALTHCARE

Appendix 4.

Hunter New England Local Health District

Prior to undertaking this assessment of competency please read:

1. **HNE LHD Clinical Procedure 'AIRVO 2 High Flow oxygen Device – set up and disinfection.'**
2. **HNE LHD AIRVO 2 Clinical Guideline 'Oxygen Delivery Device – Paediatric Patient's.'**
3. **HNE LHD Clinical Guideline 'AIRVO 2 High Flow Nasal Prong Oxygen – Adults.'**
4. **ACI Aerosol Generating Respiratory Therapies High Flow Nasal Prong Oxygen (HFNPO2)**

All available on the PPG Directory

Assessment of Competency: Cleaning and Disinfection of AIRVO 2 High flow oxygen device					
Details of Person Undertaking Assessment					
Name:		Designation: Employee number:			
Signature:					
Unit:		Date:			
Details of Person Undertaking Review					
Assessor Name:		Designation:			
Assessor Signature:		Date:			
Critical elements				Y	N
Assessor	Assessment of this procedure can only be completed by Nursing Educator, CNE, CNC NUM, CNS assessed as competency in this procedure and				
Scope of practice	• Works within scope of practice. • Has completed HETI online Decontamination of Reusable Medical Devices • Has viewed training video on-line				
Policy/guideline	Has read • HNELHD Clinical procedure CP 15_01 • NSW Health Infection Control policy				
Mandatory Staff Preparation	"Five moments of hand hygiene", infection control, standard /additional precautions, moving safely/safe manual handling, and documentation practices.				
Gathers Equipment Requirements	• Alcohol based hand rub • Performs hand hygiene • Personal Protective Equipment: protective eyewear, impervious gloves + additional precautions prn • Neutral detergent • 70% alcohol solution or alcohol wipes • Clean disposable lint free cloths • Cleaning Sponge-Stick (or green mouth care sponge stick) or disposable lint free cloth • Impervious cover				

	• Disinfection tube and filter • Waste receptacles		
Procedure	• Performs cleaning and disinfection in suitable environment i.e. non-patient care room, not in a room where sterile stock is stored • Maintains standard/additional precautions throughout the procedure • Checks sterility/integrity of sterile items • Compliance with pre-procedure hand hygiene and correct PPE • Disconnects device from power source		
	Cleaning • Cleans the outlet elbow using cleaning stick or lint free cloth • Ensures entire circumference is cleaned • Repeats as necessary until stick or cloth is debris free • Wipes outside surfaces of device with 70% alcohol wipe • Discards gloves and performs hand hygiene		
	Disinfection • Dons gloves • Connects red disinfection tube correctly (blue end to top of unit, red end to left-hand chamber port) • Fits blue filter to right hand chamber port • Plugs device into power and turns on • Starts disinfection cycle • Confirms disinfection cycle has completed successfully • Turns device off and unplugs		
Safety	Waste is contained and disposed appropriately.		
Documentation	• Documents cleaning and disinfection in unit log book including staff name, signature, date, time and cycle number of disinfection and the machine's unique identifier. • Labels device with date and time of disinfection and staff name and signature.		
Link theory to practice	Questions • Why do you need to avoid cleaning the left-hand port? • What are the two ways the AIRVO2 can be stored after reprocessing?		
Competency: **C = Competent S = Requires Supervision NYC = Not Yet Competent**			
Comments			