

Care under pressure

ReddyPort™ non-invasive ventilation products

Non-invasive ventilation (NIV) is the first line of therapy in respiratory insufficiency or failure, commonly seen with COPD, CHF^{1,2}, Asthma³, pneumonia⁴ or ARDS.⁵ In addition, NIV is utilized to wean patients off mechanical ventilation. However, many patients struggle to tolerate NIV therapy because the mask causes dry-mouth, phlegm build-up, and difficulty communicating.⁶⁻⁸ Up to 50% of NIV failures are related to the mask.⁹ Patient discomfort may lead to NIV failure.

Patient discomfort often results in removal of the mask by clinicians or patients in order to provide relief. However, this may lead to alveolar collapse¹⁰ and worsening respiratory status. Frequent removal and replacement of the mask can lead to improper fitting that can cause pressure injuries.

ReddyPort™ products promote NIV success by helping improve tolerance, empower clinicians and patients with simplified oral access while maintaining therapeutic pressure without mask removal.¹¹



ReddyPort Elbow compatible with Philips Respironics AF531 and PerforMax masks.



ReddyPort Elbow compatible with Philips Respironics AF541 mask

ReddyPort Elbow

ReddyPort features a proprietary elbow with self-sealing valve that provides access to the patient's mouth. ReddyPort Elbow, in combination with ReddyPort NIV Maintenance products, allows cleaning and moisturization of the patient's mouth without mask removal.

- Patented self-sealing valve seals with ventilator pressure and self-reverts.
- Includes an anti-asphyxia valve and connects to standard NIV tubing.
- Compatible with Philips Respironics AF531, AF541 and PerforMax NIV masks.

"Being able to clean the mouth is such a blessing. She cannot be removed from the mask because of shortness of breath. We are very happy."

Family of patient at Huntsman Cancer Hospital. Adult female with respiratory failure from pneumonia pulmonary edema, DNI status.



Silicone toothbrush being used provide oral hygiene



Integrated protective guard appliances: applicator swab, suction swab, silicone toothbrush, yankauer with silicone tip and yankauer handle (shown left to right)

ReddyPort NIV Maintenance

ReddyPort NIV Maintenance includes everything needed for oral hygiene to keep the patient's mouth clean and moisturized, without the risk and time required to remove the patient's mask.

- Patented design features, integrated protective guard for appliances that seal with ReddyPort Elbow.
- Protective guard allows for easy cleaning and moisturizing, enabling appliance insertion and removal to help prevent leakage and the "squeegee effect" when entering and exiting the patient's oral cavity.
- Therapeutic pressure is maintained while cleaning and moisturizing, reducing mask removal.
- NIV Maintenance components include: silicone toothbrush, suction swab, applicator swab, and yankauer with silicone tip.
- Follows Q4 protocols for standard oral care procedures to be applied to NIV patients.
- Addresses pneumonia risk factors by helping improve compliance for oral care protocols.

ReddyPort Microphone and Controller*

ReddyPort Microphone and Controller empower patients to speak up and share their needs. For clinicians and family members, it helps reduce the frustration that comes from not being able to hear the patient behind the mask, especially during a life-threatening illness.

- Microphone with integrated speaker seals with ReddyPort Elbow.
- System uses (DSP) digital signal processing to remove breathing noises and naturalize the patient's voice.
- Controller adjusts the volume of the patient's voice.
- Allows patients to communicate with clinicians and family without mask removal.
- Helps improve clinician and patient satisfaction.



Patient using microphone to communicate



Microphone with integrated speaker and Controller

For more information call **801.899.3036**.

* Limited commercial release

References:

1 Rochweg B, Brochard L, Elliott MW, Hess D, et al. Official ERS/ATS Clinical Practice Guidelines: Noninvasive Ventilation for Acute Respiratory Failure. *Eur Respir J*. 2017; 31:50(2):1602426 2 Huang CC, Muo CH, Wu TF, et al. The application of non-invasive and invasive mechanical ventilation in the first episode of acute respiratory failure [published online ahead of print, 2020 Mar 30]. *Intern Emerg Med*. 2020;1-9. 3 Stefan MS, Nathanson BH, Lagu T, et al. Outcomes of Noninvasive and Invasive Ventilation in Patients Hospitalized with Asthma Exacerbation. *Ann Am Thorac Soc*. 2016;13(7):1096-1104. 4 Hilbert G, Gruson D, Vargas F, et al. Noninvasive ventilation in immunosuppressed patients with pulmonary infiltrates, fever, and acute respiratory failure. *N Engl J Med*. 2001;344(7):481-487. 5 Ferrer M, Esquinas A, Leon M, Gonzalez G, Alarcon A, Torres A. Noninvasive ventilation in severe hypoxemic respiratory failure: a randomized clinical trial. *Am J Respir Crit Care Med*. 2003;168(12):1438-1444. 6 Smith TA, Davidson PM, Jenkins CR, Ingham JM. Life behind the mask: the patient experience of NIV. *Lancet Respir Med*. 2015;3(1):8-10. 7 Torheim H, Gjengedal E. How to cope with the mask? Experiences of mask treatment in patients with acute chronic obstructive pulmonary disease-exacerbations. *Scand J Caring Sci*. 2010;24(3):499-506. 8 Sørensen D, Frederiksen K, Groefte T, Lomborg K. Striving for habitual well-being in noninvasive ventilation: a grounded theory study of chronic obstructive pulmonary disease patients with acute respiratory failure. *J Clin Nurs*. 2014;23(11-12):1726-1735. 9 Nava S, Navalesi P, Gregoretti C. Interfaces and humidification for noninvasive mechanical ventilation. *Respir Care*. 2009;54(1):71-84. 10 Futier E, Constantin JM, Pelosi P, et al. Noninvasive ventilation and alveolar recruitment maneuver improve respiratory function during and after intubation of morbidly obese patients: a randomized controlled study. *Anesthesiology*. 2011;114(6):1354-1363. 11 Reddy C, Martinez M.L., Nietodelriodeastis C. Evaluation of a Novel Mask Adapter to Improve Patient Comfort and Provide Oral Care in Patients on Non-Invasive Ventilation. *Am J Respir Crit Care Med*. 2020; 201(A4621).

ReddyPort, Salt Lake City, UT, 84101, U.S.

reddyport.com

© 2020 ReddyPort and the ReddyPort logo are trademarks of ReddyPort and Company. FDA cleared, patented self-sealing elbow, oral care and other patents pending. The Philips and Respironics trademarks are property of Koninklijke Philips N.V. or their respective owners. RP2000-01 (0820)

REDDYPORT