

**McLAREN HEALTH PLAN
POLICY & PROCEDURE MANUAL**

Initial Approval Date: 05/21/24

Effective Date: 05/21/24

Effective Revision Date:

Last Review Date:

Review Cycle: As needed

SCOPE

McLaren Health Plan

SUBJECT

Inhaled Nitric Oxide

POLICY NUMBER

15-02

SECTION

Medical Policies

AUTHORIZED BY

Quality, Safety and Service

Improvement Committee

POLICY STATEMENT

Inhaled Nitrous Oxide (iNO)

PURPOSE

Inhaled Nitrous Oxide (iNO) is a natural vasodilator and has been studied for a variety of types of respiratory failure. This policy describes the criteria for use, the rationale for these criteria, and any exceptions outside of the standard criteria.

PROCEDURE

Inhaled Nitrous Oxide (iNO) has been approved by the FDA to improve oxygenation and reduce the need for extracorporeal membrane oxygenation in term and near-term (> 34 weeks gestation) neonates with hypoxic respiratory failure associated with clinical or echocardiographic evidence of pulmonary hypertension in conjunction with ventilatory support and other appropriate agents.

It also has been proposed for the following:

- a) Premature infants
- b) Critically ill children and adults with respiratory failure
- c) Postoperative management of children undergoing repair of congenital heart disease
- d) Patients after lung transplantation to prevent or reduce reperfusion injury.

Inhaled Nitrous Oxide (iNO) appears to be of greatest benefit in individuals when primary or secondary pulmonary hypertension is a component of hypoxic respiratory failure.

REQUIREMENTS AND STANDARDS:

Initial Criteria for Treatment (initial approval for 72 hours):

iNO meets the definition of medical necessity for all of the following:

1. Treatment for hypoxic respiratory failure in neonates > 34 weeks gestation and BOTH of the following:
 - a. The neonate does NOT have an unrepaired congenital diaphragmatic hernia.
 - b. Conventional therapies have all failed or are anticipated to fail. These therapies include administration of high concentrations of oxygen, hyperventilation, high frequency ventilation, induction of alkalosis, neuromuscular blockade and sedation.
2. Management of post operative pulmonary hypertension in infants or children following heart or lung surgery
3. As a method of assessing pulmonary vasoreactivity in children and adults with pulmonary hypertension.

Inhaled Nitrous Oxide (iNO) is considered experimental or investigational for all other indications, including but not limited to the following conditions:

1. Treatment of premature neonates born at less than or equal to 34 weeks of gestation with hypoxic respiratory failure.
2. Treatment of adults and children (other than those the meet the medical necessity criteria above) with acute hypoxemic respiratory failure.
3. Treatment of acute respiratory distress syndrome (ARDS) or acute lung injury
4. Acute treatment of sickle cell vaso-occlusive crisis
5. Postoperative use in adults with congenital heart disease
6. In lung transplantation, during and/or after graft reperfusion.

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