PROVIDER POLICIES & PROCEDURES

INTERMITTENT POSTIVE PRESSURE BREATHING (IPPB) IN THE HOME SETTING

The primary purpose of this document is to assist providers enrolled in the Connecticut Medical Assistance Program (CMAP Providers) with the information needed to support a medical necessity determination for an IPPB device for use in the home setting. By clarifying the information needed for prior authorization of services, HUSKY Health hopes to facilitate timely review of requests so that individuals obtain the medically necessary care they need as quickly as possible.

IPPB is a method of providing short-term or intermittent mechanical ventilation via a mouthpiece or mask. Its primary purpose in the home setting is to enhance lung expansion, prevent atelectasis, assist in clearing airway secretions, and facilitate the administration of aerosolized medications.

CLINICAL GUIDELINE

Coverage guidelines for an IPPB device for use in the home setting will be made in accordance with the DSS definition of Medical Necessity. The following criteria are guidelines *only*. Coverage determinations are based on an assessment of the individual and their unique clinical needs. If the guidelines conflict with the definition of Medical Necessity, the definition of Medical Necessity shall prevail. The guidelines are as follows:

Initial Authorization

The use of an IPPB device in the home setting may be considered medically necessary:

A. In one of the following scenarios:
    1. Standard treatments for atelectasis have been unsuccessful (e.g., incentive spirometry, chest physiotherapy, deep breathing exercises, positive airway pressure therapy);
    2. The individual has an inability to clear airway secretions and has failed to respond to other treatments (e.g., incentive spirometry, postural drainage, aerosol therapy);
    3. When delivery of aerosolized medication is needed for individuals with ventilatory muscle weakness (e.g., neuromuscular disease, failure to wean from mechanical ventilation, kyphoscoliosis, spinal injury); or
    4. When short-term ventilatory support is needed for individuals who are hypoventilating;

AND

B. When there is documentation that the individual or caregiver that resides with the individual has been trained in proper use of the device;

AND

C. When the individual has no known *contraindications.

*Note: While there is not a comprehensive list of absolute and relative contraindications for the use of IPPB, the following are examples of contraindications and precautions:

- Tension pneumothorax (untreated)
- Intracranial pressure (ICP) > 15 mm Hg
- Hemodynamic instability

- Recent facial, oral, or skull surgery
- Tracheoesophageal fistula
- Recent esophageal surgery
- Active hemoptysis
- Nausea
- Air swallowing
- Active untreated tuberculosis
- Radiographic evidence of bleb
- Singulation (hiccups)

Reauthorization

Continued use of an IPPB device in the home setting may be considered medically necessary when:

A. The above criteria under Initial Authorization have been met; and
B. There is documentation addressing the medical need for continued use of the IPPB.

NOTE: EPSDT Special Provision

Early and Periodic Screening, Diagnosis, and Treatment (EPSDT) is a federal Medicaid requirement that requires the Connecticut Medical Assistance Program (CMAP) to cover services, products, or procedures for Medicaid enrollees under 21 years of age where the service or good is medically necessary health care to correct or ameliorate a defect, physical or mental illness, or a condition identified through a screening examination. The applicable definition of medical necessity is set forth in Conn. Gen. Stat. Section 17b-259b (2011) [ref. CMAP Provider Bulletin PB 2011-36].

PROCEDURE

Requests for coverage of an IPPB device for use in a home setting will be reviewed in accordance with procedures in place for reviewing requests for durable medical equipment. Coverage determinations will be based upon a review of requested and/or submitted case-specific information.

If approved, the IPPB device will be authorized as a rental only. Initial authorization will be given for up to three (3) months with subsequent authorization of up to twelve (12) months.

The following information is needed to review requests for an IPPB device in the home setting:

1. Fully completed authorization request via web portal;
2. A signed prescription, written within the past 3 months, from the treating physician, physician assistant (PA), or advanced practice registered nurse (APRN) enrolled in the Connecticut Medical Assistance Program (CMAP);
3. Documentation from the ordering provider, written within the past 3 months, that supports the medical necessity of the requested item as described in the *Clinical Guidelines* section of this policy; and
4. An attestation from the ordering provider stating that the individual does not have any relative contraindications to the use of an IPPB device.

EFFECTIVE DATE

This Clinical Guideline is effective for prior authorization requests for individuals covered under the HUSKY A, B, C, and D programs on or after November 1, 2025.

LIMITATIONS
N/A

CODES:

Code	Description
E0500	IPPB machine, all types, with built-in nebulization; manual or automatic valves; internal or external power source

DEFINITIONS

1. **HUSKY A**: Connecticut children and their parents or a relative caregiver; and pregnant women may qualify for HUSKY A (also known as Medicaid). Income limits apply.
2. **HUSKY B**: Uninsured children under the age of 19 in higher income households may be eligible for HUSKY B (also known as the Children's Health Insurance Program) depending on their family income level. Family cost-sharing may apply.
3. **HUSKY C**: Connecticut residents who are age 65 or older or residents who are ages 18-64 and who are blind, or have another disability, may qualify for Medicaid coverage under HUSKY C (this includes Medicaid for Employees with Disabilities (MED-Connect), if working). Income and asset limits apply.
4. **HUSKY D**: Connecticut residents who are ages 19-64 without dependent children and who: (1) do not qualify for HUSKY A; (2) do not receive Medicare; and (3) are not pregnant, may qualify for HUSKY D (also known as Medicaid for the Lowest-Income populations).
5. **HUSKY Health Program**: The HUSKY A, HUSKY B, HUSKY C, HUSKY D and HUSKY Limited Benefit programs, collectively.
6. **HUSKY Limited Benefit Program or HUSKY, LBP**: Connecticut's implementation of limited health insurance coverage under Medicaid for individuals with tuberculosis or for family planning purposes and such coverage is substantially less than the full Medicaid coverage.
7. **Medically Necessary or Medical Necessity**: (as defined in Connecticut General Statutes § 17b-259b) Those health services required to prevent, identify, diagnose, treat, rehabilitate or ameliorate an individual's medical condition, including mental illness, or its effects, in order to attain or maintain the individual's achievable health and independent functioning provided such services are: (1) Consistent with generally accepted standards of medical practice that are defined as standards that are based on (A) credible scientific evidence published in peer-reviewed medical literature that is generally recognized by the relevant medical community, (B) recommendations of a physician-specialty society, (C) the views of physicians practicing in relevant clinical areas, and (D) any other relevant factors; (2) clinically appropriate in terms of type, frequency, timing, site, extent and duration and considered effective for the individual's illness, injury or disease; (3) not primarily for the convenience of the individual, the individual's health care provider or other health care providers; (4) not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of the individual's illness, injury or disease; and (5) based on an assessment of the individual and his or her medical condition. prescription.
8. **Prior authorization**: A process for approving covered services prior to the delivery of the service or initiation of the plan of care based on a determination by CHNCT as to whether the requested service is medically necessary.

ADDITIONAL RESOURCES AND REFERENCES:

- American Association of Respiratory Care. AARC Clinical Practice Guideline. Intermittent Positive Pressure Breathing-2003 Revision & Update. Available at: https://www.aarc.org/wp-

content/uploads/2014/08/05.03.0540.pdf. Accessed on June 11, 2025
- Belli S, Prince I, Savio G, et al. Airway Clearance Techniques: The Right Choice for the Right Patient. *Front Med (Lausanne)*. 2021;8:544826. Published 2021 Feb 4. doi:10.3389/fmed.2021.544826
- Centers for Medicare and Medicaid Services. Coverage Issues-Durable Medical Equipment, Durable Medical Equipment Reference List. Section 60-9, pages 13-14. https://www.cms.gov/Regulations-and-Guidance/Guidance/Manuals/downloads/pub06_part_60.pdf. Accessed May 22, 2025
- Centers for Medicare and Medicaid Services. Payment for Respiratory Assist Devices With Bi-Level Capability and Backup Rate. Federal Register, January 27, 2006, 71(18), pages 4518- 4525. https://www.cms.gov/medicare/medicare-fee-for-service-payment/dmeposfeesched/downloads/cms1167f.pdf. Accessed May 22, 2025
- ClinicalTrials.gov. NCT00000565. Clinical Study of Intermittent Positive Pressure Breathing (IPPB). Available at: https://biolincc.nhlbi.nih.gov/studies/ippb/. Accessed on May 23, 2025.
- Dohna-Schwake C, Ragette R, Teschler H, Voit T, Mellies U. IPPB-assisted coughing in neuromuscular disorders. Pediatr Pulmonol. 2006;41(6):551-557. doi:10.1002/ppul.20406
- Handelsman H. Intermittent positive pressure breathing (IPPB) therapy. Health Technol Assess Rep. 1991;(1):1-9.
- Khirani, S., Griffon, L., Thébault, C., Aubertin, G., Dupont, P., Mbieleu, B., Galodé, F., Canavesio, C., Fleurence, E., Labouret, G., Cros, P., Barzic, A., Lubrano Lavadera, M., Giovannini-Chami, L., Gilardoni, J. M., Gourdan, P., Moreau, J., Matecki, S., Zitvogel, F., Durand, M., … NIV Group of the French Society of Pediatric Pulmonology and Allergy (Société Pédiatrique de Pneumologie et Allergologie (SP2A)) (2024). Lung volume recruitment and airway clearance for children at home in France. *Respiratory medicine*, *231*, 107726. https://doi.org/10.1016/j.rmed.2024.107726
- Laffont I, Bensmail D, Lortat-Jacob S, et al. Intermittent positive-pressure breathing effects in patients with high spinal cord injury. Arch Phys Med Rehabil. 2008;89(8):1575-1579. doi:10.1016/j.apmr.2007.12.037
- Nicolini A, Mollar E, Grecchi B, Landucci N. Comparison of intermittent positive pressure breathing and temporary positive expiratory pressure in patients with severe chronic obstructive pulmonary disease. *Arch Bronconeumol*. 2014;50(1):18-24. doi:10.1016/j.arbres.2013.07.019
- Stiller K, Simionato R, Rice K, Hall B. The effect of intermittent positive pressure breathing on lung volumes in acute quadriparesis. Paraplegia. 1992;30(2):121-126. doi:10.1038/sc.1992.39
- UpToDate. COPD exacerbations: Management. JK Stoller, MD, U Hatipoglu, MD. Topic last updated May 14, 2025.
- UptoDate. Respiratory complications in the adult patient with chronic spinal cord injury. E Garish MD, MOH. Topic last update February 05, 2025
- UptoDate. Respiratory muscle weakness due to neuromuscular disorder: Management. SK Epstein MD. Topic last updated August 23, 2024.

PUBLICATION HISTORY

Status	Date	Action Taken
Original publication	July 2025	Approved at the CHNCT Medical Reviewer meeting on July 9, 2025. Approved by the CHNCT Clinical Quality Subcommittee on September 16, 2025. Approved by DSS on September 23, 2025.