कार्यालय रक्षा लेखा प्रधान नियंत्रक (द.प.क.), खातीपुरा रोड, जयपुर-12
Office of the Principal Controller of Defence Accounts (SWC),
Khatipura Road, Jaipur-12
Fax No. 0101-2388463 Phone No. 0141-2388450, 458 Email : pcdaswc.cgda@nic.in

स.प्रशा/वेतन /101/Circular/2021 दिनांक 13 .08.2021

सेवा मे ,

All section of Main Office
All sub office
IFA HQ SWC & IFA HQ 10 Corps
(Through PCDA Website)

विषय: -Revision of guidelines regarding provision of CPAP/BiPAP/Oxygen Concentrator in respect of CS(MA) beneficiaries for domiciliary use.

Please find enclosed a copy of Govt. of India, Ministry of Health & Family Welfare Department of Health & family Welfare Office Memorandum No. S.14025/55/2019EHS dated 27th May 2021 and circulated vide CGDA circular letter no. AN/XIV/19015/Govt.Orders/TA/DA/LTC/Medical dated 02.08.2021(copy attached) on above subject is forwarded herewith for information, guidance and compliance please.

Encl:- As Above.

व.लेखाअधिकारी
(प्रशा वेतन)

Copy to
EDP Section (Local)- For uploading on PCDA SWC website please.

व.लेखाअधिकारी
(प्रशा वेतन

रक्षा लेखा महानियंत्रक
उलान बटार रोड, पालम, दिल्ली छावनी-110010
Controller General of Defence Accounts,
Ulan Batar Road, Palam, Delhi Cantt.-110010

सं-प्रशा/14/19015/सरकारी आदेश/या.भ/छु.या.रि/चिकित्सा दिनांक: 02/08/2021
No. AN/XIV/19015/Govt. Orders/TA/DA/LTC/Medical

सेवा में,

सभी रक्षा लेखा प्रधान नियंत्रक/रक्षा लेखा नियंत्रक/प्र.ले.नि.(फै.)
All PCsDA/CsDA/PCA (Fys)
(Through CGDA Website)

Subject: Revision of guidelines regarding provision of CPAP/BiPAP/Oxygen Concentrator in respect of CS (MA) beneficiaries for domiciliary use.

****

उपरोक्त विषय पर भारत सरकार, स्वास्थ्य एवं परिवार कल्याण मंत्रालय, स्वास्थ्य एवं परिवार कल्याण विभाग, के दिनांक 27.05.2021 के कार्यालय ज्ञापन पत्र सं-S.14025/55/2019-EHS की प्रति सूचना, मार्गदर्शन एवं अनुपालन हेतु प्रेषित की जाती है।

A copy of Govt. of India, Ministry of Health and Family Welfare, Department of Health and Family Welfare OM F. No. S.14025/55/2019-EHS dated 27.05.2021 on the above subject is forwarded for your information, guidance and compliance please.

(राजीव रंजन कुमार)
रक्षा लेखा उप महानियंत्रक

संलग्नक: यथोपरि

प्रतिलिपि :-

1. प्रशासन - वेतन (स्थानीय) ।
2. लेखा परीक्षा (सेना/सीमा सड़क) स्थानीय ।
3. लेखा परीक्षा (समन्वय) अनुभाग (स्थानीय) ।
4. आई. टी. & एस. विंग (स्थानीय) :- रक्षा लेखा महानियंत्रक वेबसाइट पर अपलोड करने हेतु ।
5. प्रशिक्षण एवं संगोष्ठी केंद्र, बरार स्क्वायर, दिल्ली छावनी ।
6. पुस्तकालय अनुभाग (स्थानीय) ।
7. मास्टर नोट बुक प्रशासन -14 ।
8. महासचिव, ए.आई.डी.ए.ए. (सी.बी.) पुणे { द्वारा रक्षा लेखा प्रधान नियंत्रक (अधिकारी) पुणे} ।
9. महासचिव, ए.आई.डी.ए.ई.ए.(मु.) कोलकाता { द्वारा प्रधान नियंत्रक लेखा (फैक्ट्री) कोलकाता ।

(प्रदीप कुमार)
लेखा अधिकारी(प्रशा.)

No. S.14025/55/2019-EHS
Government of India
Ministry of Health & Family Welfare
Department of Health & Family Welfare
EHS Section
*****

Nirman Bhawan, New Delhi
Dated: the 27th May, 2021

OFFICE MEMORANDUM

Sub:- Revision of guidelines regarding provision of CPAP / BiPAP / Oxygen concentrator, in respect of CS(MA) beneficiaries for domiciliary use.

The undersigned is directed to refer to the Office Memorandum No. S.14025/6/2006-MS dated 19th May, 2006 issued by this Department on the above subject. The matter has been reviewed in this Ministry and the following guidelines have been framed for considering requests for permission to purchase Oxygen Concentrator/BiPAP/CPAP etc. by CS(MA) beneficiaries and regulating reimbursement of cost of such machines to the CS(MA) beneficiaries:

(i) Request of the beneficiary should be accompanied with the relevant proforma prescribed for the machine, duly filled up by the treating physician (specimen copy of proforma attached). The treating physician should carefully read the laid down guidelines before filling up the respective columns of the Proforma. Actual value of all the parameters mentioned in Proforma should invariably be entered and complete basic investigation reports must be attached.

A. Arterial blood gas report taken while the patient is in stable condition and is breathing room air (in case of oxygen concentrator and bi-level ventilator supplier system).

B. Detailed in-lab-level-I polysomnography report (including all the tracings and tables) in case of recommendation for CPAP and Bi-level CPAP.

(ii) As these machines are life saving devices and have a maximum life of five years, these will be allowed to be replaced again after a period of five years subject to a certificate by the service engineer regarding the un-serviceability/condemnation/ of the earlier machine.

(iii) The beneficiary has also to submit an undertaking to the effect that he has not claimed reimbursement of the cost of the machine in the last five years (copy of format for the affidavit and the undertaking is enclosed).

(iv) Individual requests for permission/ replacement / ex-post facto approval shall be considered by the screening committee consisting of DDG(M), Dte.GHS and two Medical Specialists in the concerned field.

(v) The maximum ceiling limit for reimbursement will be as following:

a. Oxygen Concentrator	Rs. 45,000/- + GST
b. CPAP	Rs. 45,000/- + GST
c. Bi-level CPAP	Rs. 68,000/- + GST
d. Bi-level Ventilatory System	Rs. 1,05,000/- + GST

(vi) The above ceiling limits include cost of maintenance with spare parts for a period of five years. No request for reimbursement of cost of maintenance/parts will be entertained.

(vii) Request for replacement of machine after completion of five years will need to be advised and processed in the same manner as for the first machine.

(viii) Request for permission/ex-post facto approval of these machines, complete in all respect as mentioned above may be sent to Directorate General Health Services.

2. This Office Memorandum supersedes all earlier instruction issued on this subject. These instructions shall take effect from the date of issue of this Office Memorandum i.e. all requests under this OM should have advice for these machines subsequent to the issue of this OM.

3. This issues with the concurrence of Integrated Finance Division, Ministry of Health & Family Welfare vide concurrence Dairy No. 2188, dated 18rd December, 2020.

Signature valid
Digitally signed by SANDEEP KUMAR
Date: 2[illegible]05:05 IST

(Sandeep Kumar)
Under Secretary to the Govt. of India

1. All Ministries/Departments, Government of India.
2. PPS to Secretary (H&FW)/Secretary (AYUSH)/Secretary (HR).
3. PPS to DGHS/AS&DG (CGHS)/AS&FA/AS&MD, NRHM/AS(H), MoHFW, New Delhi
4. Director, CGHS, Nirman Bhawan, New Delhi
5. Addl.DDG(HQ), CGHS, MoHFW, Nirman Bhawan, New Delhi
6. AD(HQ), CGHS, R.K.Puram, Sector-12, New Delhi
7. All Addl. Directors/Joint Directors of CGHS cities outside Delhi
8. Rajya Sabha/Lok Sabha Secretariat, New Delhi
9. Registrar, Supreme Court of India, New Delhi
10. U.P.S.C. Dholpur House. New Delhi
11. Office of the Comptroller & Auditor General of India, Pocket-9, Deen Dayal Upadhyaya Marg, New Delhi.
12. Integrated Finance Division, MoHFW, Nirman Bhawan, New Delhi
13. Deputy Secretary (Civil Service News), Department of Personnel & Training, 5th Floor, Sardar Patel Bhawan, New Delhi.
14. Secretary, Staff Side, 13-D, Ferozshah Road, New Delhi
15. All Staff Side Members of National Council (JCM)
16. ED(H)/Planning, Railway Board, Ministry of Railways, Rail Bhawan, Rafi Marg, New Delhi – 110001
17. Central Organisation, ECHS, Department of Ex-Servicemen Welfare, Ministry of Defence, New Delhi
18. Chairman, Employees State Insurance Corporation, Ministry of Labour& Employment, Panchdeep Bhawan, C.I.G. Marg, New Delhi-110002
19. UTI-ITSL, 153/1, First Floor, Old Madras Road, Ulsoor, Bengaluru-560008.
20. Hindi Section, MoHFW, Nirman Bhawan, New Delhi for providing Hindi version of this OM.
21. Guard file.

UNDERTAKING

I, the undersigned, do hereby declare that, I have not purchased any CPAP/BIPAP/ Oxygen Concentrator machine, in the past five years at Government expenses.

1. Name :

2. Office I.D. NO :

3. Name of Department/ Ministry :

4. Address of Applicant / Mobile :

Dated :

Signature of the Applicant.

Notarized Affidavit for BIPAP / CPAP / Oxygen Concentrator Machine

1. Sh./Smt./Kum. ..... S/D/W/H/O .....

.....

Working in the Department/ Ministry .....

R

/O .....

do solemnly affirm and declare that

The CPAP / BIPAP / Oxygen concentrator machine has been advised by Dr. ..... Hospital ..... in r /o .....

I undertake to return CPAP / BIPAP / Oxygen concentrator machine in good working condition to Directorate. General Health Services, Nirman Bhawan, New Delhi, after its utility is over.

The responsibility for maintenance and upkeep of the machine will lie with me. I shall not claim Expenditure incurred, if any, on upkeep and maintenance of the machine.

I will submit the claim at ceiling / approved rates and the remaining amount, if any, will be borne by me.

I have enclosed a complete sleep lab report / ABC Report and performa duly filled by treating specialist.

I shall not use the aforesaid machine for any other purpose except treatment of ..... .

CERTIFICATE OF MEDICAL NECESSITY TO BE ISSUED TO CS(MA) BENEFICIARIES BEING PRESCRIBED CONTINUOUS POSITIVE AIRWAY PRESSURE (CPAP) DEVICE *(To be filled by the treating physician)*

Certification Type: Initial/ Revised

1. Patient Name

2. Age of Patient

3. Physician Name

4. Address of physician

5. Telephone No of Physician

6. (a) Brief history and physical findings

(b) co-morbidity (if any) e.g. COPD, diabetes mellitus etc.

(c) Whether accompanied by symptoms of

- Excessive daytime sleepiness : Yes/No
- Snoring : Yes/No
- Impaired cognition : Yes/No
- Documented cardiovascular disease like Hypertension, ischemic heart disease or Stroke (specify if Yes) : Yes/No.

7. Laboratory data (specify date against each parameter):

Hematocrit

ECG

Blood Sugar

Lipid Profile

Arterial blood gases: 1 2 3

- Date
- pH
- paO_2
- $paCO_2$
- HCO_3 a
- HCO_3 s
- BE
- O_2 sat

X-ray Chest

Echocardiography (wherever necessary)

Pulmonary function tests

Thyroid function tests

Ear, nose & throat examination

Others (specify)

8. Diagnostic nocturnal polysomnography (NPSG) data: Only whole night polysomnography (Level-1) including channels for sleep, breathing, pulse oxymetry, leg EMG, ECG, snoring will be accepted for consideration of CPAP/BiPAP

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(a) Date of sleep study

(b) Address of sleep-laboratory / facility

(c) Duration of diagnostic NPSG study (in hours)

(d) Parameters studied during polysomnography

- Electro-encephalogram — Yes/No
- Electro-oculogram — Yes/No
- Electro-myogram — Yes/No
- Oro-nasal airflow — Yes/No
- Chest & abdominal wall effort — Yes/No
- Body position — Yes/No
- Snore microphone — Yes/No
- Electro-cardiogram — Yes/No
- Oxyhemoglobin saturation — Yes/No

(e) Average number of obstructive events per hours of recorded sleep (in case of standard as well as split NPSG)

(i) Obstructive apnoea*

(ii) hypopnea**

(iii) Flow limitations***

(iv) RERA

(f) Respiratory Distress Index (RDI)****

9. Date of CPAP titration study

10. CPAP pressure (in cm H_2O) prescribed (to abolish obstructive apnoeas, hypopneas, RERAs and snoring in all sleep positions and sleep stages):

11. Supplemental oxygen (flow rate or FIO_2):

12. Final Diagnosis

I certify that the medical necessity information is true, accurate and complete to the best of my knowledge. I have carefully gone through the note for prescribers before filling up this proforma.

Date: (Full Name, signature & address of Physician)

Note for prescribers (For diagnostic as well as for titration):

Only whole night manually validated Level-1 polysomnography including channels for sleep, breathing, pulse oxymetry, leg EMG, ECG, snoring & CPAP titration will be accepted for consideration of CPAP/BiPAP. Screening studies such as Level III, Level IV (Cardio pulmonary sleep studies) shall not be acceptable. Auto titrated CPAP studies shall also not be acceptable.

* **Apneas** Absence of airflow on the nasal cannula and < 10% baseline fluctuations on the thermistor signal, lasting for > 10 s.

** **Flow limitation** events: Any series of two or more breaths (lasting > 10s) that had a flattened or nonsinusoidal appearance on the inspiratory nasal cannula flow signal and ended abruptly with a return to breaths with sinusoidal shape.

*** **Hypopneas** American Academy of Sleep Medicine (AASM) hypopneas: As proposed by the AASM Task Force (10), these events include both flow Hypopneas and any flow limitation event associated with 3% desaturation or associated with an AASM arousal.

**** **RERA (respiratory effort-related arousal)** is defined as a event characterized by increasing respiratory effort for ≥ 10 seconds leading to arousal from sleep but which does not fulfill the criteria for hypopnoea or apnoea. A RERA is detected with nocturnal esophageal catheter pressure measurement, which demonstrates a pattern of progressive negative esophageal pressures terminated in a change in pressure to a less negative pressure level associated with an arousal.

Upper airway resistance syndrome (UARS): is an abnormal breathing pattern during sleep that is associated with isolated daytime sleepiness not explained by any other cause, including the obstructive sleep apnoea/hypopnea syndrome. Essential features include (a) the clinical complaint of excessive daytime sleepiness; (b) an elevated EEG arousal index (more than ten per hour of sleep) with arousals related to increased respiratory efforts as measured by continuous nocturnal monitoring of esophageal pressures; (c) a normal RDI of less than 5 events per hour of sleep. Supportive features include (a) the clinical complaint of snoring (b) an increase in snoring intensity prior to EEG arousals and (c) clinical improvement with a short term trial of nasal CPAP therapy.

Split-Night Study NPSG: Patients with a RDI of >40 events per hour during the first 2 hours of a diagnostic NPSG receive a split-night study NPSG, of which the final portion of the NPSG is used to titrate CPAP; split-night study may be considered for patients with RDI of 20-40 events

per hour, based on clinical observations, such as the occurrence of obstructive respiratory events with a prolonged duration or in associated with severe oxygen desaturation; a minimum of 3 hours of sleep is preferred to adequately titrate CPAP after this treatment is initiated; split-night studies require the recording and analysis of the same parameters as a standard diagnostic NPSG; on occasion, an additional full-night CPAP titration NPSG may be required if the split-night study did not allow for the abolishment of the vast majority of obstructive respiratory events or prescribed CPAP treatment does not control clinical symptoms.

CPAP treatment is indicated in the following situations:

The treatment of obstructive sleep apnea (OSA) in adults is considered medically necessary for patients who meet either of the following criteria on polysomnography:

1. Apnea Hypopnea Index (AHI) or a respiratory disturbance index (RDI) greater than or equal to 15 events per hour; **OR**
2. AHI (or RDI) greater than or equal to 5, and less than 15 events per hour with documentation demonstrating any of the following symptoms:
   - Excessive daytime sleepiness, as documented by either a score of greater than 10 on the Epworth Sleepiness scale or inappropriate daytime napping, (e.g., during driving, conversation or eating) or sleepiness that interferes with daily activities; or
   - Impaired cognition or mood disorders; or
   - Hypertension; or
   - Ischemic heart disease or history of stroke; or
   - Cardiac arrhythmias, or
   - Pulmonary hypertension.

The AHI is equal to the average number of episodes of apnea and hypopnea per hour and must be based on a minimum of two hours of sleep recorded by polysomnography using actual recorded hours of sleep, (i.e., the AHI may not be extrapolated or projected).

Note: *For the purposes of this recommendation, the terms apnea hypopnea index (AHI) and respiratory disturbance index (RDI) are interchangeable, although they may differ slightly in clinical use; an AHI/RDI greater than 30 is consistent with severe obstructive sleep apnea. In some cases, respiratory effort-related arousals (or RERAS) are included in the RDI value. These RERA episodes represent EEG arousals associated with increased respiratory efforts but do not qualify as apneic or hypopneic episodes because of the absence of their defining air flow changes and/or levels of oxygen desaturation.*

CERTIFICATE OF MEDICAL NECESSITY TO BE ISSUED TO CSE(MA) BENEFICIARIES BEING PRESCRIBED BILEVEL CONTINUOUS POSITIVE AIRWAY PRESSURE (BI-LEVEL CPAP) / BI-LEVEL VENTILATORY SUPPORT SYSTEM *(To be filled by the treating physician)*

Certification Type: Initial / Revised

1. Patient Name
2. Age of Patient
3. Physician Name
4. Address of physician
5. Telephone No of Physician

6. (a) Brief history and physical findings

(b) Co-morbidity (if any)

(c) Whether accompanied by symptoms of

- Excessive daytime sleepiness : Yes/No
- Snoring : Yes/No
- Impaired cognition : Yes/No
- Documented cardiovascular disease like Hypertension, ischemic heart disease or Stroke (specify if Yes) : Yes/No

7. Laboratory data (specify date against each parameter):

Hematocrit

ECG

Blood Sugar (wherever necessary)

(a) Date of sleep study

(b) Address of sleep-laboratory / facility

(c) Duration of diagnostic NPSG study (in hours)

(d) Parameters studied during polysomnography:

- Electro-encephalogram — Yes/No
- Electro-oculogram — Yes/No
- Electro-myogram — Yes/No
- Oro-nasal airflow — Yes/No
- Chest & abdominal wall effort — Yes/No
- Body position — Yes/No
- Snore microphone — Yes/No
- Electro-cardiogram — Yes/No
- Oxyhemoglobin saturation — Yes/No

(e) Average number of obstructive events per hours of recorded sleep (in case of standard as well as split NPSG)

(i) Obstructive apnoea*

(ii) hypopnea**

(iii) Flow limitations***

(iv) RERA

(f) Respiratory Distress Index (RDI)****

9. Date of CPAP titration study

10. CPAP pressure (in cm H_2O) prescribed (to abolish obstructive apnoeas, hypopneas, RERAs and snoring in all sleep positions and sleep stages):

11. Supplemental oxygen (flow rate or FiO_2):

12. Final Diagnosis

I certify that the medical necessity information is true, accurate and complete to the best of my knowledge. I have carefully gone through the note for prescribers before filling up this proforma.

Date: (Full Name, signature & address of Physician)

[illegible] for CPAP

Note for prescribers (For diagnostic as well as for titration):

Only whole night manually validated Level-1 polysomnography including channels for sleep, breathing, pulse oxymetry, leg EMG, ECG, snoring & CPAP titration will be accepted for consideration of CPAP/BiPAP. Screening studies such as Level III, Level IV (Cardio pulmonary sleep studies) shall not be acceptable. Auto titrated CPAP studies shall also not be acceptable.

* Apneas Absence of airflow on the nasal cannula and < 10% baseline fluctuations on the thermistor signal, lasting for > 10 s.

** Flow limitation events: Any series of two or more breaths (lasting > 10s) that had a flattened or nonsinusoidal appearance on the inspiratory nasal cannula flow signal and ended abruptly with a return to breaths with sinusoidal shape.

** Hypopneas American Academy of Sleep Medicine (AASM) hypopneas: As proposed by the AASM Task Force (10), these events include both flow Hypopneas and any flow limitation event associated with 3% desaturation or associated with an AASM arousal.

*** RERA (respiratory effort-related arousal) is defined as a event characterized by increasing respiratory effort for ≥ 10 seconds leading to arousal from sleep but which does not fulfill the criteria for hypopnoea or apnoea. A RERA is detected with nocturnal esophageal catheter pressure measurement, which demonstrates a pattern of progressive negative esophageal pressures terminated in a change in pressure to a less negative pressure level associated with an arousal.

Upper airway resistance syndrome (UARS): is an abnormal breathing pattern during sleep that is associated with isolated daytime sleepiness not explained by any other cause, including the obstructive sleep apnoea/hypopnea syndrome. Essential features include (a) the clinical complaint of excessive daytime sleepiness; (b) an elevated EEG arousal index (more than ten per hour of sleep) with arousals related to increased respiratory efforts as measured by continuous nocturnal monitoring of esophageal pressures; (c) a normal RDI of less than 5 events per hour of sleep. Supportive features include (a) the clinical complaint of snoring (b) an increase in snoring intensity prior to EEG arousals and (c) clinical improvement with a short term trial of nasal CPAP therapy.

Split-Night Study NPSG: Patients with a RDI of >40 events per hour during the first 2 hours of a diagnostic NPSG receive a split-night study NPSG, of which the final portion of the NPSG is used to titrate CPAP; split-night study may be considered for patients with RDI of 20-40 events.

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for CSA with symptoms (such as fatigue, dyspnoea, morning headaches etc) and one of the following: (a) $PaCO_2 \geq 45$ mmHg on room air or $PaCO_2 \geq 50$ mmHg, done while awake and breathing the patient's usual FiO_2, (b) sleep oximetry demonstrating oxygen saturation $\leq 88\%$ for at least 5 consecutive minutes done while breathing the patient's usual FiO_2, (c) for progressive neuromuscular disease (only) maximal inspiratory pressure is <60 cm H_2O or forced vital capacity is < 50% predicted AND chronic obstructive pulmonary disease does not contribute significantly to the patient's pulmonary limitation.

(II) Chronic Obstructive Pulmonary Disease (COPD) (e.g. chronic bronchitis, emphysema, bronchiectasis) with symptoms (such as fatigue, dyspnea, morning headache etc) and one of the following: (a) $PaCO_2 > 55$ mmHg while awake and breathing patient's usual FiO_2 (b) $PaCO_2$ of 50-54 mmHg and nocturnal desaturation of $spO_2 \leq 88\%$ for 5 continuous minutes while receiving oxygen therapy ≥ 2 LPM; (c) $PaCO_2$ of 50-54 mmHg and hospitalization related to recurrent (≥ 2 in a 12 month period) episodes of hypercapneic respiratory failure; optimal management with bronchodilators, oxygen when indicated must have been ensured; obstructive sleep apnoea must have been excluded by polysomnography and there should preferably be an evidence of sustained hypoventilation as shown by prolonged episodes of desaturation during sleep.

(III) Nocturnal hypoventilation from additional disorders (alveolar hypoventilation: central alveolar hypoventilation, idiopathic central sleep apnoea, obesity hypoventilation syndrome, Cheyne-Stokes respiration, obstructive sleep apnoea combined with COPD and pulmonary hypertension or CHF i.e. overlap syndrome, radiation fibrosis or occupational exposure diseases; NPSG criteria for OSA not responsive to CPAP include (i) PSG criteria for mixed sleep apnoea not responsive to CPAP therapy (ii) central sleep apnoea; (iii) other forms of nocturnal hypoventilation.

Indications for humidification

(vi) Positive Airway Pressure more than 12 cm water

(vii) Recurrent and intractable nasal stuffiness and blockage

(viii) Severe dryness of throat

esophageal pressures; (c) a normal RDI of less than 5 events per hour of sleep. Supportive features include (a) the clinical complaint of snoring (b) an increase in snoring intensity prior to EEG arousals and (c) clinical improvement with a short term trial of nasal CPAP therapy.

Split-Night Study NPSG: Patients with a RDI of >40 events per hour during the first 2 hours of a diagnostic NPSG receive a split-night study NPSG, of which the final portion of the NPSG is used to titrate CPAP; split-night study may be considered for patients with RDI of 20-40 events per hour, based on clinical observations, such as the occurrence of obstructive respiratory events with a prolonged duration or in associated with severe oxygen desaturation; a minimum of 3 hours of sleep is preferred to adequately titrate CPAP after this treatment is initiated; split-night studies require the recording and analysis of the same parameters as a standard diagnostic NPSG; on occasion, an additional full-night CPAP titration NPSG may be required if the split-night study did not allow for the abolishment of the vast majority of obstructive respiratory events or prescribed CPAP treatment does not control clinical symptoms.

BI-LEVEL CPAP is indicated in the following conditions:

BI-LEVEL CPAP is a device used mainly for severe cases of OSA.

Bilevel CPAP (with IPAP 4-22 cm water) and EPAP 4-22 cm water)

I. When CPAP pressure requirement is greater than 16 cm
II. Oral leaks become uncontrollable at sub-therapeutic pressure after trying humidifier, chin strap & positive pressure therapy.
III. Pressure of central apneas due to too high pressures.
IV. When patient cannot tolerate CPAP after ensuring the problem is not due to oral leaks, dryness, nasal congestion, interface problem or claustrophobia.
V. Patients with persistent hypoxia and/or hypercapnia after treatment with CPAP

BI-LEVEL Ventilatory support system is indicated in the following conditions:

Bilevel CPAP (with IPAP 4-30 cm water) and EPAP 4-30 cm water)

(I) Restrictive Thoracic Disease: (e.g. sequelae of polio, spinal cord injury, neuropathies, myopathies and dystrophies, amyotrophic lateral sclerosis, chest wall deformities and kyphoscoliosis, post thoracoplasty

CERTIFICATE OF MEDICAL NECESSITY TO BE ISSUED TO CS(MA) BENEFICIARIES BEING PRESCRIBED LONG TERM OXYGEN THERAPY /OXYGEN CONCENTRATOR *(To be filled by the treating physician)*

Certification Type: Initial/ Revised

1. Patient Name
2. Age of Patient
3. Physician Name
4. Address of physician
5. Telephone No of Physician

6. (a) Brief history and physical findings

(b) Co-morbidity (if any)

(c) Whether accompanied by symptoms of

- Excessive daytime sleepiness — Yes/No
- Snoring — Yes/No
- Impaired cognition — Yes/No
- Documented cardiovascular disease like Hypertension, ischemic heart disease or Stroke (specify if Yes) — Yes/No

7. Laboratory data (specify date against each parameter):

Hematocrit

ECG

X-ray Chest

Echocardiography (wherever necessary)

[illegible] (For diagnostic as well as for titration):

Home oxygen therapy is the home administration of oxygen at concentrations greater than the ambient air with the intention of treating or preventing the symptoms and manifestations of hypoxic or non-hypoxic medical conditions that are known to clinically improve with oxygen.

Clinical Indications

Home oxygen therapy is considered medically necessary in the following circumstances:

1. Chronic Hypoxia (generally long-term use). The conditions with which this may be associated include, but are not limited to:
   - Chronic obstructive pulmonary disease
   - Diffuse interstitial lung disease
   - Bronchiectasis
   - Widespread pulmonary neoplasm
   - Pulmonary hypertension
   - Recurring congestive heart failure due to chronic cor pulmonale

The following laboratory values, obtained while breathing ambient air, will be presumptive evidence for hypoxia:

Adults:

- Arterial partial pressure of oxygen (PaO2) less than or equal to 55mmHg or arterial oxygen saturation (SaO2) less than or equal to 88%
- PaO2 levels between 56 and 59 or SaO2 89% in the presence of pulmonary hypertension, cor pulmonale, edema secondary to right heart failure, or erythrocytosis with hematocrit greater than 55%

Note:

1. Patients who desaturate to an SaO2 less than or equal to 88% only during exercise *and* who demonstrate improvement in both the hypoxia and dyspnea and/or exercise capacity when using O2 are candidates for supplemental O2 during exercise only.
2. Patients who desaturate only during sleep to an SaO2 of less than or equal to 88% for more than 30% of the night or with evidence of otherwise unexplained pulmonary hypertension, cor pulmonale, edema secondary to right heart failure, or erythrocytosis with

hematocrit greater than 55%, and in whom obstructive sleep apnea (OSA) and other nocturnal apnea or hypoventilation syndromes have been ruled out or, if OSA present, have persistent desaturation despite correction of AHI (RDI) by CPAP, are candidates for nocturnal O2.

Adults and Children:

- Arterial partial pressure of oxygen (PaO2) less than or equal to [illegible] or arterial oxygen saturation (SaO2) less than or equal to [illegible]

[illegible] are considered medically necessary only when needed to complement the medical needs of an individual who requires a stationary system.