वैज्ञानिक तथा औद्योगिक अनुसंधान परिषद
COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH
अनुसंधान भवन, 2 रफी मार्ग, नई दिल्ली – 110001
Anusandhan Bhawan, 2, Rafi Marg, New Delhi - 110001

सा०/No. : 5-1(66)/2009-PD

दिनांक/Dated: 02.08.2021

प्रेषक / From : संयुक्त सचिव (प्रशासन)
Joint Secretary (Admn.)

सेवा में / To : सी.एस.आई.आर. की सभी राष्ट्रीय प्रयोगशालाओं/संस्थानों/मुख्यालय/एककों के निदेशक/प्रधान
The Directors/Heads of all CSIR National Labs./Instts./Hqrs./Units

महोदय/Sir / महोदया/Madam,

मुझे भारत सरकार द्वारा जारी किए गए निम्नलिखित कार्यालय ज्ञापन को आपकी जानकारी, मार्गदर्शन और अनुपालन के लिए अग्रेषित करने का निदेश हुआ है:

I am directed to forward herewith the following Office Memorandum issued by the Government of India for your information, guidance and compliance:

क्रम सं. **Sl. No.**	**कार्यालय ज्ञापन सं/ .** **Office Memorandum No.**	**विषय/** **Subject**
1.	भारत सरकार, स्वास्थ्य एवं परिवार कल्याण मंत्रालय, स्वास्थ्य एवं परिवार कल्याण विभाग का कार्यालय ज्ञापन सं० S.14025/55/2019-EHS दिनांक 27.05.2021 Government of India, Ministry of Health & Family Welfare, Department of Health & Family Welfare Office Memorandum No. S.14025/55/2019-EHS dated 27.05.2021	Revision of guidelines regarding provision of CPAP/BiPAP/Oxygen concentrator, in respect of CS(MA) beneficiaries for domiciliary use.

भवदीय/Yours faithfully

02/08/21

संतोष कुमार/Santosh Kumar
अनु.अधि.(नीति प्रभाग)/Section Officer (PD)

संलग्न/Encl. : यथोपरि/As above

प्रतिलिपि/Copy to:

1) आई.टी. प्रभाग प्रमुख वेबसाइट और पॉलिसी रिपॉजिटरी पर इस परिपत्र को उपलब्ध कराने के अनुरोध के साथ/
Head, IT Division with the request to make this circular letter available on the website & Policy Repository.

2) कार्यालय प्रति/Office copy.

Phone: EPABX-23710138, 23710144, 23710158, 23710468, 23710805, 23711251, 23714238, 23714249, 23714769, 23715303
Fax: 91-11-23714788, Gram: CONSEARCH, NEW DELHI, E-mail: jsa@csir.res.in

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 23rd December, 2020.

Signature valid

Digitally signed by SANDEEP KUMAR
Date: 2021.05.27 14:05:05 IST

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

To

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 cèiling / 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

14

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.

2

15

(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 CSS(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)

Lipid Profile (wherever necessary)

Arterial blood gases: 1 2 3

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

(Note: the Arterial blood gas values should include those during chronic, stable state (atleast 3 months after an acute exacerbation) of the disease e.g. in a case of COPD, the ABG value during acute exacerbation generally demonstrates moderate to severe hypercapnia which may normalise during stable state and therefore may not be an indication for long term NIPPV)

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 BI-LEVEL CPAP/BI-LEVEL ventilatory support system

(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

(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-I 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.

* Apnea 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.

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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. A split-night study may be considered for patients with RDI of 20-40 events

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

for TB) with symptoms (such as fatigue, dyspnoea, morning headaches etc) and one of the following: (a) $PaCO_2 \geq 45$ mmHg on room air or $PaCO_2 \geq 52$ mmHg, done while awake and breathing the patient's usual FiO_2, (b) sleep oximetry demonstrating oxygen saturation $\leq 88\%$ for at least than 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

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)

Pulmonary function tests

Arterial blood gases:	1	2	3
Date			
pH			
paO_2			
$paCO_2$			
HCO_3 a			
HCO_3 s			
BE			
O_2 sat			

(Note: the Arterial blood gas values should include those during chronic, stable state (atleast 3 months after an acute exacerbation) of the disease e.g. in a case of COPD, the ABG value during acute exacerbation generally demonstrates moderate to severe hypoxemia and hypercapnia which may normalise during stable state and therefore may not be an indication for long term oxygen therapy)

Others (specify)

11. Final Diagnosis

12. Recommended: Oxygen concentrator / portable oxygen cylinder / compressed oxygen cylinders

    a. Flowrate
    b. Nasal prongs/ Cannula
    c. Nasal mask
    d. Number of hours per day

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)

...ts for prescribers (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.

Infants and Children:

- Arterial partial pressure of oxygen (PaO2) less than or equal to 60mmHg or arterial oxygen saturation (SaO2) less than or equal to 92%

Note: Portable oxygen systems are considered medically necessary only when needed to complement the medical needs of an individual who requires a stationary system