Table S1: ICD-9 Codes Used to Identify Diagnoses from Claims

<table>
<thead>
<tr>
<th>Condition</th>
<th>ICD-9 Codes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Arthritis</td>
<td>714.xx, 715.xx, 716.xx, 720.0x, 721.0x, 721.2x, 721.3x, 721.90</td>
</tr>
<tr>
<td>Dementia</td>
<td>331.0, 331.11, 331.19, 331.2, 331.7, 290.0, 290.1x, 290.2x, 290.3, 290.4x, 797, 294.1x, 294.x2, 294.8</td>
</tr>
<tr>
<td>Depression</td>
<td>296.2x, 296.3x, 298.0x, 300.4x, 309.1, 311.xx</td>
</tr>
<tr>
<td>Diabetes</td>
<td>249.xx, 250.xx, 357.2, 362.0x, 366.41</td>
</tr>
<tr>
<td>Gastroesophageal reflux disease</td>
<td>530.81</td>
</tr>
<tr>
<td>Hyperlipidemia</td>
<td>272.0x, 272.1x, 272.2x, 272.3x, 272.4x</td>
</tr>
<tr>
<td>Malignancy</td>
<td>140.xx-208.xx</td>
</tr>
<tr>
<td>Renal disease</td>
<td>016.0x, 095.4, 189.0, 189.9, 223.0, 236.91, 249.4x, 250.4x, 271.4, 274.1, 283.11, 403.01, 403.11, 403.91, 404.02, 404.03, 404.12, 404.13, 404.92, 404.93, 440.1, 442.1, 572.4, 580.xx, 581.xx, 582.xx, 583.xx, 584.xx, 585.xx, 586, 587, 588.xx, 591, 753.12, 753.13, 753.14, 753.15, 753.16, 753.17, 753.19, 753.2x, 794.4</td>
</tr>
</tbody>
</table>
Figure S1a: Diagnostic Testing Pre-authorization Form

Apnea Events

The patient has observed apnea during sleep

- Yes
- No
- Unknown

Signs and Symptoms

☐ Excessive daytime sleepiness evidenced by:
  - Epworth Sleepiness Scale (ESS) > 10 or,
  - Inappropriate daytime napping (during conversation, driving or eating) or,
  - Sleepiness that interferes with daily activity

☐ Habitual snoring or gasping/choking episodes associated with awakenings
☐ Treatment resistant hypertension
☐ Soft tissue abnormalities or neuromuscular diseases involving the craniofacial area or upper airway
☐ Obesity
  - BMI > 30.00

Patients’ BMI:

  Member height (ft):

  Member height (in):

  Member weight (lbs):

Comorbid Conditions

☐ Stroke (CVA) within the last 30 days
☐ Transient Ischemic Attack (TIA)
☐ Coronary Artery Disease (CAD)
☐ Sustained supraventricular tachycardiac arrhythmias
Contraindications for Home Sleep Testing

- The patient is 18 years old or younger
- Moderate or severe chronic obstructive pulmonary disease (COPD) – Forced expiratory volume in 1 second/Forced vital capacity (FEV1/FVC) less than or equal to 0.7 and FEV1 less than 80% of predicted
- Moderate or severe congestive heart failure (CHF) – New York Heart Association (NYHA) class III or IV
- CHF with history of ventricular fibrillation or sustained ventricular tachycardia in a patient who does not have an implanted defibrillator
- Cognitive impairment (inability to follow simple instructions) resulting in inability to apply the home sleep testing equipment when another individual is not available to assist with this task
- Physical impairment resulting in inability to apply the home sleep testing equipment when another individual is not available to assist with this task
- Oxygen dependent for any reason
- Stroke (CVA) within the last 30 days
- Current use of opiate narcotics
- Body Mass Index (BMI) is > 33
- The elevated serum bicarbonate level >28 mmol/L
- Established diagnosis of obesity hypoventilation syndrome

Figure S1b: Initial APAP/CPAP and Supplies Pre-Authorization Form

Please provide the AHI or RDI, whichever is higher, from the most recent PSG, HST, or pre-split portion of a split night

Signs and symptoms – non-pediatric

- Excessive daytime sleepiness evidenced by Epworth Sleepiness Scale (ESS) > 10 or,
  Inappropriate daytime napping (during conversation, driving or eating) or,
- Impaired cognition
- Mood disorders
☐ Insomnia
☐ Documented hypertension
☐ Ischemic heart disease
☐ History of stroke
☐ Cardiac arrhythmias
☐ Pulmonary hypertension

Is this request for PAP therapy replacing the titration study in a facility?

☐ Yes
☐ No
☐ Unknown