| | **RESPIRATORY SERVICES** | DATE CREATED: April 2011 |
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| | | DATE REVIEWED/REVISED: **November 2015** |
| **PROCEDURE** | TITLE: Pulmonary Diagnostics: Overnight Oximetry (Outpatient) (Respiratory Therapy) NUMBER: B-00-12-12120 | RELATED DOCUMENTS: |

## SITE APPLICABILITY:

ST. PAUL'S HOSPITAL
MOUNT SAINT JOSEPH HOSPITAL

## GENERAL INFORMATION:

Overnight Oximetry may be ordered for the screening and assessment of treatment effectiveness for obstructive sleep apnea.  It may also be used for the determination of nocturnal oxygen requirements.  Clear documentation should be made if the patient is on oxygen and/or CPAP/BiPAP during the test.  Overnight oximetry will only be completed for outpatients through the Pulmonary Function Lab.

## SPECIAL CONSIDERATIONS:

- Disposable finger probes should be given to the patient
- Equipment needs to be returned by 1200 the following day
- Oximeter will be stored in the PFT lab when not in use

## REQUIRED SUPPLIES & EQUIPMENT:

- Nellcor N-560 pulse oximeter with carry case
- Disposable MAX – AL pulse oximetry finger sensor
- Home Sleep Study Questionnaire
- Oximeter Sign Out form
- Data download cable

## PROCEDURE:

1. Verify with the patient the reason for the test and if the test will be completed on oxygen and/or CPAP/BiPAP.
2. Assemble the equipment and explain the procedure to the patient.
3. Plug in the oximeter.  Show the patient how to turn the oximeter ON and OFF.
   **NOTE:** The oximeter must be plugged in when in use to maintain the battery charge.  Ensure the power cable is securely connected to the rear of the oximeter.
4. Connect the disposable oximetry sensor to the oximeter and explain how to adhere the sensor to their finger.
5. Review Home Sleep Study Questionnaire with patient.
6. Fill out the Oximeter Sign Out form and have the patient sign the form.

7. Ensure the patient is able to return the equipment before 1200 the following day.

## PROCEDURE FOR DOWNLOADING:

1. Bring the overnight machine and the patient chart to the Dictation room at SPH or the report room at MSJ.
2. Surface wipe the machine and place the MAX-AL pulse oximetry finger sensor in the collection bin.
3. Open the Profox Oximetry application on the computer desktop by double clicking the **PROFOX** icon with the left mouse key.
4. The **Main Menu** will now be displayed. Click **New Patient** once.
5. Enter the patient data as prompted:
   - **Full Name:** Surname, First name
   - **Identification Number:** PHN Number
   - **Req. Physician:** Ordering Physicians name
   - **Report Comments:** Reason for test; performed on RA or Oxygen, CPAP/BiPAP settings if used.
6. When the patient data entry is complete, click **Save** once.
7. The program will return to the **Main Menu**. Click on **Oximetry Data (transfer)**.
8. A new screen will appear and prompt to pick **Manufacturer (Nellcor)** and **Oximeter Model (Nellcor N-560)**.
9. Connect the serial cable from the back of the computer of the port on the oximeter. Plug the oximeter in and turn it on, waiting until the self-test has been completed.
10. Select **Download Using ASCII Protocol**.
11. Simultaneously press the **SpO$_2$ Alarm Limit** button and **Heartbeat/Min Alarm Limit** button as prompted for **3 seconds**. When the number **1** is displayed in the heart rate window, press the **SatSeconds** button. The trend will begin to download automatically.
12. Once the download is complete, the program will prompt **Please Select the Recording…** Select the period with the most recent data and click **OK**.
13. A 12-hour graph of the SpO$_2$ and pulse will be displayed. Click **Save This Test**.
14. The next prompt will ask **Does This Test Belong to…** (Automatically recalls the last patient data entered). If this is correct, select **YES**.
15. The screen with the patient information will appear. Review and confirm if the information is correct by pressing **OK**. Please make sure **that the reason for the test and if a CPAP/BIPAP machine was used is in the comments section.**
16. The program will now return to the **Main Menu**.
17. **Confirm that the date on the downloaded test is accurate**. From the **Main Menu** select **Utilities**, and then select **Change the Date and Time of Current Test**. If the date and time of the current test are incorrect, make the necessary changes and continue.
18. The option to **Preview** or **Print Reports** will be displayed. Choose **Print Reports**.
19. Print 2 copies of the report.
20. At SPH, place in the patient file in the Dictation room on 8B (Room 8436). At MSJ, place the file on the desk in the PF Laboratory.

## PROCEDURE FOR CLEARING MEMORY:

1. Once the data has been retrieved and verified, the trend information in the memory must be cleared.
2. While the oximeter is in the normal operating mode:
   a) Simultaneously press and hold the **SpO2 Alarm Limit** button and the **Pulse Rate Alarm Limit** button for at least **3 seconds**.
   b) **Option 1** will be displayed in the heart rate LED → press the **Adjust Up** button and select **Option 2**.
   c) Press the **SatSeconds Alarm Limit** button to clear the trend data.

## REFERENCES:

1. Nellcor N-560 operating manual

## REVIEWED BY:

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