UTMB RESPIRATORY CARE SERVICES PROCEDURE - Assessing Patient Response to Bronchodilator Therapy		Policy 7.2.8 Page 1 of 2	
Assessing Patient Response to Bronchodilator Therapy	Formulated: 10/02	Effective: Reviewed:	10/10/02 01/31/12

Assessing Patient Response to Bronchodilator Therapy

Purpose

To establish a baseline function and reveal the presence or absence of a desired response to bronchodilator therapy in non-ventilated patients.

Audience

A licensed respiratory care practitioner may perform pulmonary function monitoring.

Scope

All non-intubated patients receiving bronchodilator therapy by RCS will be assessed by measuring peak expiratory flow and/or (FEV₁) before and after a treatment if ordered by a physician. These outcomes are to be documented in Epic under Respiratory Care. When possible, these outcomes should be compared to predicted values for a person of the same sex, age, and height and documented as part of the assessment

Indications

Assessment of airflow and other clinical monitoring is indicated when the need exists

- To confirm the appropriateness of therapy
- To individualize the patient's medication dosage and/or frequency of administration for each treatment
- To help determine patient status during acute and long-term pharmacologic therapy
- To determine the need for a change in dosage, medication, or frequency of therapy

Contraindications

There are no absolute contraindications. However, when patients are in acute severe distress, the screening should be performed after bronchodilator therapy has been instituted.

Relative Contraindications

Relative contraindications are conditions in which pulmonary function monitoring may be inappropriate secondary to patient physical or performance related limitations (i.e., maxillo-facial deformity, trauma, surgical intervention, or an inability to follow commands necessary to perform procedure as directed).

Equipment

- Bedside pulmonary function screening device.
- Disposable Pneumotach.
- Nose clip if necessary
- Lung function calculator

UTMB RESPIRATORY CARE SERVICES PROCEDURE - Assessing Patient Response to Bronchodilator Therapy		Policy 7.2.8 Page 2 of 2	
Assessing Patient Response to Bronchodilator Therapy	Formulated: 10/02	Effective: Reviewed:	10/10/02 01/31/12

Corresponding Policies

Respiratory Care Services Policy # 7.2.6; Spirometry.

References

AARC Clinical Practice Guidelines, <u>Assessing Response to Bronchodilator Therapy at Point of Care</u>, Respiratory Care; 1995; 40 (12): 1300-1307:

AARC Clinical Practice Guidelines, <u>Infant/toddler pulmonary function</u> <u>tests</u>. Respiratory Care. 1995; 40:761-768.

AARC Clinical Practice Guidelines. <u>Spirometry</u>, 1996 update, Respiratory Care 1996; 41:629-636

AARC Clinical Practice Guidelines, <u>Static Lung Volumes</u>. Respiratory Care 1994; 39:830-6.

Donald F. Egan (Editor), et al <u>Egan's Fundamentals of Respiratory Care</u>, Eighth Edition, Mosby; 8th edition, June 2, 2003

Ruppel G. <u>Manual of Pulmonary Function Testing</u>. 7th edition, St. Louis: Mosby; 1998.

Hnatiuk OW, Dillard TA, Torrington KG. <u>Adherence to established guidelines for preoperative pulmonary function testing</u>. Chest. 1995; 107:1294-1297.

Beauchamp RK; <u>Pulmonary function testing procedures</u>. In: Barnes TA, Ed. Core Textbook of Respiratory Care Practice. 2nd edition. St. Louis: Mosby-Year Book; 1994.

Enright PL, Lebowitz MD, Cockroft DW. <u>Physiologic measures: pulmonary function tests</u>. <u>Asthma outcome</u>. American Journal of Respiratory Critical Care Medicine. 1994; 149:S9-18.