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 (FEV_1) 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

Contra-indications

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 Contra-indications

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

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

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Corresponding Policies

Respiratory Care Services Policy # 7.2.6; Spirometry.

References

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