# Basic Skills Qualification Office Spirometry



#### **Evaluation Process**

Prior to seeking BSQ certification, a resident should be confident in their skills. The "Basic Skills Qualification" is printed and given to the supervising physician, where after, the resident performs the procedure under direct observation of the supervising physician. The competency assessment is completed by the supervising physician with their signature and given back to the resident. The resident then returns the competency assessment to the Academic Coordinator.

Resident:	

	Competent	Needs Work
Discuss procedure indications		
Coach good effort for 6 seconds of exhalation		
Obtain 3 acceptable trials		
Interpret FEV1, FVC, FEV1/FVC ratio		
Administer bronchodilator and repeat testing (optional)		

Faculty:	
Date:	

### Indications:

- Identify pulmonary disease and assess severity
- Monitor for disease progression and assess response to treatment
- Establish baseline prior to initiation of medications with pulmonary toxicity
- Risk stratification for surgical patients
- Evaluate for occupational or Social Security disability

#### Contraindications:

- Symptoms that would affect performance (nausea/vomiting, vertigo)
- Hemoptysis of unknown etiology
- Pneumothorax
- Recent abdominal, thoracic or eye surgery
- Recent MI or unstable angina
- Thoracic aneurysm

## Technique:

- Discuss procedure in detail to patient
- Fit mouthpiece into spirometer, place disposable nose clip (or plug nose with hand)
- Have patient exhale as deeply as possible with spirometer away from mouth, insert mouthpiece into mouth with teeth clamped and lips closed around it to form seal
- Have patient exhale as hard and fast as possible, continuing for a full 6 seconds (coaching is key)
- Inhale fully at the end of expiration to create a full flow/volume loop (optional)
- Repeat until spirometer confirms 3 acceptable results
- Interpret and explain results to patient