SHAW AMERICAN FINANCIAL CORPORATION

Pulmonary Function Tests (PFTs)

Pulmonary function tests (PFTs) include spirometry, lung volumes, blood gas measurements, and diffusion capacity. These measures help in determining the extent of lung disease and in following the course of disease, but do not make a
diagnosis. The tests most commonly seen in insurance applications are spirometry and flow loops. **Spirometry** consists of recording volume change plotted against time during certain respiratory maneuvers. The gold standard spirometry is a water seal spirometry (an inverted drum in water). Spirometry is effort dependent and requires
a skilled technician to instruct the individual to give their best effort on forced exhalation into the tube. Poor effort can give falsely abnormal results. Spirometry measures the forced vital capacity (FVC) and the forced expiratory volume in one second (FEV1). FEV1 is the maximum amount of air exhaled in the first second of forced exhalation. It is a sensitive measurement for disease severity. **Flow loops** are drawings of the spirometry test and are helpful in visualizing the abnormality present. Obstructive and
restrictive patterns can be identified. In **arterial blood gas** measurements, blood is taken from an artery and the gases are measured. The oxygen and carbon dioxide are reported as partial pressure (PO2 and PCO2). This reflects how well the lungs can exchange carbon dioxide for oxygen. **Diffusion capacity** (DLCO) measures the transfer of a minute quantity of carbon monoxide (CO) that is inhaled. DLCO is reduced in any lung pathology (ie. chronic obstructive or restrictive lung disease), but is particularly useful in determining severity in interstitial lung disease. PFT results are compared with the predicted values (which are based on sex and height) to obtain the **percent of predicted values**. Normal values are over 80% of predicted, except for FEV1 % which has a normal value of 75%. PFTs are generally summarized as an obstructive pattern (decreased flow rates) or a restrictive pattern (smaller lungs). The lower the percent of predicted, the more severe the disease process. FEV1 % of predicted is used as a guide for severity of lung disease clinically and for the underwriting process.

1. Type of lung disease:
chronic bronchitis ___
emphysema ___
restrictive lung disease ___
asthma ___

2. Please list date when first diagnosis:

_____

3. Has your client ever been hospitalized for this condition?
yes, please give details

_____

4. Has your client ever smoked?
yes, currently smokes_____(amount/day)
yes, smoked in the past but quit_____(date)
never smoked _____

5. Is your client on any medications (include inhalers)?
yes, please give details
_____

6. Have pulmonary function tests (a breathing test) ever been done?
yes, please give most recent test results_____(date)

7. Please note clients build:
Height _____ Weight_____

8. Does your client have any abnormalities on an ECG or x-ray?
yes, please give details
_____

9. Does your client have any other major health problems (ex: heart disease, etc.)?
yes, please give details
_____