## **DIRECT ACCESS SPIROMETRY SERVICE – further information**

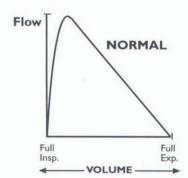
- This service provides spirometry with measurement of FEV1, vital capacity, and bronchodilator response to salbutamol.
- The service is provided in some community venues as well as on hospital sites thus we provide easy local access for most people
- It is provided to confirm the diagnosis of COPD and assess severity
- It provides assessment of bronchodilator response (using salbutamol). Please note that nonresponse in a laboratory setting does not always exclude clinical benefit

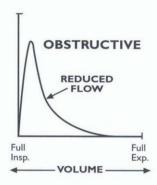
## **UNDERSTANDING THE REPORT**

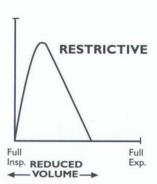
## UNDERSTANDING THE REPORT

Spirometry will identify normal results or evidence of airflow limitation. It is presented graphically as a flow-volume loop - a plot of flow against lung volume from full inspiration to full expiration. Examples are illustrated below. The following additional comments are important.

- 1. Further lung function assessment may be required if the results suggest a restrictive defect e.g. interstitial disease or a neuro-muscular problem (see example below). There is a much reduced lung volume.
- An obstructive ventilatory defect associated with low vital capacity (see example below) can be due simply
  to obstructive airways disease but could also imply an additional problem causing low lung volumes e.g. old
  tuberculosis.
- Normal spirometry excludes chronic obstructive pulmonary disease but DOES NOT exclude asthma or interstitial lung disease. If the most likely cause of breathlessness is still pulmonary disease then consider clinic referral.
- 4. If spirometry is normal and diagnoses other than pulmonary are possible e.g. obesity, heart failure, anaemia, hypothyroidism etc. then consider other appropriate investigation.







Obstructive - Flow rate reduced through expiration giving "scalloped" shape to down slope of the curve.

Restrictive - The flow-volume loop indicates a normal pattern of expiration but much reduced lung volume.

## **ONWARD REFERRAL**

 We do not refer directly to an OP clinic but occasionally may refer directly to the pulmonary function laboratory for full testing if a restrictive defect is identified