

# SPIROLA

## Spirometry Longitudinal Data Analysis Software



Patient performing lung function testing.

**MAINTAIN SPIROMETRY QUALITY**

**INTERPRET PERIODIC SPIROMETRY**

**RECORD AND EVALUATE INTERVENTIONS**

### Purpose of Lung Function Testing

Monitoring lung function in at-risk populations enables the identification of individuals with excessive decline. Forced expiratory volume in one second (FEV<sub>1</sub>) is the measure best suited for monitoring changes in lung function over time. An excessive decline in FEV<sub>1</sub> over several years has been associated with increased respiratory morbidity, loss of productivity at an earlier age, and increased mortality.

### SPIROLA's Role

The *Spirometry Longitudinal Data Analysis* (SPIROLA) software is an integrated visual and quantitative tool that aids in monitoring lung function in individuals over time. To identify individuals with excessive decline in lung function accurately and in a timely manner, it is important to maintain acceptable quality of the spirometry tests and precision of the longitudinal spirometry data. Additionally, identification of excessive decline followed by appropriate interventions may help to preserve an individual's lung function.

### SPIROLA allows the user to:

- monitor the quality of spirometry tests
- monitor longitudinal data precision
- determine if an individual has excessive lung function decline
- collect information on potential risk factors
- plan, record, and evaluate the effect of intervention strategies

### How Can I Download SPIROLA?

SPIROLA is developed and maintained by NIOSH and can be downloaded free of charge from the NIOSH website. A demonstration database is included with the software (names in the database are fictional). Visit [www.cdc.gov/niosh/topics/spirometry/spirola-software.html](http://www.cdc.gov/niosh/topics/spirometry/spirola-software.html) or scan the QR code for more information, to download the software, or to access the user manual.

### We Need Your Feedback on SPIROLA

We strive to continuously improve SPIROLA and are currently developing a web-based version. We request your feedback to develop a useful and user-friendly application. Please contact us at: [SPIROLA@cdc.gov](mailto:SPIROLA@cdc.gov) or 304-285-5899 and let us know how SPIROLA is working for you.

Longitudinal FEV<sub>1</sub> evaluation produced by SPIROLA.

