



**Yuwell Breathcare management software**

**User Manual**

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# **1. Product information**

## **1.1 Intended use of system**

Help service providers to track the user equipment usage provide management basis, patients using the equipment, data from the device through the cloud to service providers, service providers through Yuwell Breathcare to view the user use equipment and data report, follow-up management, active intervention, can also through remote setting to help patients adjust the use of equipment parameters.

## **1.2 User**

Used by: service providers

# **2. Software installation and uninstallation**

## **1.1 System configuration requirements**

The software requirements for the system are:

Supported operating systems: Win7; Win8.

Processor: 400 MHz Pentium processor or equivalent (minimum); 1 GHz Pentium processor or equivalent (recommended).

Memory: 96 MB (minimum); 512 MB or more (recommended).

Hard disk: At least 500 MB of free space is required.

CD or DVD drive: Not required.

Display: 800 x 600, 256 colors (minimum); 1024 x 768 enhanced colors, 32-bit (recommended).

## **1.2 Software Installation**

Before installing, please close other applications as much as possible.

The first step is to check whether your system has an earlier version of Yuwell management system. If it is already installed, please uninstall it (please refer to 1.3 Software Uninstallation or follow the uninstallation instructions of the earlier version to uninstall) .

The second step is to open the installation file directory and double-click the "BreathCareSetup.exe" file, as shown in Figure 1 below.



Figure1

The third step, select the installation language through the drop-down menu, see Figure 2 below, after the selection is completed, click "OK" to enter the next step:

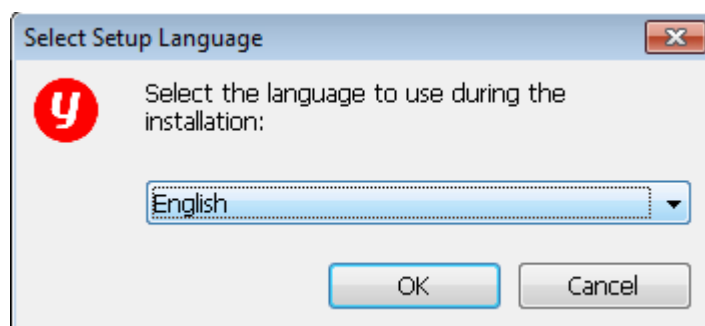


Figure2

The fourth step is to choose the installation path or follow the default installation path, click "Next (N)" to enter the next step.

The fifth step, in the installation selection additional task interface shown in Figure 3 below, the desktop shortcut will be created by default. You can cancel the creation of the desktop shortcut by unchecking "Create desktop shortcut" and click "Next (N)" enter the next step:

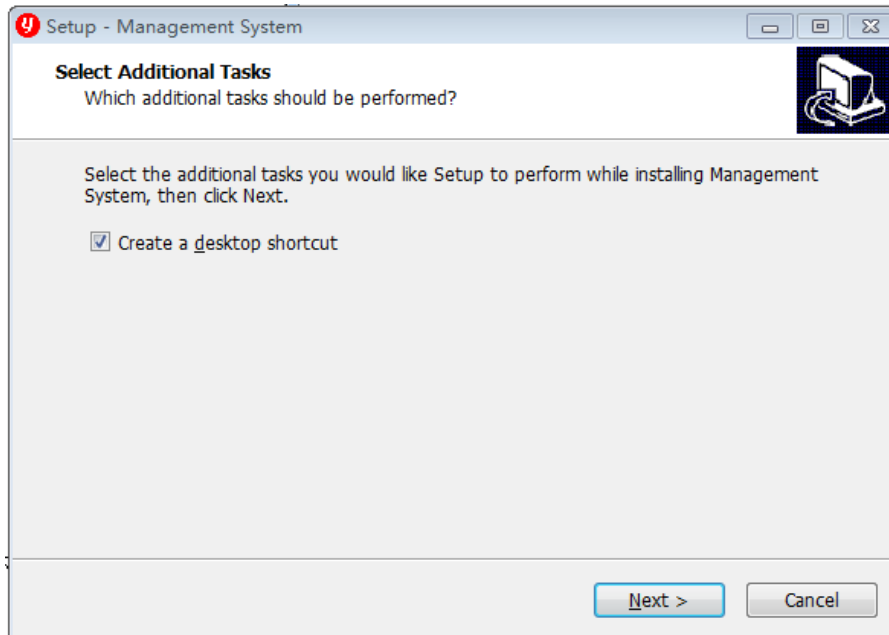


Figure3

The sixth step, in the preparation installation interface shown in Figure 5 below, after clicking "Install", you will enter the software installation process, as shown in Figure 6.

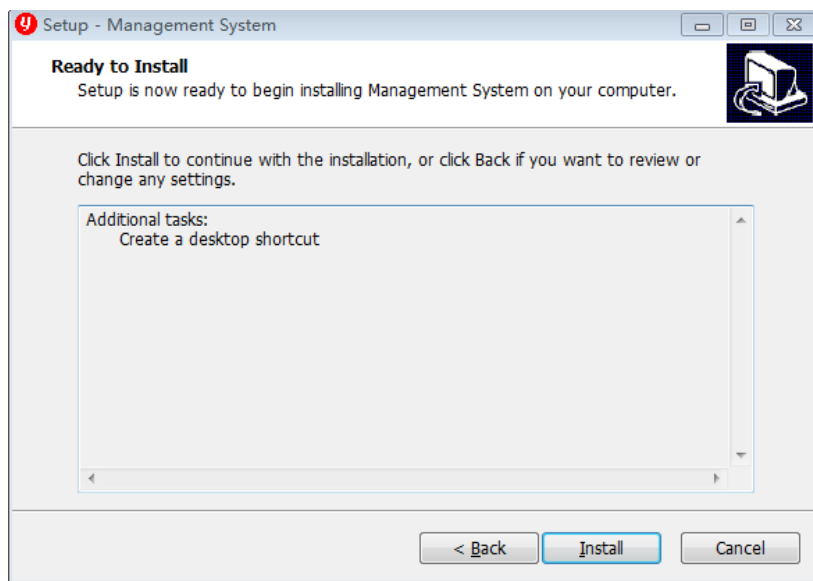


Figure5

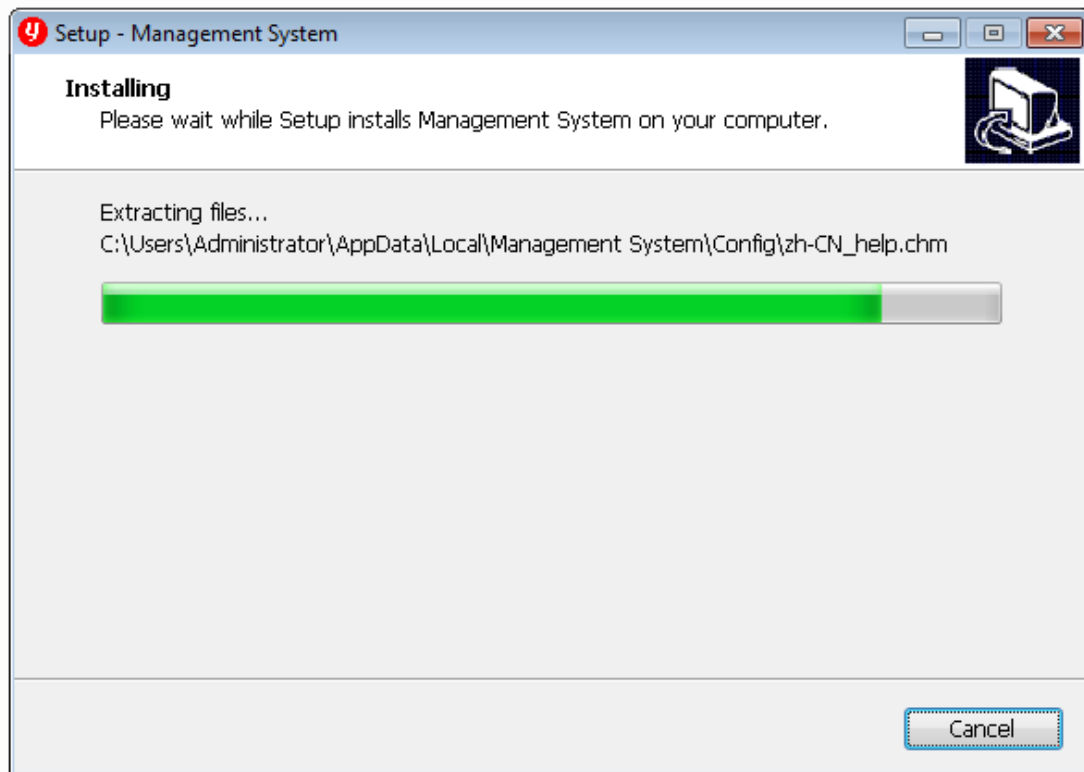


Figure6

If the anti-virus software blocks during the installation, select allow operation until the following figure 7 appears.

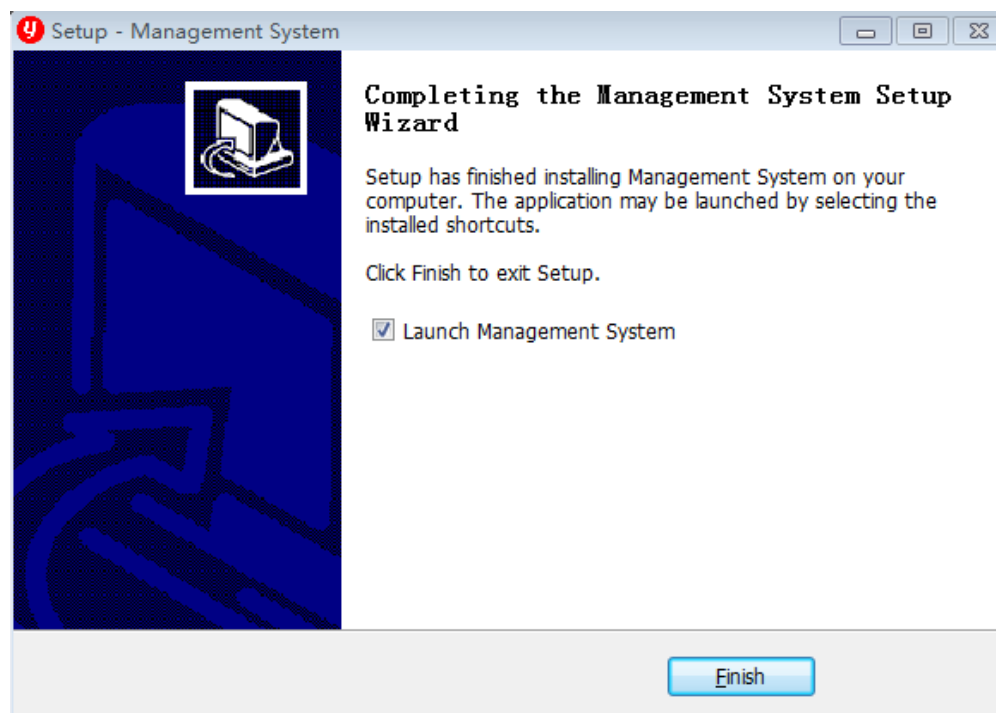


Figure7

Step 7. Click the "Finish" button to complete the installation of the management system.  
The system will automatically enter the quick guide interface, as shown in Figure 8 below.

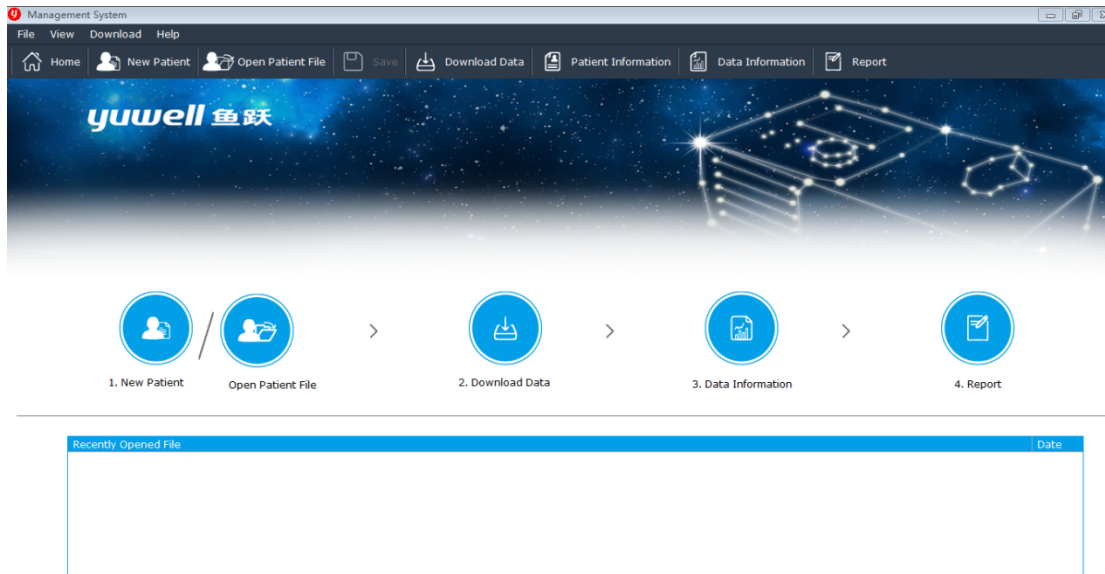


Figure8

## 1.3 Software uninstall

Open the "Control Panel", then open the "Add or Remove Programs" or "Programs and Features" option (depending on the version of the operating system), find the "Management System" application icon, right-click and select Click "Uninstall" to uninstall.

Click "Yes" in the pop-up uninstall dialog box, and after a short wait of 1-2 seconds, the software will be removed from your operating system.

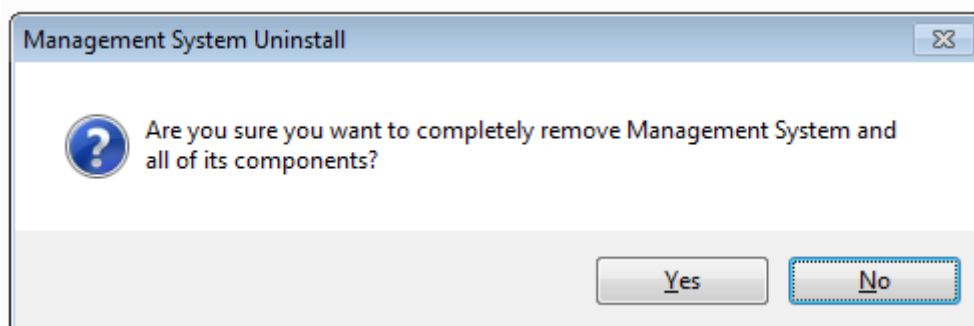


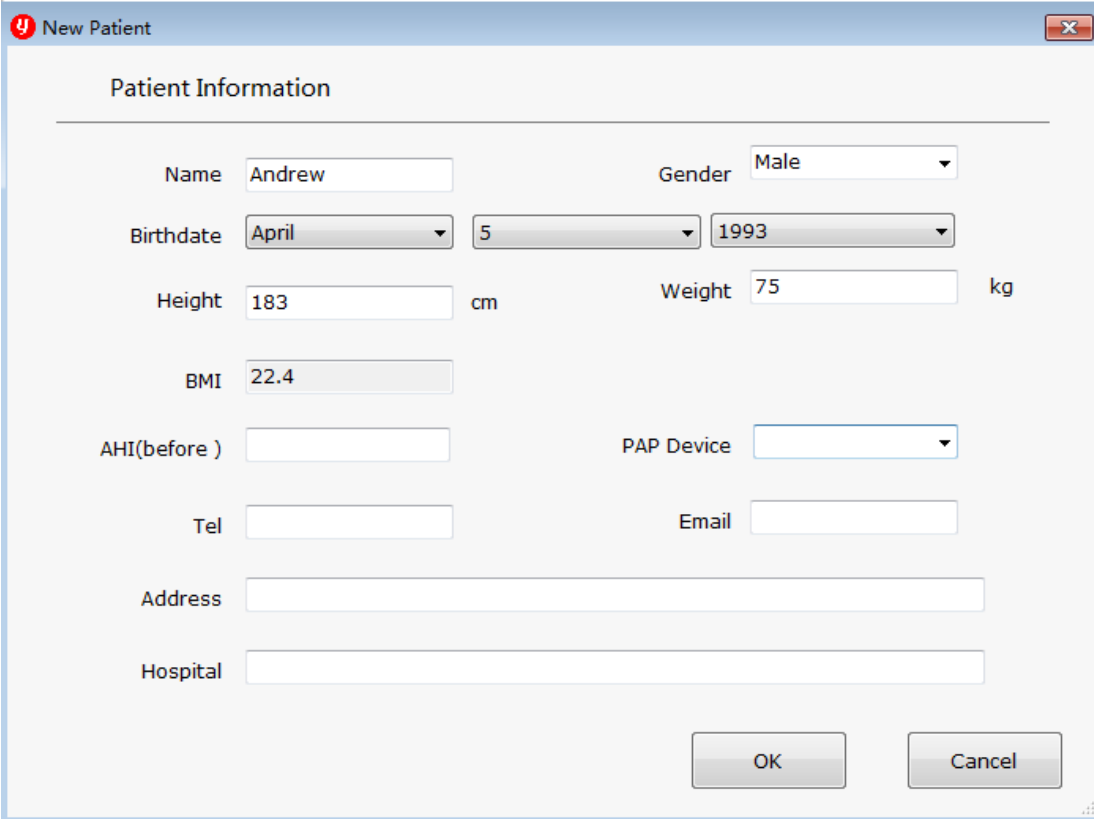
Figure10

## 2. Quick guide

### 2.1 New File / Open File

#### 2.1.1 New file

Click "New Patient" on the main page of the management software shown in Figure 8, and you can fill in the user information in the pop-up New File window, see Figure 11 below:



The screenshot shows a window titled "New Patient" with a close button in the top right corner. The window contains a form titled "Patient Information" with the following fields:

- Name: Andrew
- Gender: Male
- Birthdate: April, 5, 1993
- Height: 183 cm
- Weight: 75 kg
- BMI: 22.4
- AHI(before):
- PAP Device:
- Tel:
- Email:
- Address:
- Hospital:

At the bottom right of the form are two buttons: "OK" and "Cancel".

Figure11

The patient information page can fill in the user's name, age, gender, height, and weight. The BMI index is automatically generated from the height and weight information. After completing the filling, click "OK" to enter the "Patient Information" page. On this page You can fill in "Diagnostic Information", see



Figure 12 below:

The screenshot shows a web application window titled "Management System". The menu bar includes "File", "View", "Download", and "Help". Below the menu bar are icons for "Home", "New Patient", "Open Patient File", "Save", "Download Data", "Patient Information", "Data Information", and "Report". The main content area is titled "Patient Information" and has two tabs: "Basic Information" (selected) and "Diagnostic Information". Under "Basic Information", there is a "Condition Summary" section with "Patient Categories" containing "Medical Record Number" (12345), "Hospitalization Number", and "Others". Below this is "Disease" (OSA), "Systolic Blood" (120 mmHg), and "Diastolic" (90 mmHg). The "Device Parameters" section includes "Inspiratory Pressure" (15 cmH2O), "Expiratory Pressure" (5 cmH2O), "Mask" (Full Face), "I/E" (33 %), "Respiratory Rate" (12), and "Tidal Volume" (800 ml). At the bottom is a "Diagnostic Advice" section with a large empty text box.

Figure12

The diagnostic information page can fill in the user's disease type, blood pressure value, the pap device parameters and other information. After completing the filling, click "Save" as shown in Figure 13 below. A file saving path selection interface will pop up, as shown in Figure 14, select the appropriate path After entering the file name, click "Save" to create the user's file.

The screenshot shows the "Management System" window with the same menu bar and icons as Figure 12. The "Save" button, represented by a floppy disk icon, is highlighted in the toolbar.

Figure13

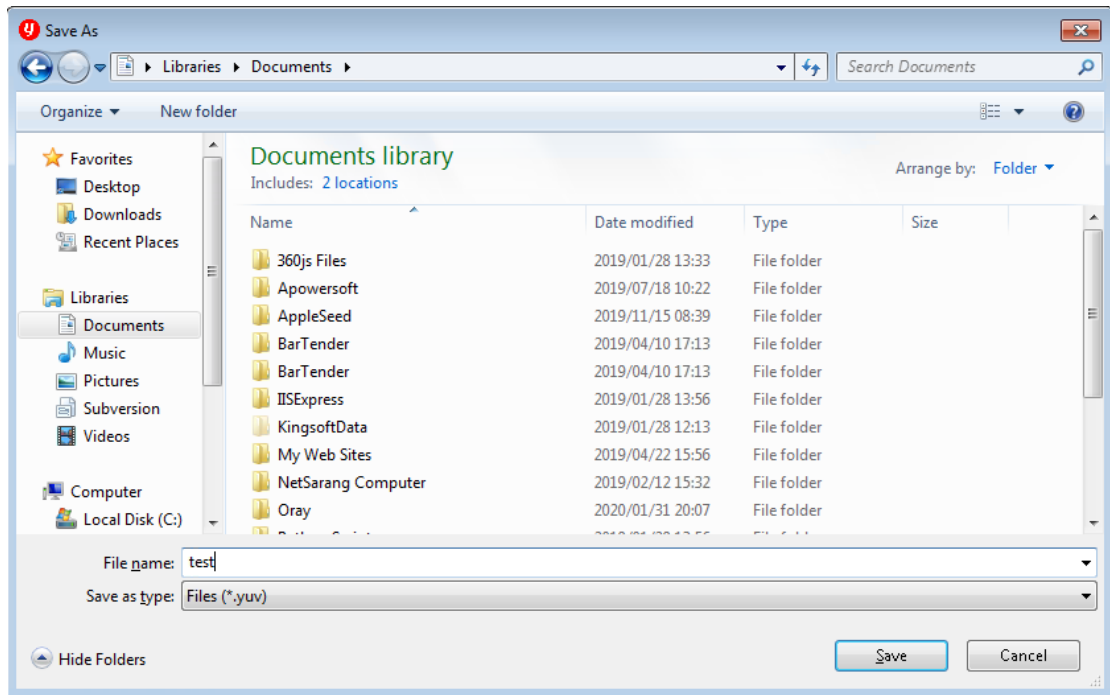


Figure14

The user file saved at this time only includes the user's basic information and diagnostic information and does not include treatment data. For the method of adding treatment data, please refer to section 2.2 of this manual.

### 2.1.2 Open file

When the user file has been saved, you can open the user file through this software to view user information and treatment data. Click "Open Patient File" on the main page of the management software shown in Figure 8 to pop up the

user file selection interface, as shown in Figure 15.

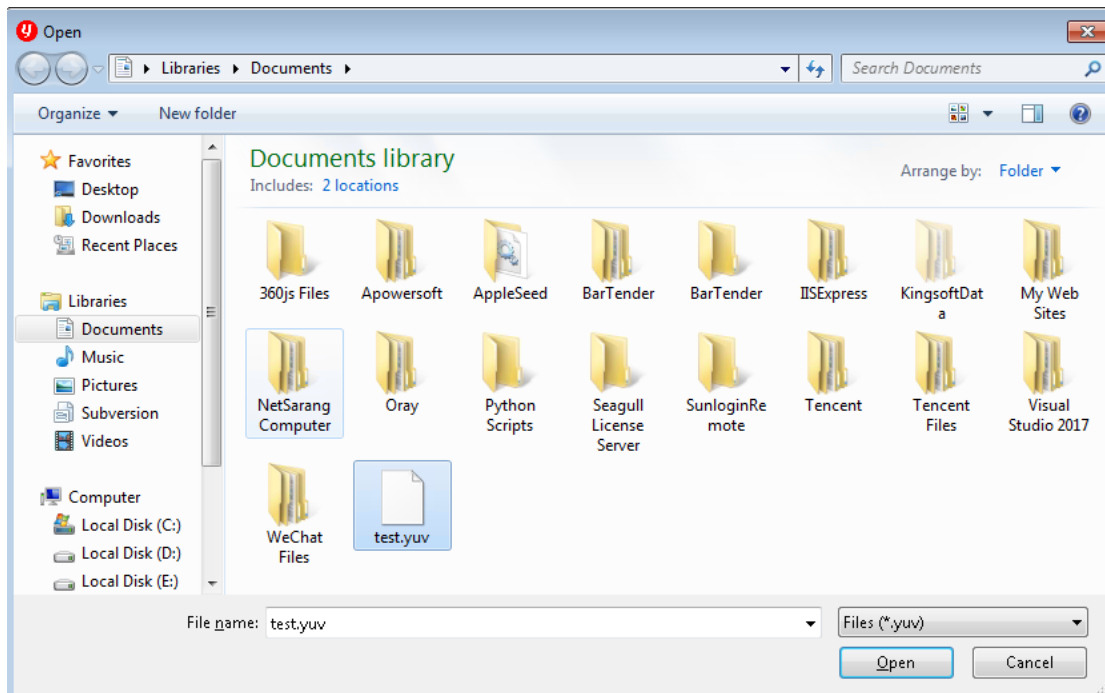


Figure15

Select the correct path, select the user profile (suffix ".yuv"), and click "Open (O)" to see the user information and treatment data (if any) in the management software.

After creating a new user file or opening a user file, you can add treatment data to the file. For the method of adding, see section 2.2.

## 2.2 “Loading data”

Click "Download Data" on the main page of the management software shown in Figure 8 to pop up the Select device Type dialog box. You can select a bi-level pap and a single-level CPAP / Auto CPAP, see figure 16 below:

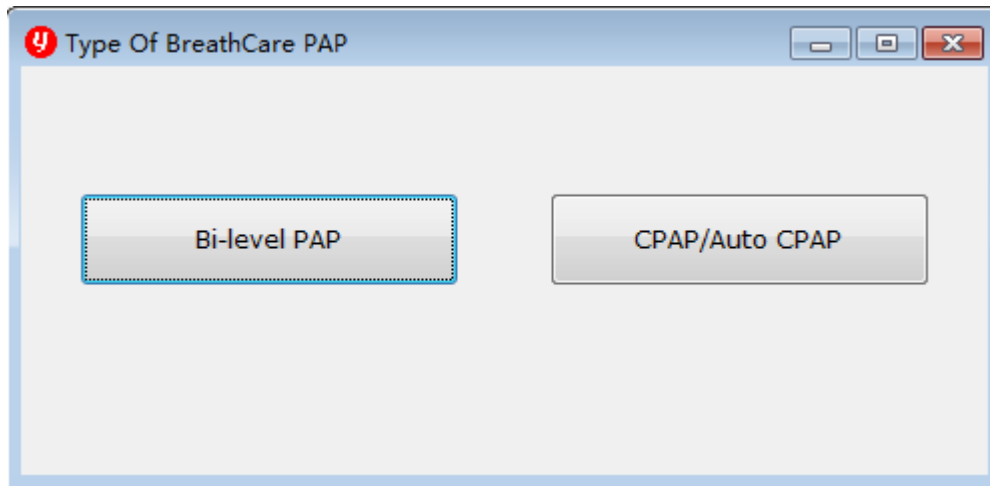


Figure16

If you need to view the treatment data of the bi-level pap, click “Bi-level PAP” to pop up the file path selection interface and select the correct file path, see figure 17:

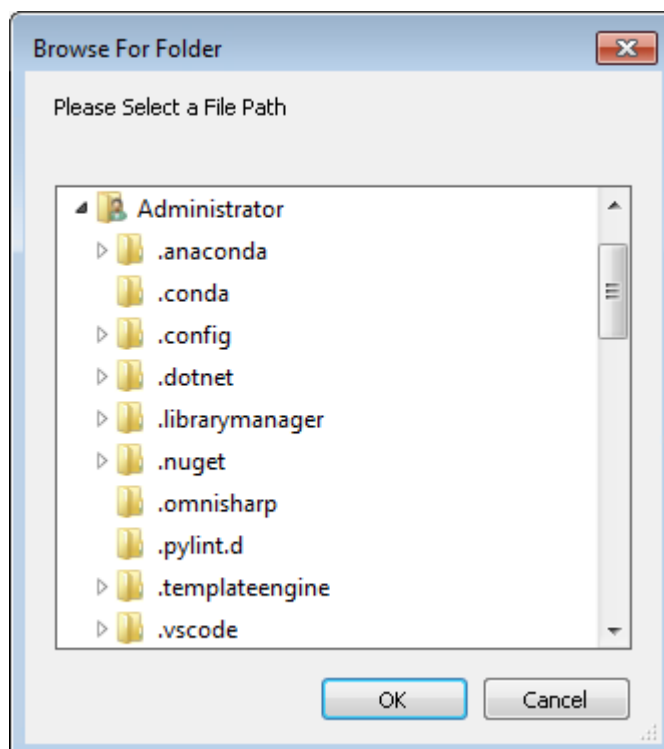


Figure17

Note: Open the bi-level pap therapy data, select the data folder, and click "OK" to open all therapy data in the folder. By default, the folder uses the ventilator serial number (SN) name:

If you need to view the treatment data of single-level (CPAP / Auto CPAP) , click "CPAP / Auto CPAP" to select the correct file path in the pop-up file path selection interface, as shown in Figure 18 below:

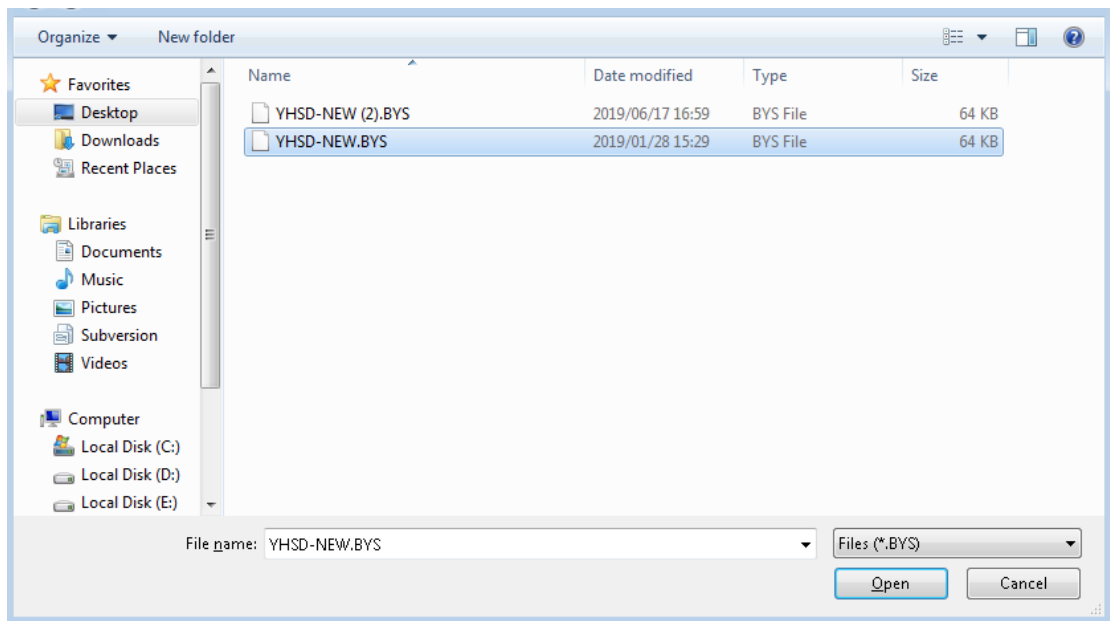


Figure18

Note: To open the single-level (CPAP / Auto CPAP) treatment data, you need to select the treatment data with the suffix ".BYS", the default name is "YHSD-NEW.BYS", click "OK" to open CPAP / Auto CPAP treatment data.

After turning on the treatment data of the bi-level pap and (CPAP / Auto CPAP), it will automatically jump to the data information page, and you can view the treatment data on the data information page.

In the case of creating a new user file or opening a user file, after loading the data, click "Save" in the ribbon to archive the user file.

## 2.3 “Data information”

After opening the treatment data, on the data information page, you can view the following: user information, equipment information, date, profile information,

statistical information, detailed charts and trend charts. The layout of these contents is shown in Figure 19 below:

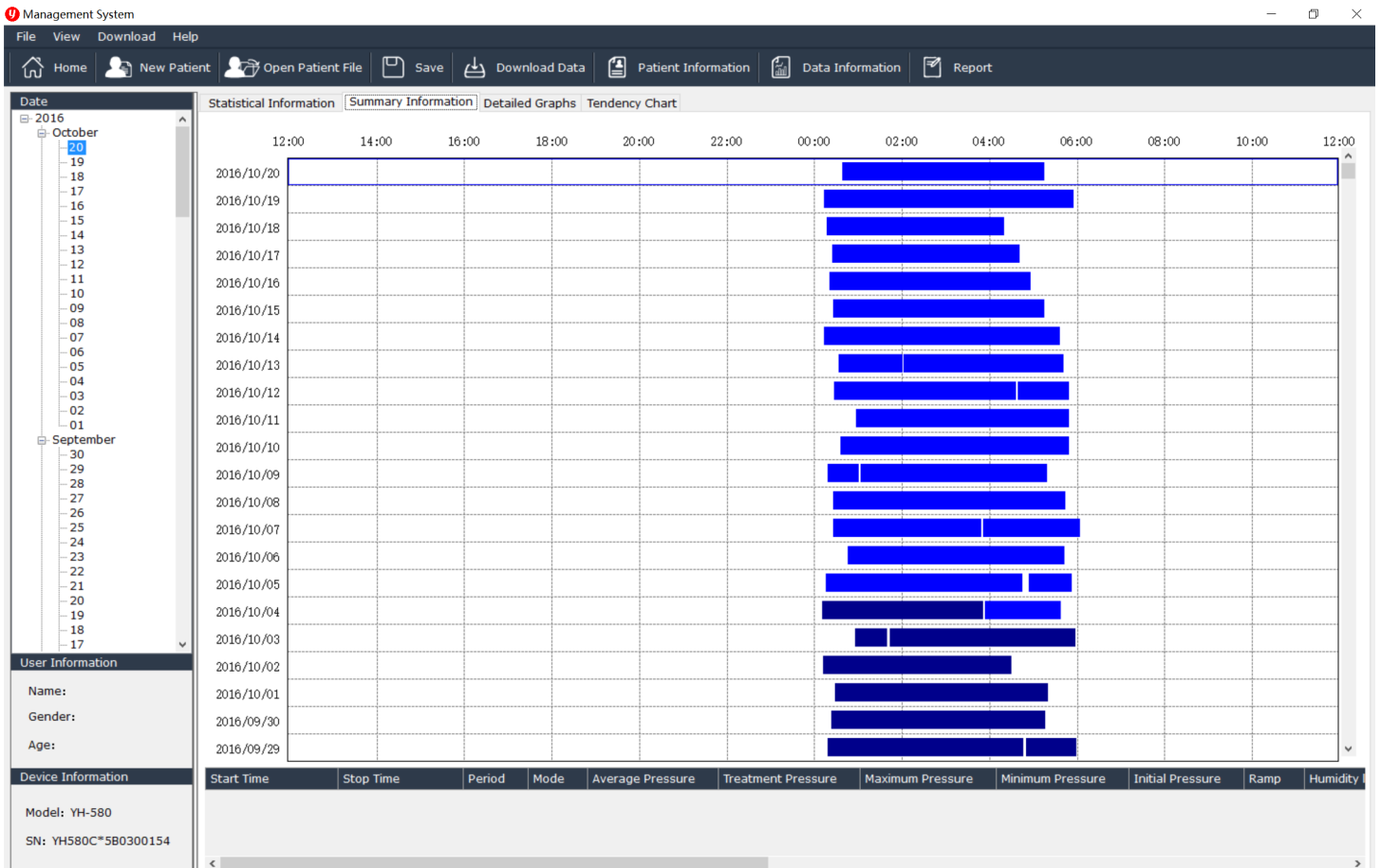


Figure19

### 2.3.1 User Info

In the lower left of the data information interface, you can see the user information, see Figure 19 above:

When only the treatment data is opened, the user information is empty. After opening or creating a new user profile, the user information will show the user's name, gender, and age, see Figure 20 below:

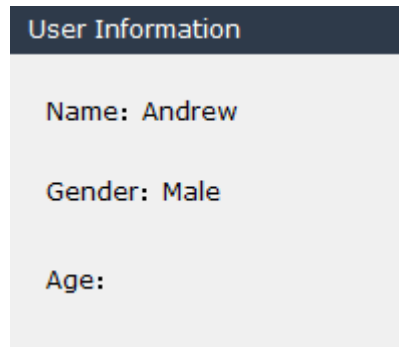


Figure20

### **2.3.2 Device Information**

The device information can display the related information corresponding to the open treatment data, including the model and serial number (SN), see Figure 19 above.

### **2.3.3 Date list**

The date list at the top left of the data information interface shows the month and date used by the pap device. Only the date used is displayed. You can view the date information of the pap device used here, see Figure 19 above.

The date list can be used as a reference for date information of related treatment data in summary information, statistical information and detailed chart interface.

### **2.3.4 Summary information**

After opening the treatment data for the first time, you will see "Summary Information" in the data information interface, and you will see the basic ventilator usage in the overview information interface. You can check the date of use with the blue record bar. duration.

The time axis above the coordinate axis is 24 hours a day, and each blue bar corresponding to the time indicates that the pap device has been used once. Click to select the record bar, and the overview information of the treatment can be displayed at the bottom of the interface, including start time, end time,

duration of use, mode, average pressure, heating level and other information. See Figure 21 below:

Note: Most pap device are used at night, so the 24-hour timeline of each day, the previous day 12:00 noon to the next day 12:00 noon is the daily use time range.

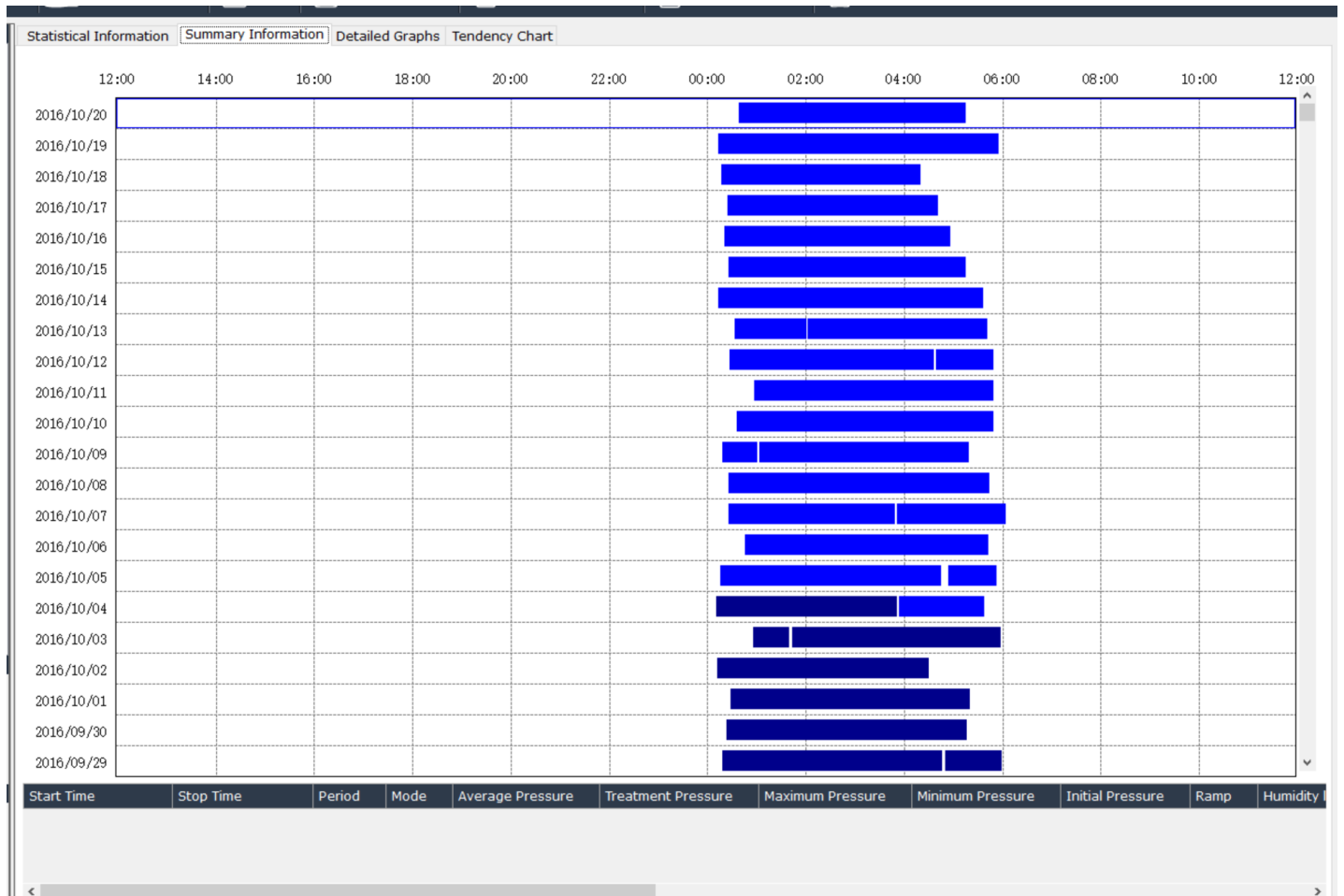


Figure21

### 2.3.5 Statistics information

According to the selected date range, the statistical information interface can calculate the general information statistical results of treatment data within this range of time, including data information such as total days used, total hours used, days  $\geq 4$  hours, etc. See Figure 22 for details.



Statistical Information   Summary Information   Detailed Graphs   Tendency Chart						
Date Period: 20/10/2016 To 20/10/2016						
Use Condition	Total Days Used:	1	Total Hours Used:	4.6	Used Days≥4 Hours:	1
	Average Daily Usage Time:	04:37	Shortest Daily Usage Time:	04:37	Longest Daily Usage Time:	04:37
Event/Hour AHI	AI:	0.9	AHI:	1.5	SI:	3
	HI:	0.6				
Pressure cmH2O	Average:	7.2	Maximum:	9	Minimum:	4.6
	Leakage Volume LPM	Average:	7.2	Maximum:	40	Minimum:
SPO2: %	Average:	--	Highest SPO2:	--	Lowest SPO2:	--
	ODI:	--	Spo2<90% Proportion(%):	--	Spo2<80% Proportion(%):	--
Pulse Rate PR	Average:	--	Fastest Pulse Rate:	--	Slowest Pulse Rate:	--

Figure22

The date range of the statistical information can be freely selected, and the start and end calendar functions can be clicked to select.

### 2.3.6 Detailed chart

The pap device records the current set pressure, air leakage, heating level and other parameters every minute during the start of the treatment. In the detailed chart, you can use the time axis as the coordinates to display the data information of each minute.

The data of CPAP / Auto CPAP includes: current working pressure, air leakage, AI / HI, SP02 saturation and pulse rate information.

Bi-level pap data includes inspiratory pressure (IPAP), expiratory pressure (EPAP), maximum inspiratory pressure, minimum inspiratory pressure, leak volume (LV), tidal volume (VT), minutes Ventilation (MV), respiratory rate (BPM), breathing ratio (%), SP02 saturation, and pulse rate information.

In the detailed chart interface, the management software will display these data in the form of a line chart, as shown in Figure 23 below:

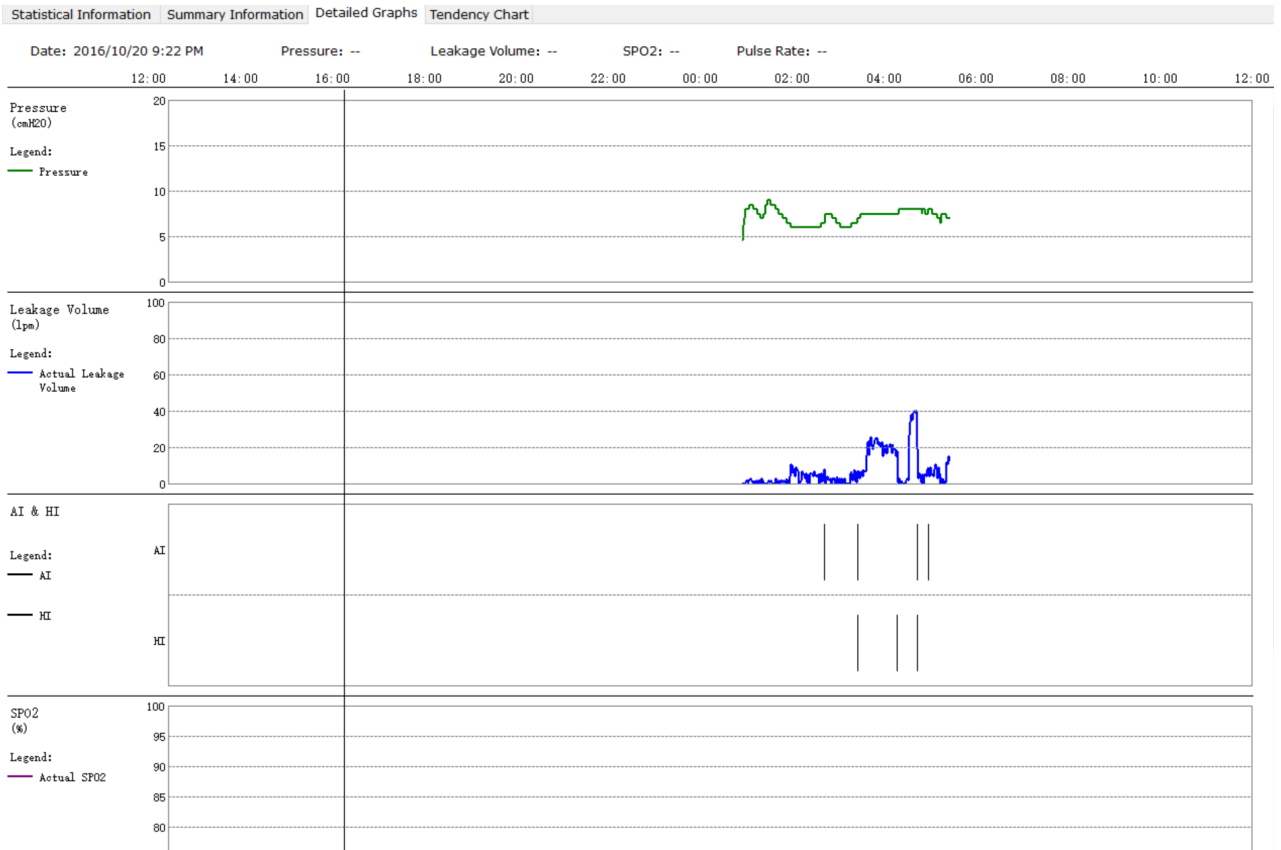


Figure 23

### 2.3.7 Trend chart

On the trend chart interface, you can draw a trend chart of part of the treatment data during the entire use period of the pap device according to the daily unit. The trend chart can see the long-term trend of the treatment data, and you can understand the user's overall use situation, see figure 24.

The trend graph of CPAP / Auto CPAP data includes average pressure, average leakage, and AHI value.

Bi-level pap device data trend graphs include average pressure, average leak volume, average tidal volume, average minute ventilation volume, average SP02, etc.

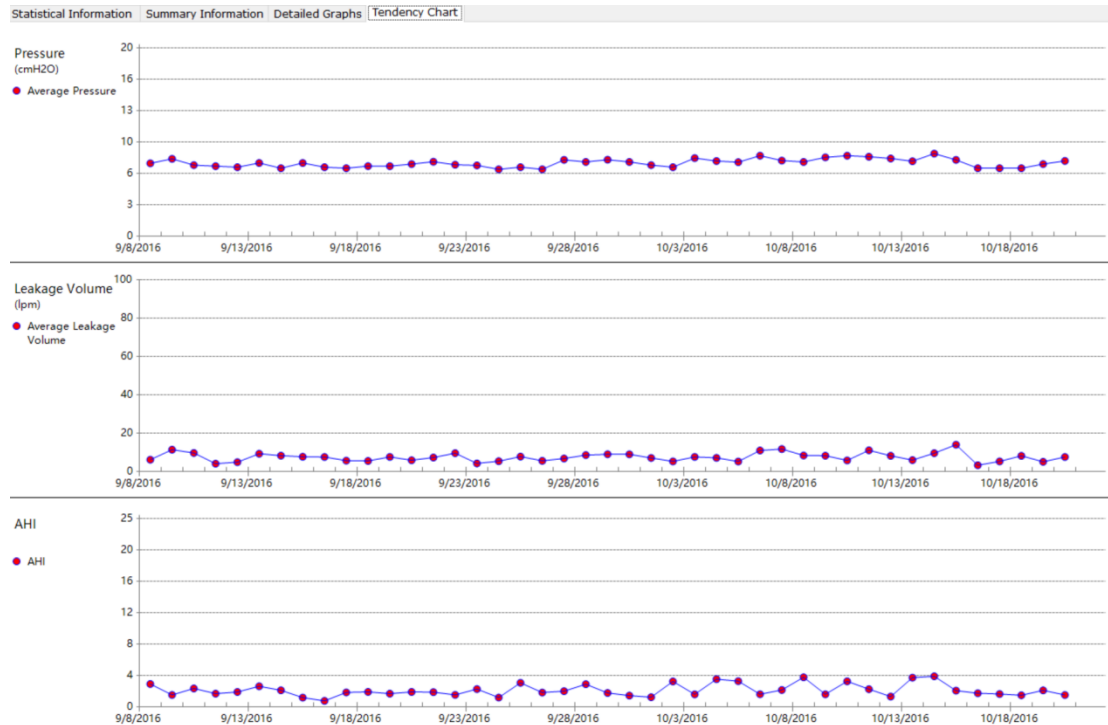


Figure 24

## 2.4 “Report”

Click “Report” on the main page of the management software as shown in Figure 8. You can select the required date range and report content in the pop-up report content dialog, see Figure 25.

Among them,

the summary refers to user information and statistical information.

Long-term information includes profile information and trend charts.

Details include a chart of the data for each treatment.

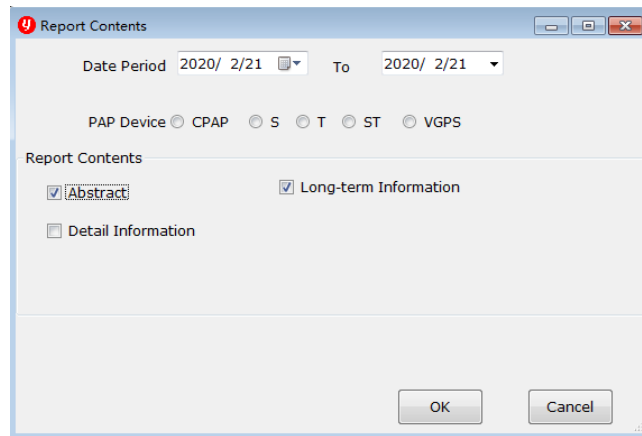


Figure 25

Click "OK" to open the report preview interface, as shown in Figure 26 below:

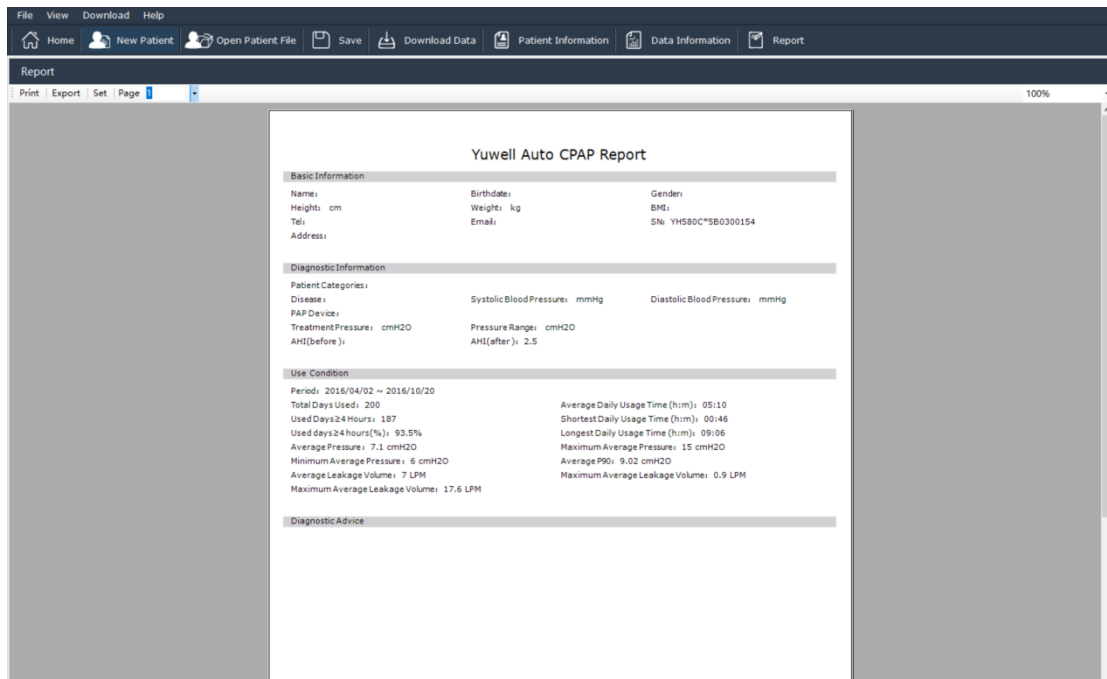


Figure 26

On the report preview page, you can turn the page to view the report content. After confirming that it is correct, you can click "Print" in the upper left corner to print the report through a printer or click "Export" to save it as a PDF file.

# 3. Function Description

## 3.1 Functional zone

On the top of the management software, there are "Home", "New Patient", "Open Patient File", "Save", "Download Data", "Patient Information", "Data Information" and "Report" buttons, as shown below 27.

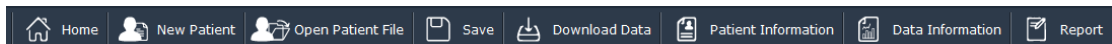


Figure27

“Home”: Back to the Quick Guide screen in Figure 8;

“New Patient”: Create a new user file, see section 2.1.1 for details;

“Open Patient File”: Open an existing user file, see section 2.1.2 for details;

“Save”: Save user file;

“Download Data”: Load the therapy data of the pap device, see section 2.2 for details;

“Patient Information”: Edit user information, including basic information and diagnostic information. After editing, click "Save" to save user file.

“Data Information”: Open the data information interface to view the treatment data, see section 2.3;"Report": preview output report, see section 2.4 for details.

## 3.2 Usage record

There is a "Recently Opened File" record at the bottom of the management software quick guide interface, which records the recently created or opened

user file and the date of access, as shown in Figure 28. Double-click the access record to quickly open the user profile.

Recently Opened File	Date
C:\Users\Administrator\Desktop\呼吸机使用信息\Andrew.yuv	2/21/2020 1:17 PM
C:\Users\Administrator\Desktop\Andrew.yuv	2/21/2020 11:23 AM

Figure28

### 3.3 Software shutdown

Click the close button in the upper right corner of the management software to close the management software.

Note: When the management software is closed, unsaved user files are not automatically saved

### 3.4 Help

#### 3.4.1 Manual book

If you have any questions during the use of the management software, please select the menu bar> "Help"> "Instruction" to open this manual for reference. If you have any questions, please contact the software developer's email: luliang@yuyue.com.cn; or call Yuyue ventilator manufacturer: 0512-67373082.

#### 3.4.2 Language

If you need to adjust the operating language of the management software, select the menu bar> "Help"> "Language" to change the language of the management software.

#### 3.4.3 about us

Select the menu bar> "Help"> "About" to view the version number of this system software.

This management software supports the remote upgrade function. Please ensure that the computer can connect to the Internet, please select the menu bar> "Help"> "About" and click "Check for Updates".

The software will automatically check whether there is a new version. If there is a new version, it will prompt whether to upgrade. After selecting the upgrade, the software will automatically upgrade to the latest version. Please note that you may need to close the software during the upgrade process.