


hypnus Analyzer
Operation Instruction
A/0

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1 Running

Double click the icon  on the desktop to start the software and the interface is shown as Figure1:

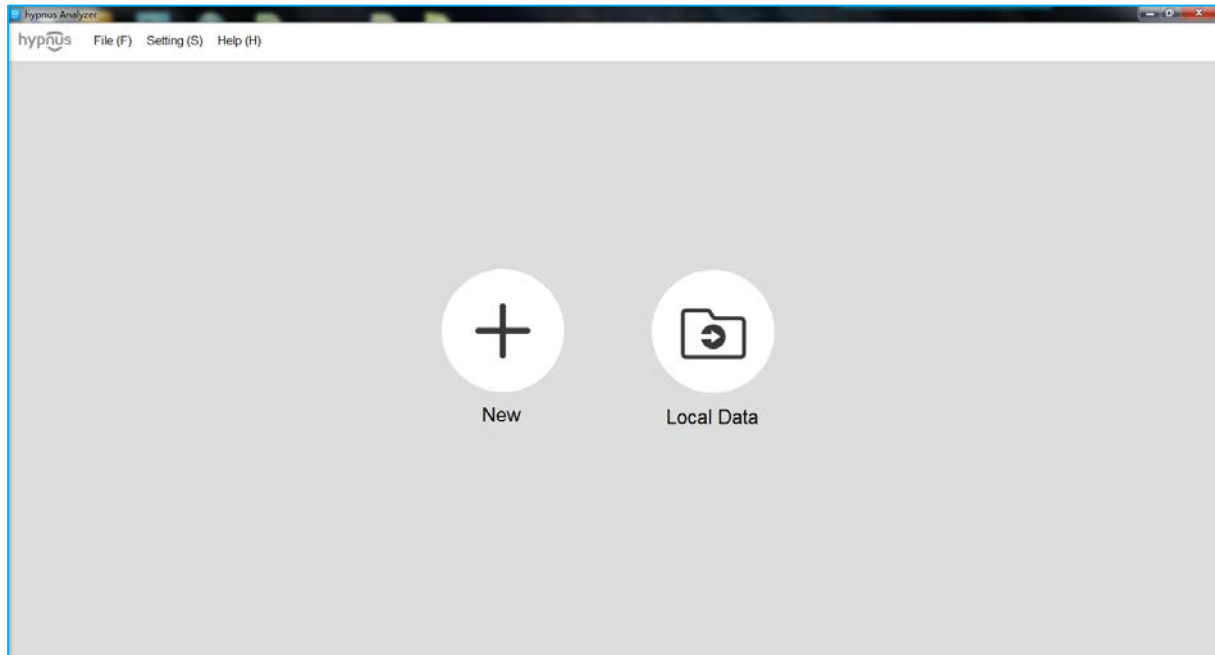



Figure 1


You can do such operation as:

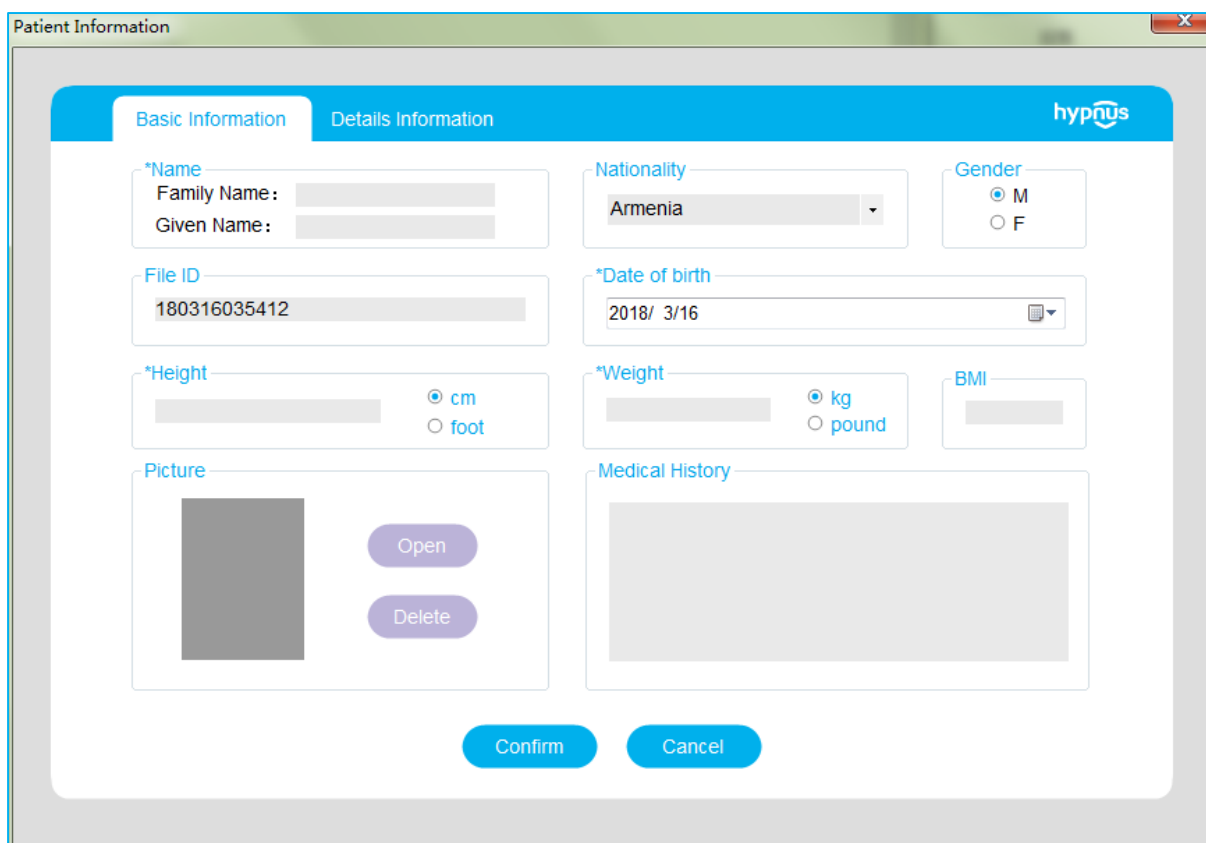
- 1) Create a new patient and import therapy data.
- 2) Select a patient existing in local system and import therapy data.
- 3) Import and check therapy data by using [Import Data] comment in [File] menu temporarily.

2 Import

2.1 Create a new patient and import

Click the button  to enter the registration interface as Figure 2. Enter the importing interface as Figure 3 when you finished the patient's information and clicked [Confirm] button.

Click the button  and select the file including sleep data (both **DATAFAIL** & **CONFIG** files) to import the data.



Patient Information

Basic Information | Details Information

***Name**
Family Name:
Given Name:

Nationality
Armenia

Gender
☒ M
☐ F


File ID
180316035412

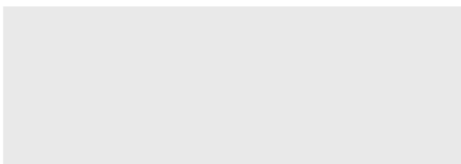
***Date of birth**
2018/ 3/16

***Height**
 ☒ cm
☐ foot

***Weight**
 ☒ kg
☐ pound

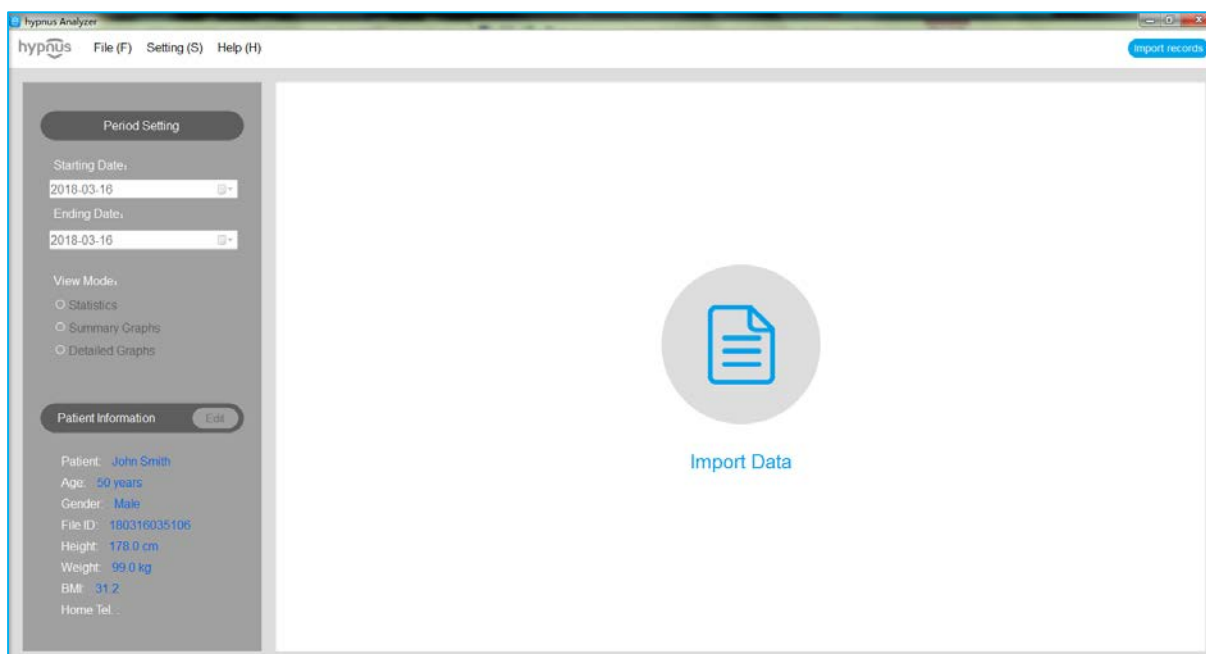
BMI

Picture

Open
Delete

Medical History


Confirm Cancel

Figure 2



hypnus Analyzer

hypnus File (F) Setting (S) Help (H)

Import records

Period Setting

Starting Date: 2018-03-16

Ending Date: 2018-03-16

View Mode:
☐ Statistics
☐ Summary Graphs
☐ Detailed Graphs

Patient Information Edit

Patient: John Smith
Age: 50 years
Gender: Male
File ID: 180316035106
Height: 178.0 cm
Weight: 99.0 kg
BMI: 31.2
Home Tel: .



Import Data

Figure 3

Click [Yes] button in the reminder shown as Figure 4 to import patient's data to the default File in your system. The therapy data could be read without importing if you select [No] button in reminder.

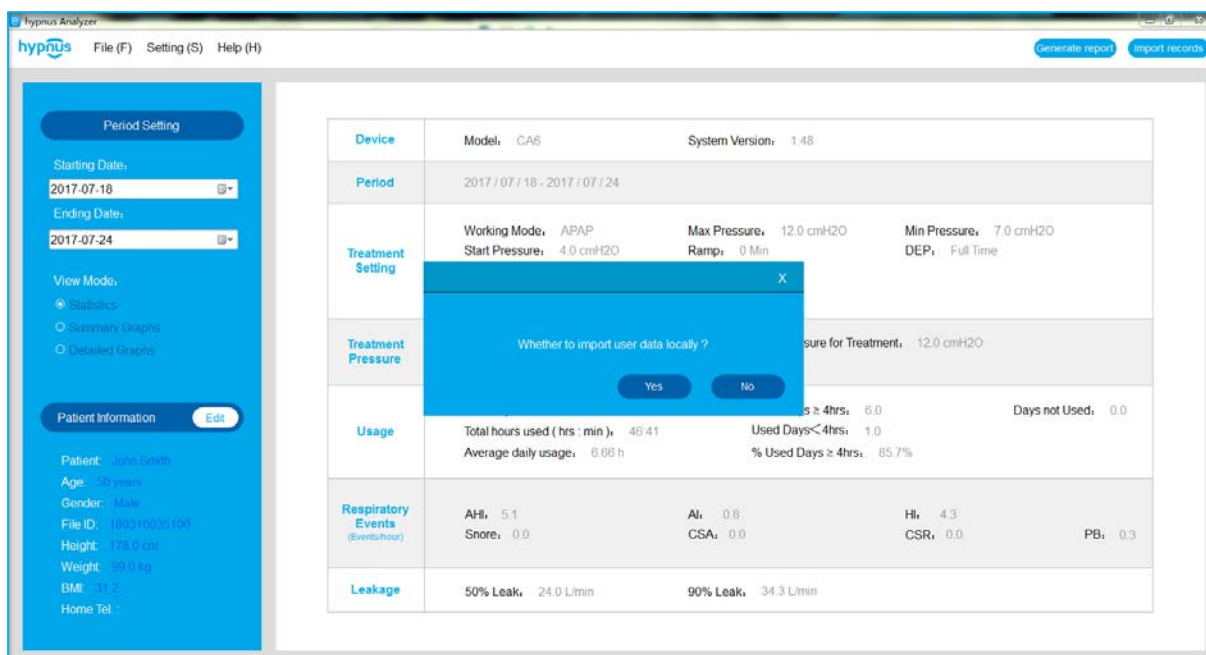



Figure 4

2.2 Select a local patient and import

Click the button  in interface shown as Figure 1 to enter the interface of local patient list (see Figure 5).

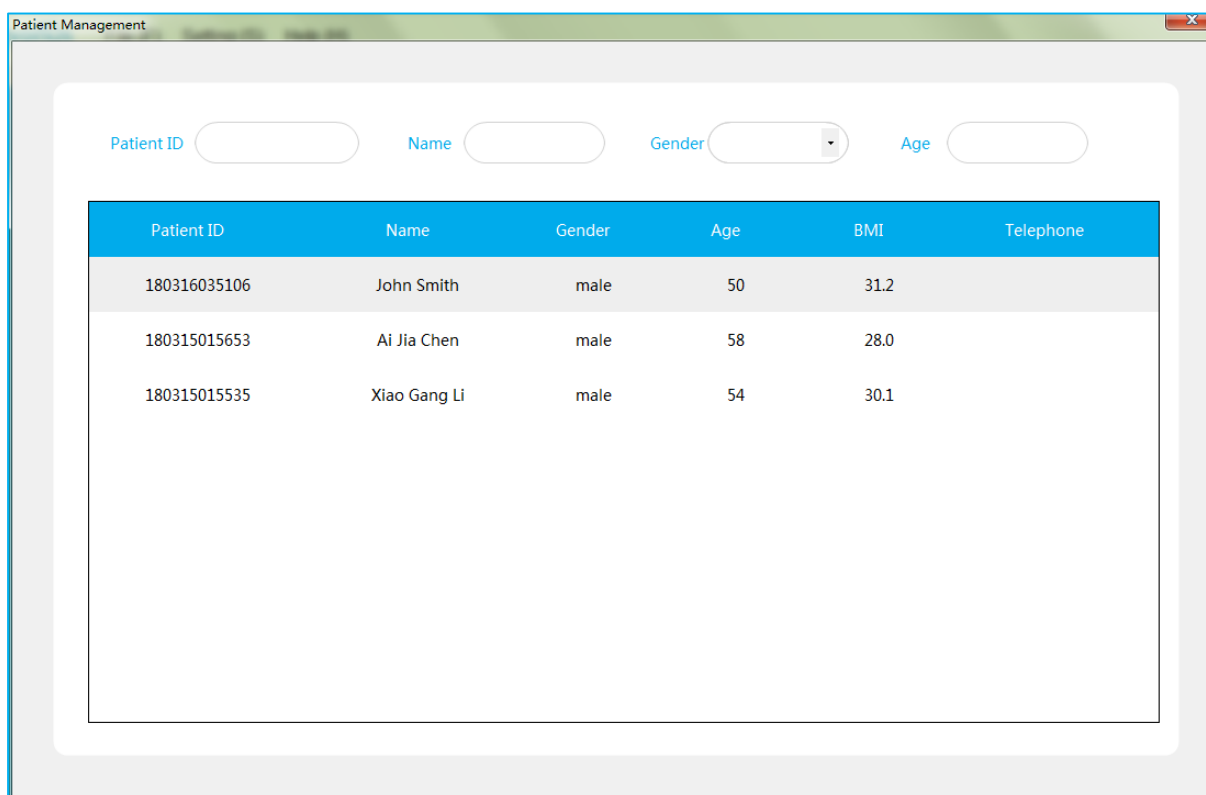


Figure 5

You can inquiry and select the patient in the list, then using the comment [Import] by the right mouse button to import patient's therapy data (see Figure 6).

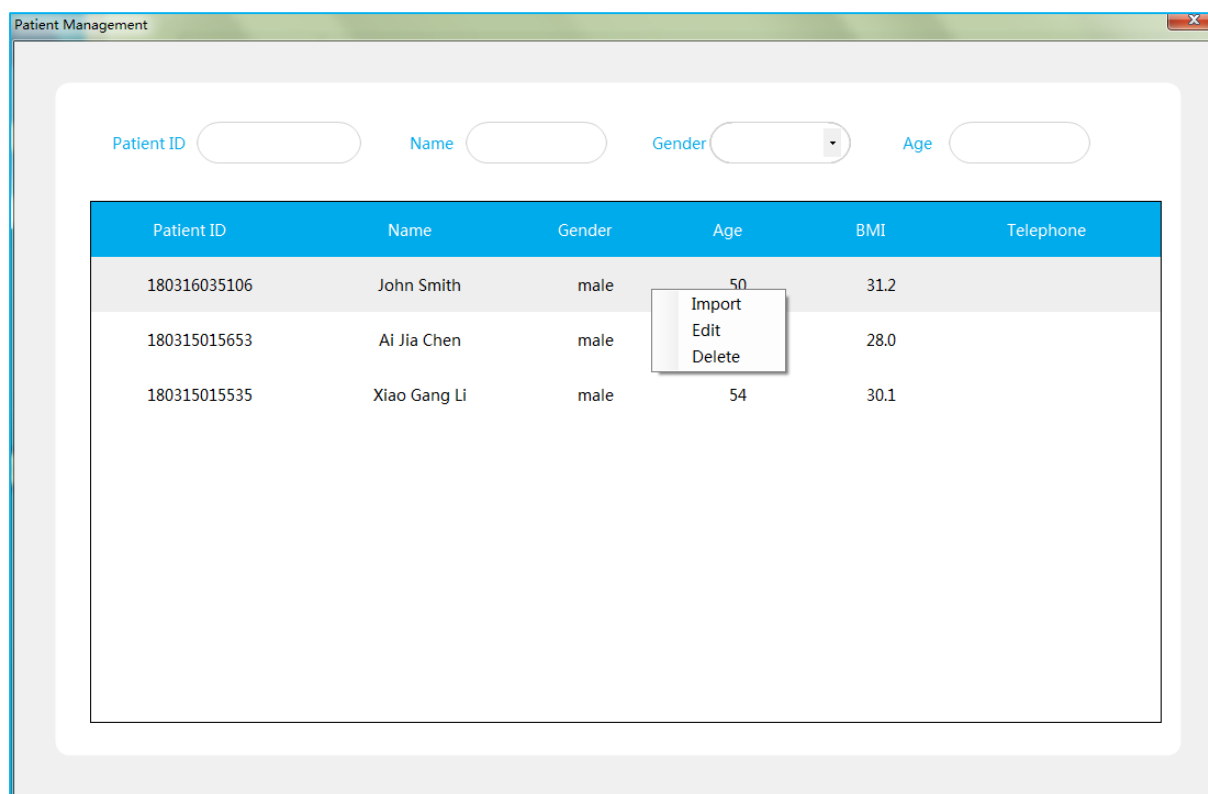


Figure 6

2.3 Open the local import record

Double click one patient in local list and enter the import records interface (see Figure 7), then double click one record to enter view mode interface.

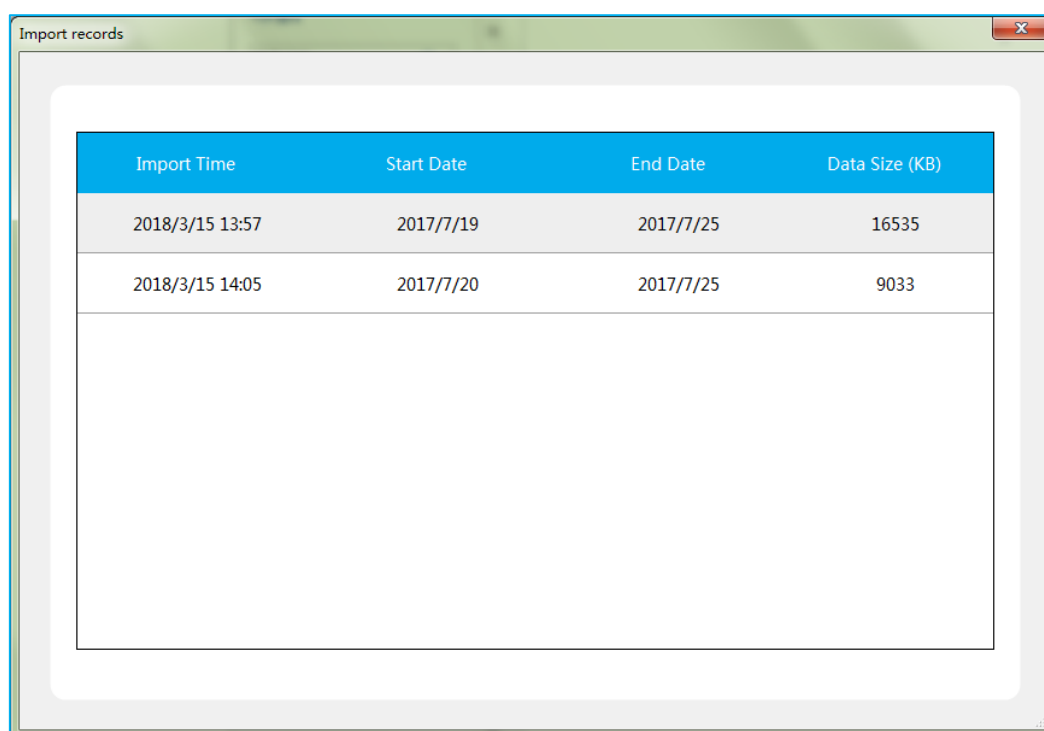
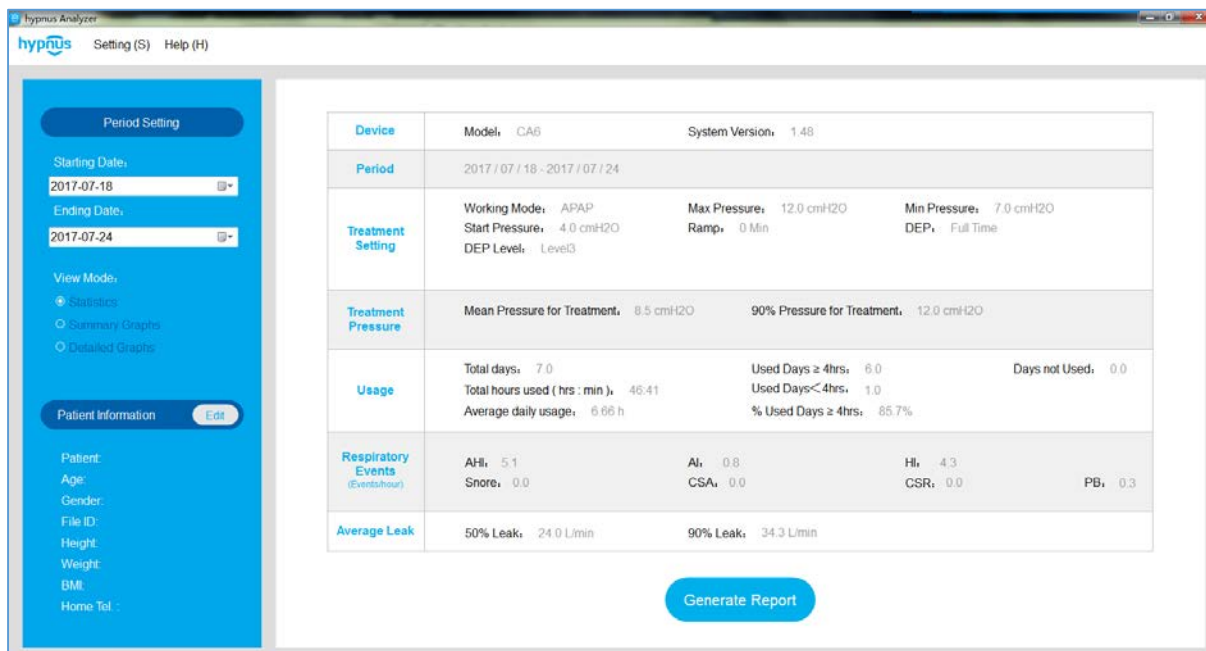


Figure 7

3 View Mode

The interface entered is shown as Figure 8 when you finished importing:



The interface shows the hypnus Analyzer window with a sidebar on the left and a main content area on the right. The sidebar includes a 'Period Setting' section with 'Starting Date' (2017-07-18) and 'Ending Date' (2017-07-24), a 'View Mode' section with radio buttons for 'Statistics' (selected), 'Summary Graphs', and 'Detailed Graphs', and a 'Patient Information' section with an 'Edit' button. The main content area displays a table of data:

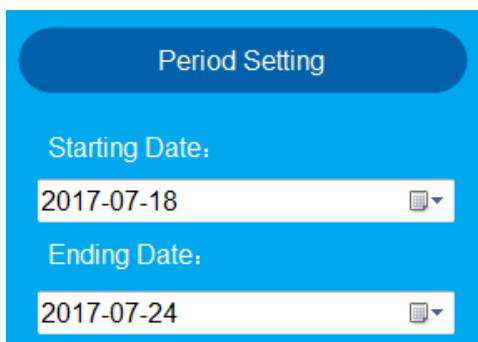
Device	Model: CA6	System Version: 1.48
Period	2017 / 07 / 18 - 2017 / 07 / 24	
Treatment Setting	Working Mode: APAP Start Pressure: 4.0 cmH2O DEP Level: Level3	Max Pressure: 12.0 cmH2O Ramp: 0 Min Min Pressure: 7.0 cmH2O DEP: Full Time
Treatment Pressure	Mean Pressure for Treatment: 8.5 cmH2O	90% Pressure for Treatment: 12.0 cmH2O
Usage	Total days: 7.0 Total hours used (hrs : min): 46:41 Average daily usage: 6.66 h	Used Days ≥ 4hrs: 6.0 Used Days < 4hrs: 1.0 % Used Days ≥ 4hrs: 85.7% Days not Used: 0.0
Respiratory Events (Events/hour)	AHI: 5.1 Snore: 0.0	AI: 0.8 CSA: 0.0 HI: 4.3 CSR: 0.0 PB: 0.3
Average Leak	50% Leak: 24.0 L/min	90% Leak: 34.3 L/min

A 'Generate Report' button is located at the bottom right of the main content area.

Figure 8

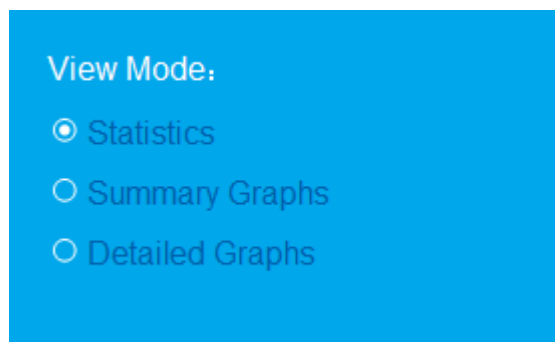
3.1 Setting Period

Setting the starting date and ending date (see Figure 9), then select view mode needed (see Figure 10).



The 'Period Setting' section shows two date pickers. The 'Starting Date' is set to 2017-07-18 and the 'Ending Date' is set to 2017-07-24. Both pickers have a calendar icon to the right.

Figure 9



The 'View Mode' section shows three radio buttons. The 'Statistics' option is selected, indicated by a filled circle. The other two options, 'Summary Graphs' and 'Detailed Graphs', are unselected, indicated by empty circles.

Figure 10

3.2 Statistics

This view show you the device information, treatment settings, usage, respiratory events and leak status.

Device	Model: CA6	System Version: 1.48
Period	2017 / 07 / 18 - 2017 / 07 / 24	
Treatment Setting	Working Mode: APAP Start Pressure: 4.0 cmH2O DEP Level: Level3	Max Pressure: 12.0 cmH2O Ramp: 0 Min Min Pressure: 7.0 cmH2O DEP: Full Time
Treatment Pressure	Mean Pressure for Treatment: 8.5 cmH2O	90% Pressure for Treatment: 12.0 cmH2O
Usage	Total days: 7.0 Total hours used (hrs : min): 46:41 Average daily usage: 6.66 h	Used Days ≥ 4hrs: 6.0 Used Days < 4hrs: 1.0 % Used Days ≥ 4hrs: 85.7% Days not Used: 0.0
Respiratory Events (Events/hour)	AHI: 5.1 Snore: 0.0	AI: 0.8 CSA: 0.0 HI: 4.3 CSR: 0.0 PB: 0.3
Average Leak	50% Leak: 24.0 L/min	90% Leak: 34.3 L/min

Figure 11

The acronym meaning of Respiratory Event can be referred as below:

AHI	Apnea-hypopnea Index	CSA	Central Sleep Apnea Index
AI	Apnea Index	CSR	Cheyne-Stokes Respiration Index
HI	Hypopnea Index	PB	Periodic Breath Index
SI	Snore Index	Leak	Leak

3.3 Summary Graphs

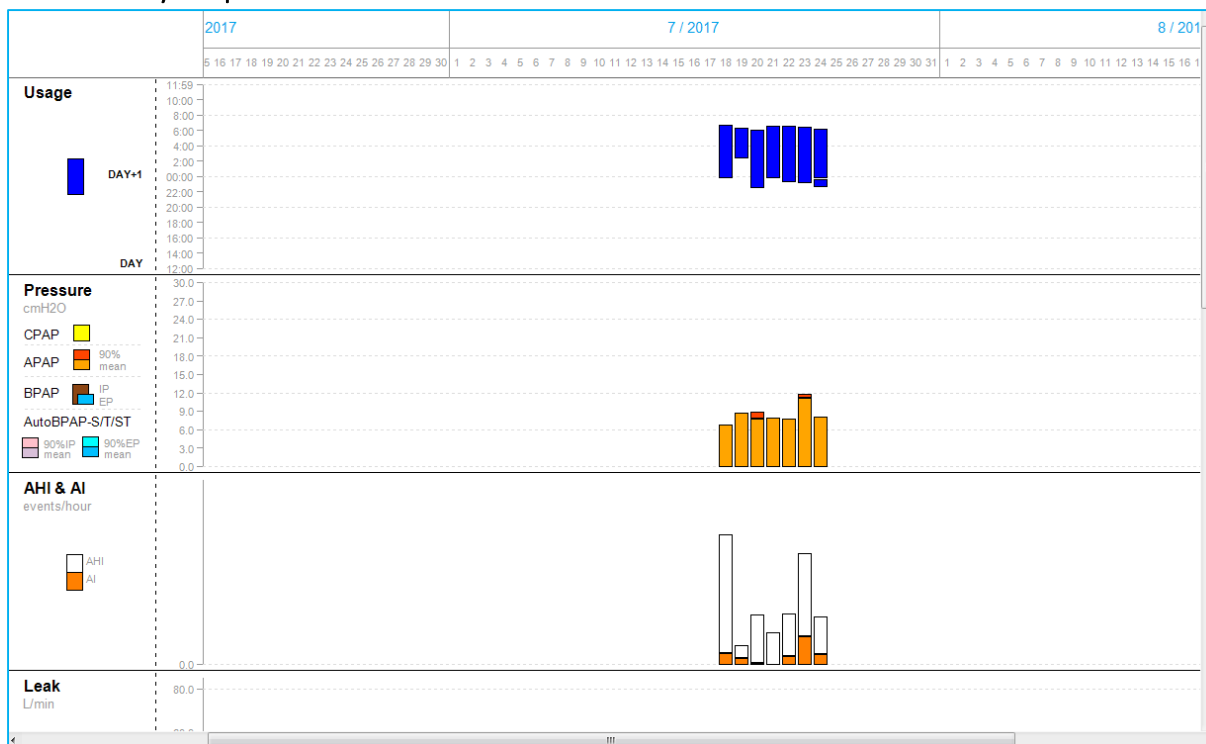


Figure 12

You can view the columns of usage, therapy pressure, and respiratory events...in Summary Graph mode.

The graph for the parameter selected can be moved by long pressing the title.

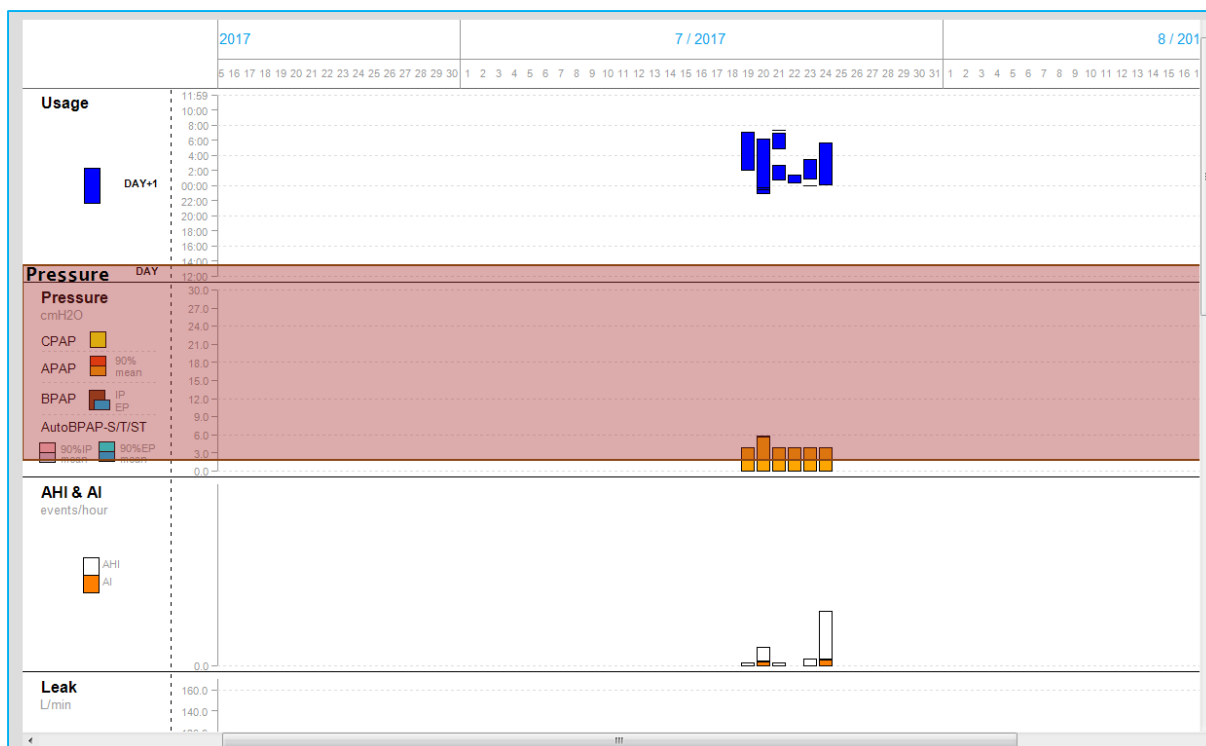


Figure 13

3.4 Detailed Graphs

You can select the date (see Figure 14) and view the detailed graphs for the high frequency data about treatment pressure and flow (as Figure 15).

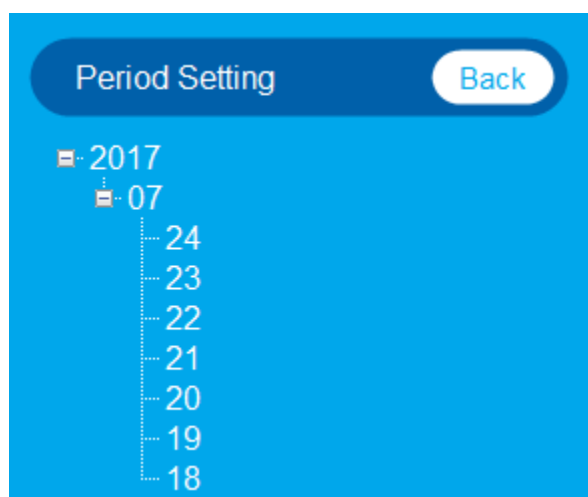


Figure 14

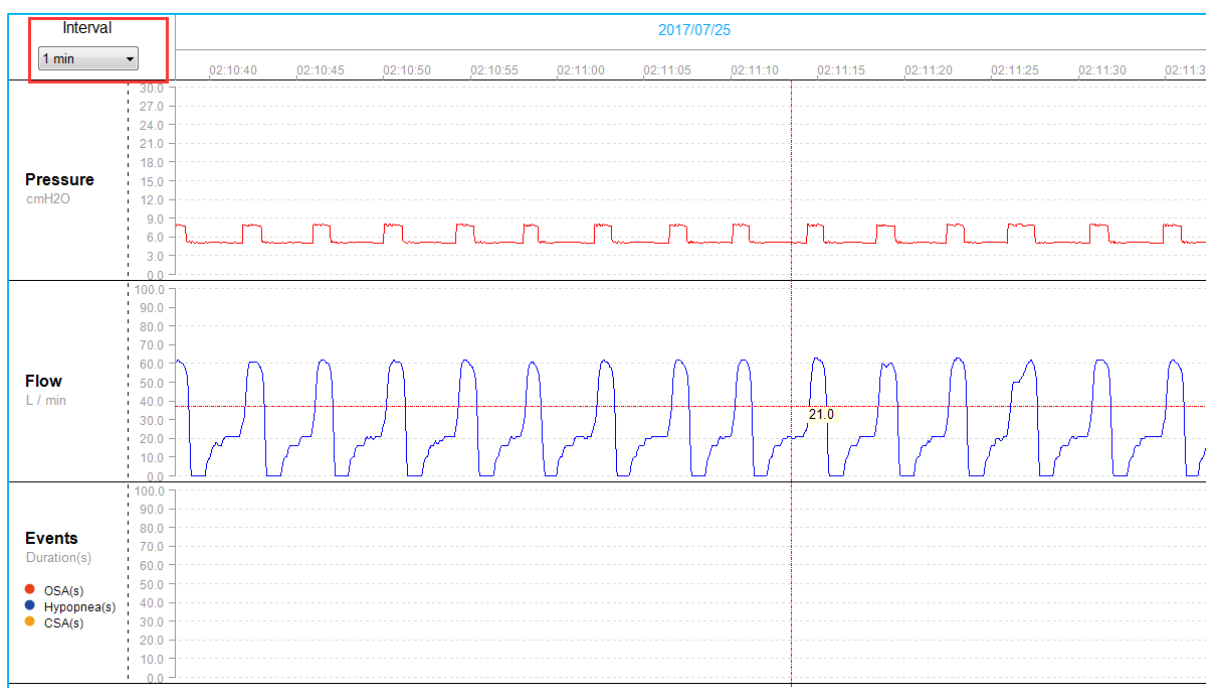


Figure 15

The graph can be zoomed by changing the interval which is marked in Figure 15.

4 Generate Report

Click the button [Generate Report](#) on top right corner (see Figure 16) to enter the diagnostic opinion (see Figure 17) and then click the button [Confirm] to generate the report.

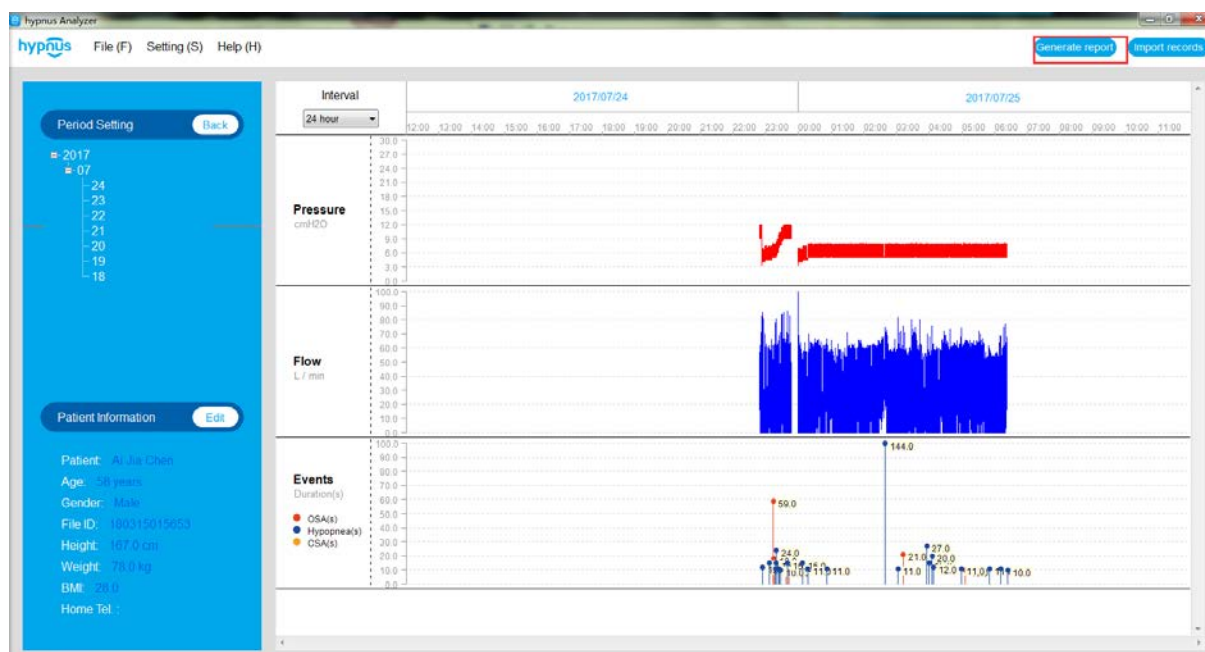


Figure 16

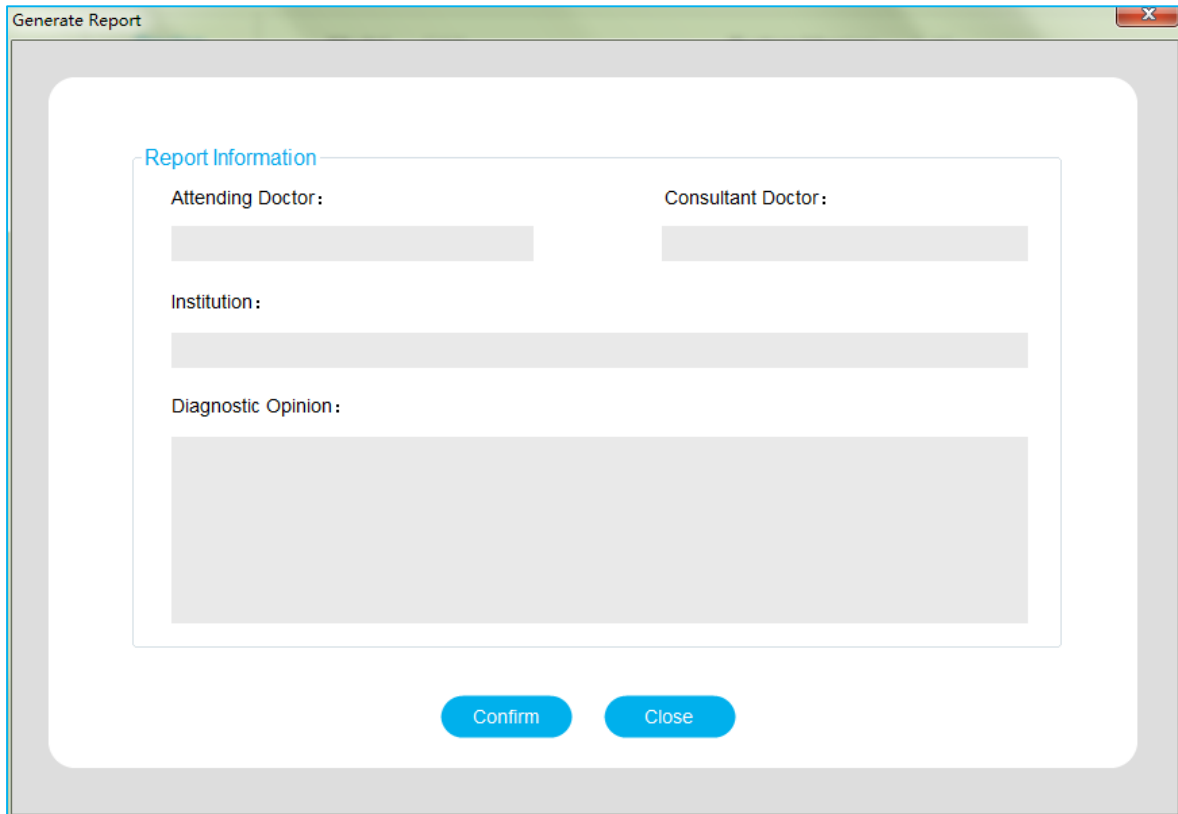


Figure 17

The report will be open when it has been generated successfully.

Notice:

- The reminder shown as Figure 18 will pop up to create a new patient if you generate a report without entering patient information.
- You need to download and setup the PDF reader so as to check the report.

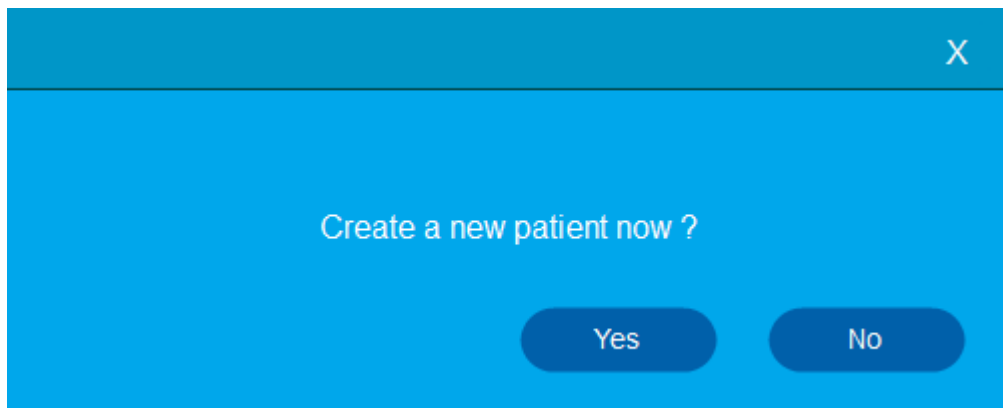


Figure 18

The report can be found in the save path you setting and its samples are shown in Figure 19.

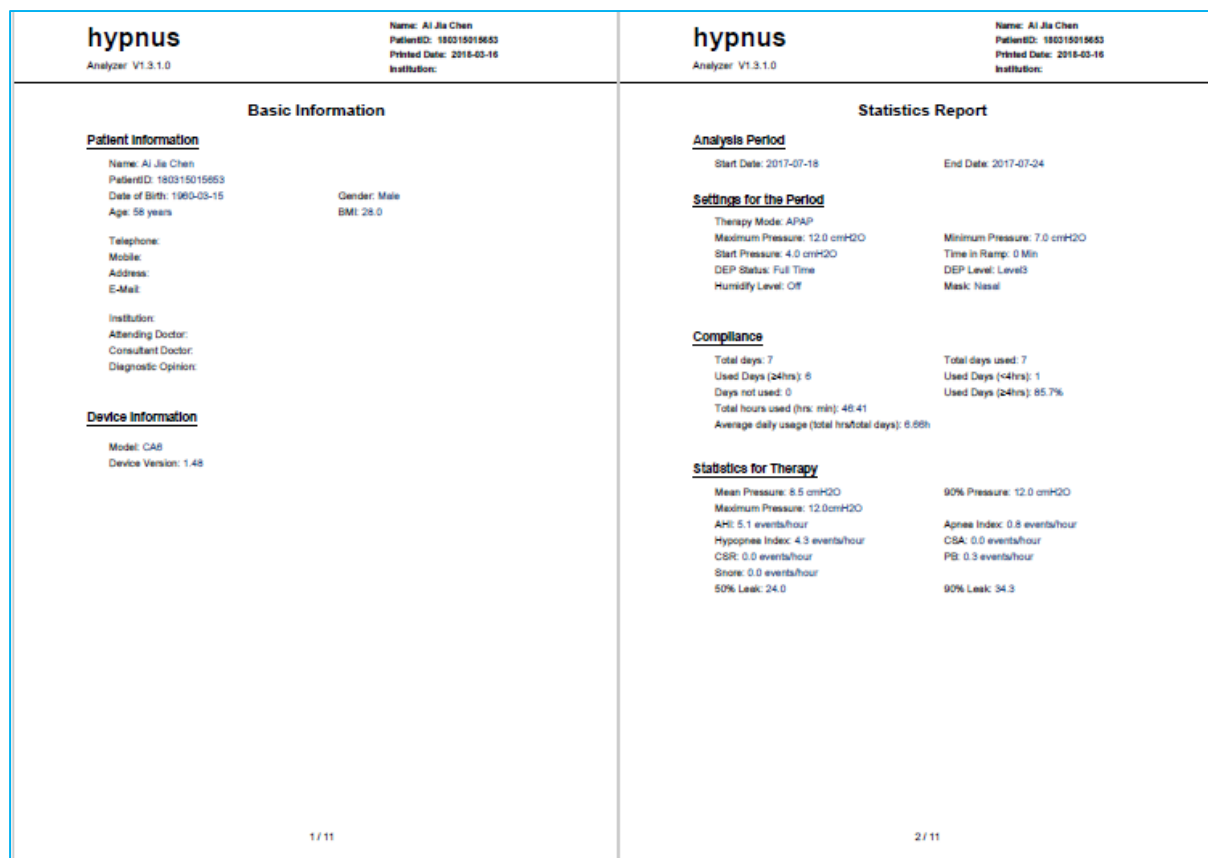


Figure 19-1

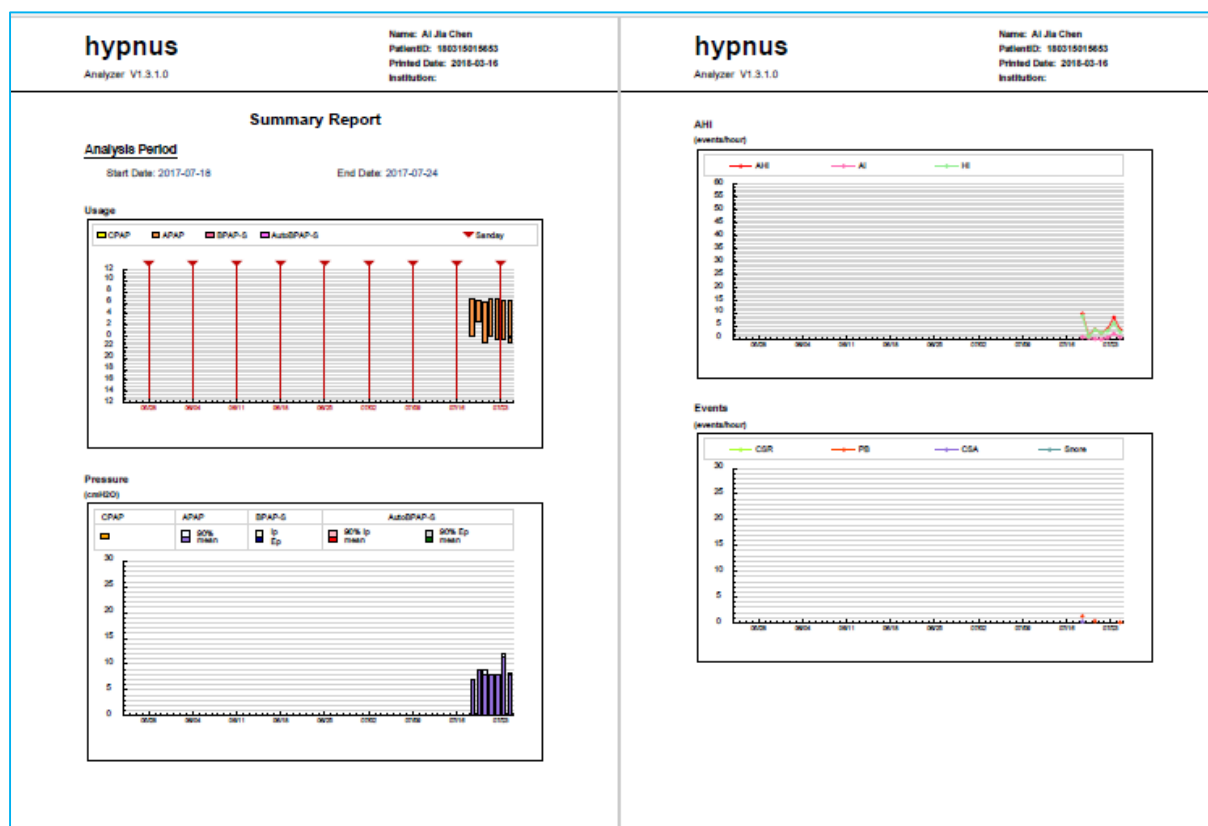


Figure 19-2

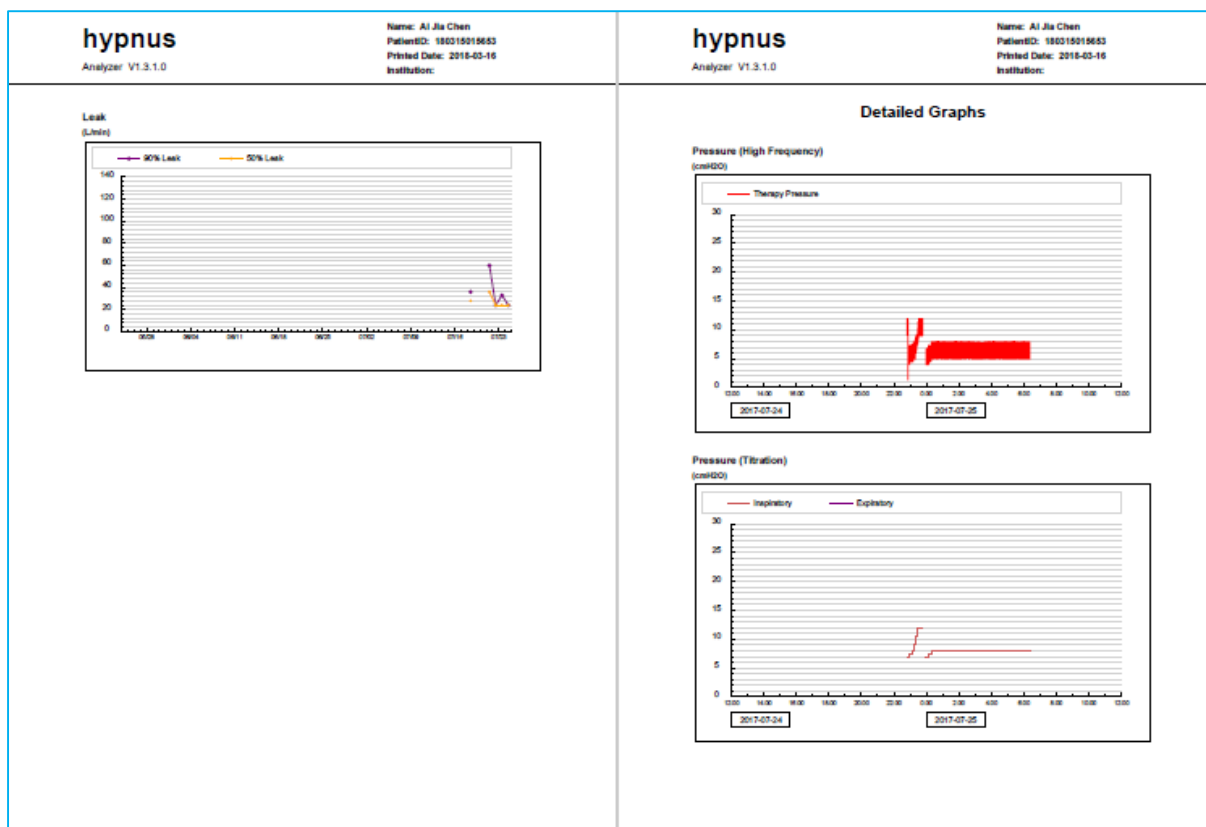


Figure 19-3

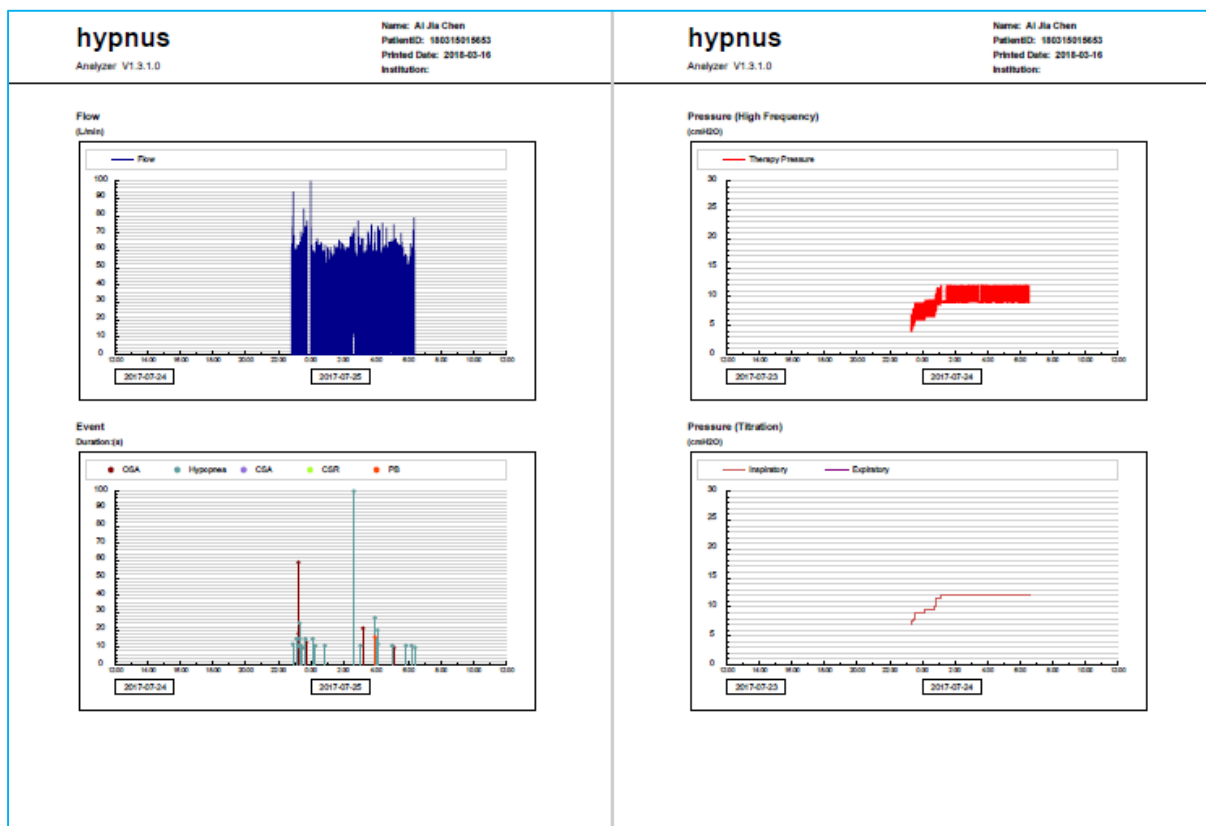


Figure 19-4

5 Edit Patient's Information

Click the [Edit] button in left bottom of view mode interface (see Figure 20) and you can enter the patient's information interface shown as Figure 21.

You can edit the name, age and communication information but the File ID cannot be changed.

Patient Information

Edit

Patient: Ai Jia Chen
Age: 58 years
Gender: Male
File ID: 180315015653
Height: 167.0 cm
Weight: 78.0 kg
BMI: 28.0
Home Tel. :

Figure 20

Patient Information

Basic Information Details Information

*Name
Family Name: Chen
Given Name: Ai Jia

File ID
180315015653

*Height
167.00 ☒ cm ☐ foot

*Weight
78.00 ☒ kg ☐ pound

BMI
28.0

Picture
Open
Delete

Nationality
Costa Rica

Gender
☒ M ☐ F

*Date of birth
1960/ 3/15

Medical History

Confirm Cancel

Figure 21

6 Setting

You can make these work including changing treatment parameters, choosing data path and selecting report model and transferring interface language.

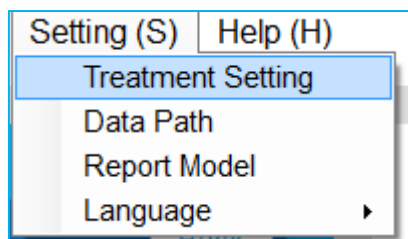


Figure 22

6.1 Treatment Setting

Click “Treatment Setting” in setting menu to change therapy parameters in this interface shown as

Figure 23.

A screenshot of the 'Treatment Setting' interface. At the top, there are two sections: 'Mode' and '*Device Information'. The 'Mode' section shows 'Work Mode' set to 'APAP'. The '*Device Information' section shows 'Product Model' as 'CA6' and 'System' as '1.48'. Below these is the 'Treatment Settings' section, which contains two columns of parameters. The left column includes 'Max Pressure' (12.0 cmH20), 'Min Pressure' (7.0 cmH20), 'Start Pressure' (4.0 cmH20), 'Ramp' (0 min), 'DEP' (Full time), and 'DEP Level' (3). The right column includes 'Humidify Level' (OFF), 'Heat Tubing' (26.0 °C), 'Smart Temp' (OFF), 'Smart Start' (ON), 'Mask' (Nasal), and 'Tube Type' (15 mm). At the bottom, there are 'Save' and 'Cancel' buttons.

Figure 23

The setting options are different according to work mode.

You must replace the file “config.bin” in SD card to save new treatment setting, which will refresh the setting after the patient inserted SD card into ventilator and restarted.

6.2 Data Path Setting

Click “Data Path” in setting menu and you can change the save path for patient data (see Figure 24).

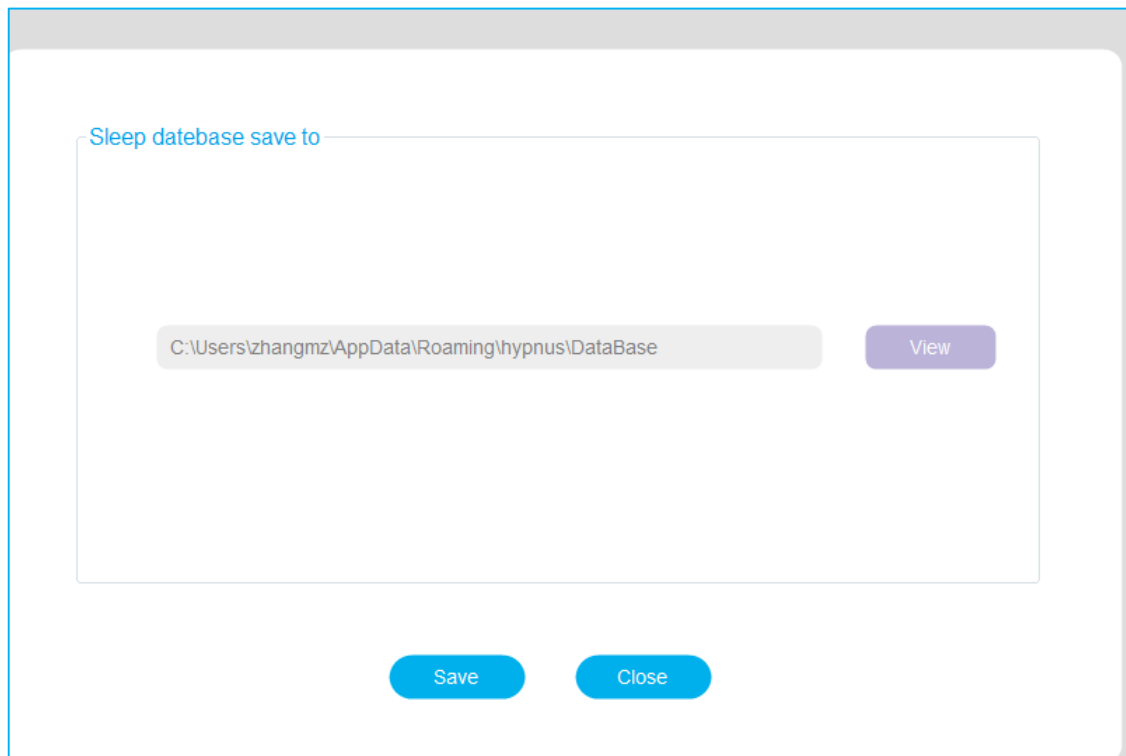


Figure 24

6.3 Report Model Setting

Click "Report Model" in setting menu and select the models need to show in report (see Figure 25).

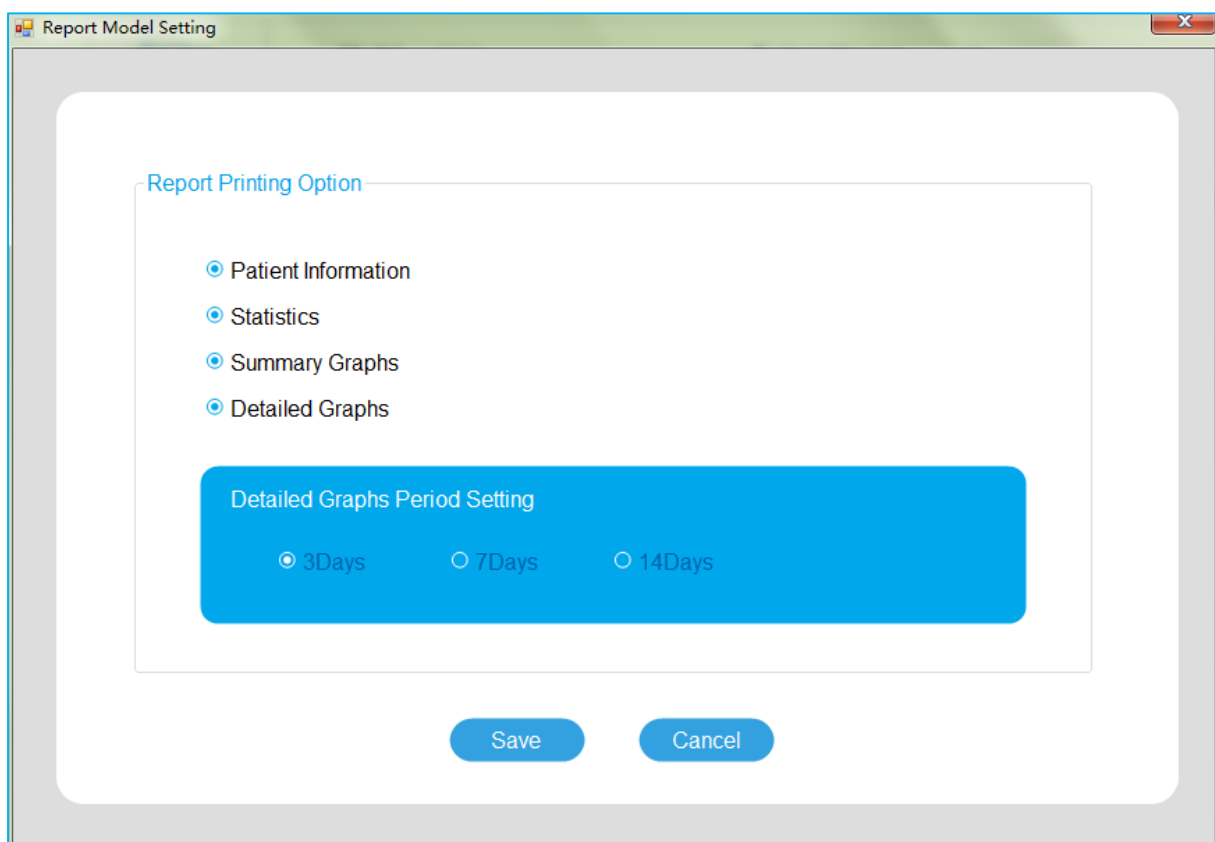


Figure 25

6.4 Language Setting

Click "Language" in setting menu to change interface language.