

# Respiratory – Inflammatory Monitoring – COPD-Asthma-COVID-19



Home Spirometry  
Monitoring



Nitric Oxide  
Monitoring



O<sub>2</sub> Sat, BP, Activity, Temp, Pulse

Home – SNF – LTC – Elder Residential Living



# Respiratory Monitoring





# Respiratory Monitoring

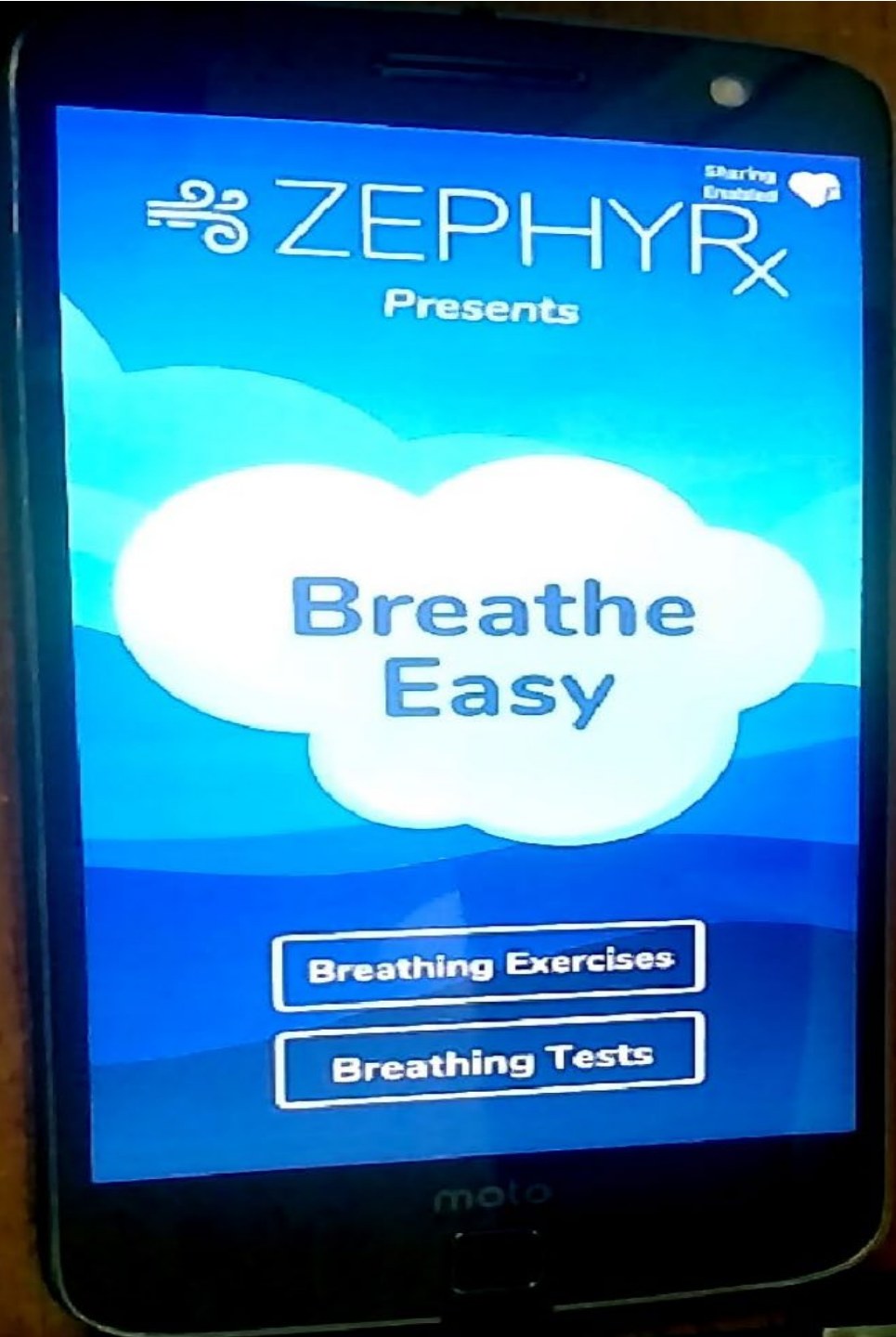


# Respiratory Monitoring

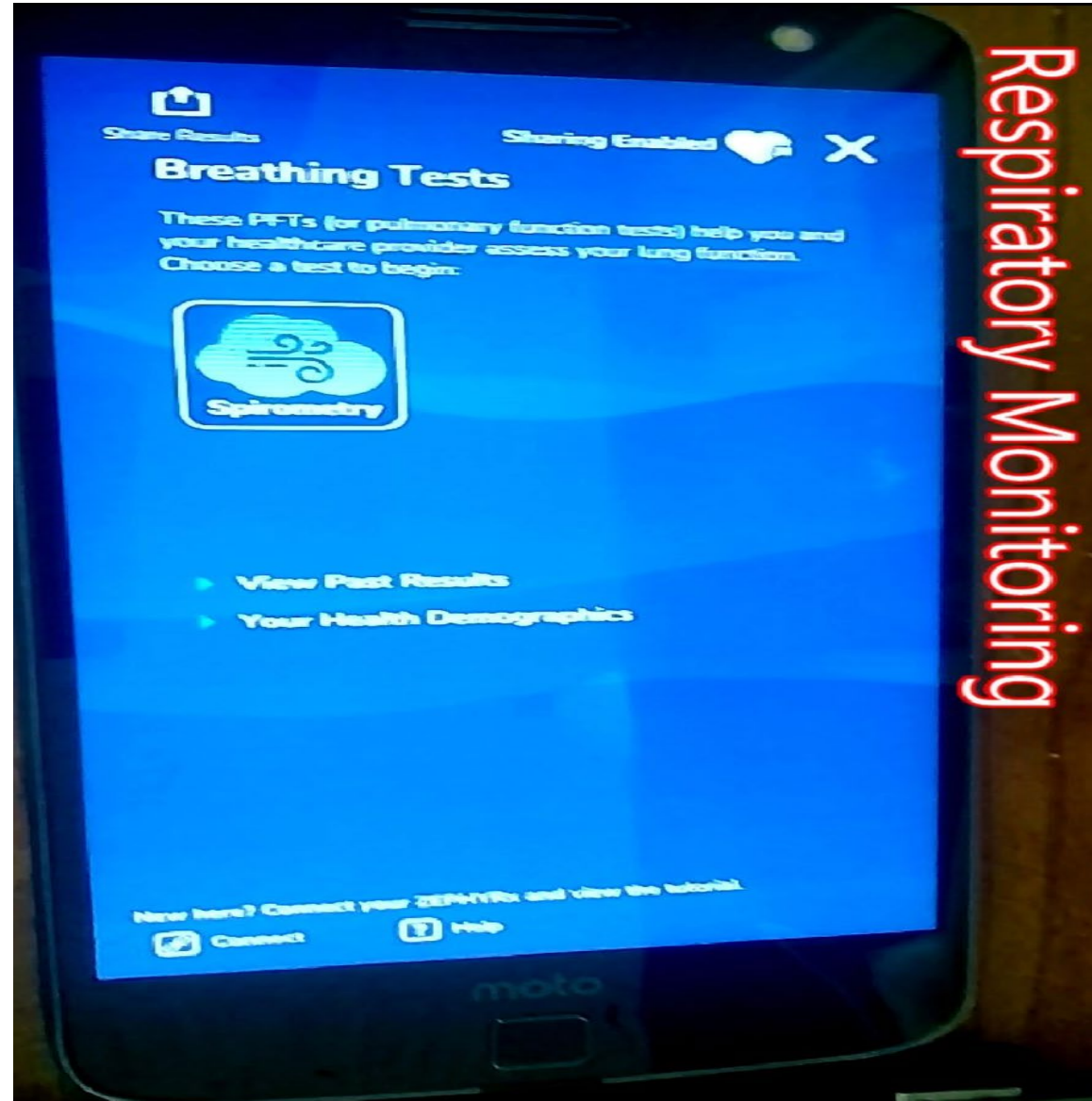




# Respiratory Monitoring



# Respiratory Monitoring





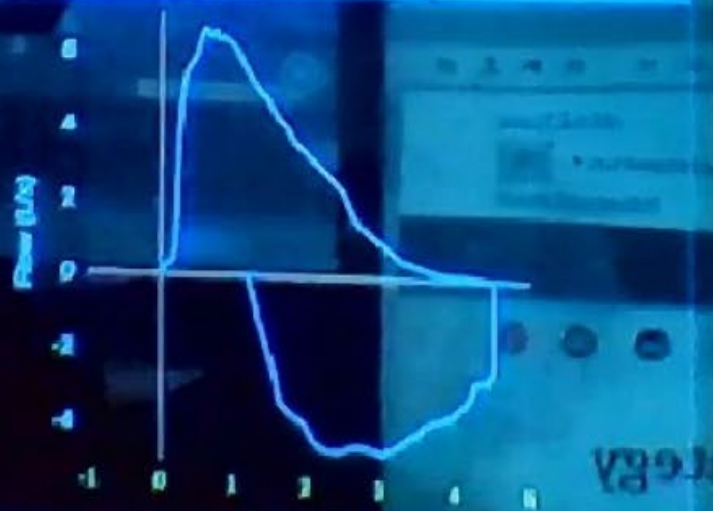
# Respiratory Monitoring

Share Results  
06:04 AM 04/17/2020  
h: 57 in  
w: 186 lbs  
Allen Ohta  
lc: 03 Apr 1943  
g: Male

## Your Spirometry Results:

BEST PNC	BEST FEV1	BEST FEV1/PNC
4.53L	3.11L	69%
% EXPECTED	% EXPECTED	% EXPECTED
126 %	115%	91%
BEST PIF	BEST FEV3	BEST FEV2575
7.06 L/s	4.12L	1.72 L/s
BEST PIF	BEST FVC	BEST FEF
3.74 L/s	3.42L	19.8 s

## Flow-Volume Curve:




Patient Data Asthma On...

View As:

Matching records: Include Omit

Insert: Operators

Script paused Continue Cancel



Asthma and Allergy Solutions  
"Dedicated to wellness, committed to care"

Dashboard

New Patient

Search

Patient Data

Sleep ApneaGastro ERAsthmaBronchitisCOPDEmphysemaPulmonary RehabChronic CoughRespiratory InfectionCystic Fibrosis

Patient:

Patient DOB/Age:

Clinic Pt ID/Gender:

Barcode:

Medical Practice:

Patient Zip Code:

Insurance Carrier:

Vital Monitor ID:

Spirobank ID:

EHR Classification:

Adult or Pediatric:

Provider:

Nurse:

FeNO DOS:

Spirometry DOS:

Initial ICD-10 & Notes

Prescriptions

Crash Cart

Asthma Action Plan

Clinic Spirometry Chart

Respiratory Billing Forms

Asthma Control Test

Clinic Follow-up Spiro/FeNo

Respiratory Snapshot:  
ACT =  
FEV1 Pre =  
FeNo =  
FEV1 Post =

Clinic Vitals

Vitals Monitor


FeNO Chart

Help Desk

FeNO Test

At Home Spirometry

Provider/Allergist Consultation



Patient Notes

Chart Notes

AAS Pt ID

Patient Contact

Deactivate

X



Patient Data

## Asthma Action Plan

Print

Patient

Reg #

Date

5/21/2020

DOB:

Age:

Green Zone  
(Doing Well)

- ✓ Breathing is good (no coughing, wheezing, chest tightness, or shortness of breath during the day or night), and
- ✓ Able to do usual activities (work, play, and exercise)
- ✓ Spirometry test is 80% or higher  
Forced Value = )

## Controller Medications

Take these medication(s) **EVERY DAY**

Select Zone

Medication Name

Dose

Frequency

Strength

☐ If your child usually has symptoms with exercise, then give:YELLOW ZONE  
(Caution)

- ✓ Breathing problems (coughing, wheezing, chest tightness, shortness of breath, or waking up from sleep), or

## Rescue Medications

Select Zone

Continue giving the controller medication(s) as prescribed.

Give:

Then:

- Wait **20 minutes** and see if the treatment(s) helped
- If your child is GETTING WORSE or is NOT IMPROVING after the treatment(s), go to the RED ZONE
- If your child is BETTER.

Layout: Asthma Action Control - ... ▾

View As:



Preview

Script paused

Continue

Cancel

Aa

Edit Layout

- ✓ Can do some, but not all, usual activities, or
- ✓ Current Spirometry test is below 80% but is 60% or higher  
Forced Value = )

- If your child is BETTER,

**Then:** If your child still has symptoms after 24 hours, CALL YOUR CHILD'S DOCTOR and if he/she agrees:

☐ Start:☐ Other

If rescue medication is needed more than **2 times a week**, call your child's doctor at

## RED ZONE (Medical Alert)

- ✓ Breathing is hard and fast (nose opens wide, ribs show), or
- ✓ Quick-relief medications have not helped, or
- ✓ Cannot do usual activities (including trouble talking or walking) or
- ✓ Current Spirometry test is below 60%  
Forced Value = )

## Emergency Treatment

Select Zone

Give these medication(s) AND seek medical help NOW.

**Take:****Then:**

- Wait **15 minutes** and see if the treatment(s) helped
- If your child is GETTING WORSE or is NOT IMPROVING, **go to the hospital or call 9-1-1**
- If your child is BETTER, continue treatments every 4 to 6 hours and call your child's doctor - **say your child is having an asthma attack and needs to be seen TODAY**

**Then:**☐ If your doctor agrees, start:☐ Other:

Plan Developed in Partnership with Patient's Family by (Doctor's Name):

Doctor Number:

Signature:

Date/Time

Dashboard

Found: 1 / 128

<

>

Patient Search

New Patient

Patient Data		Asthma:
Patient:	Burns	
Patient DOB/Age:	4/16/1997	22
Clinic Pt ID/Gender:	X6547B	Male
Barcode:		
Medical Practice:	Veteran Affairs Clinic	106
Patient Zip Code		
Insurance Carrier:	Chosen clinic has no Insurance C	Help
Spirobank ID		
EHR Classification:		
Adult or Pediatric:	Adult	
Provider:	Demo Provider	
Provider's Billing NPI:	141609	
Allergy Tech:	Test Nurse	
Enviro Test DOS:	7/9/2019	
Provider Review Date:	3/2/2020	
Enviro Re-Test DOS:		
Date Enviro Mix DOS:	11/11/2019	
Allergy Shots DOS:	2/10/2020	
Spirometry DOS:		
Adult Food Test DOS:	7/9/2019	
Pedi Food Test DOS:		

Asthma

Environment

Food

Penicillin

Initial ICD-10 & Notes

Asthma Rx

Crash Cart

Asthma Action Plan

Spirometry Chart

Asthma Billing Forms

Asthma Control Test

Environment Test Spiro/FeNo

Asthma Snapshot:  
No ACT score  
FEV1 Pre = 82  
FeNo = 15  
FEV1 Post = 25

TRACK  
5yr & under

Food Test Spiro/FeNo

Provider/Allergist Consultation

FeNo Chart

Injection Spiro/FeNo

Allergy Alerts

FeNo Test

Asthma Follow-up Spiro/FeNo

Patient Forms

At Home Spirometry

English

Español

Patient Notes



Asthma Followup		Patient Search		New Patient	
<p>You can submit spirometry &amp; FeNo scores for a patient here for asthma only or asthma &amp; allergy Followup visits.</p>		Environment		Food	
Timestamp:		Penicillin			
NEW ACT/TRACK		Asthma Rx		Crash Cart	
FEV1 Value - Pre		Spirometry Chart		Asthma Billing Forms	
Scan FeNO QR:	tap-iPad camera-barcode	Environment Test Spiro/FeNo		Asthma Snapshot: No ACT score	
FeNo Test		Food Test Spiro/FeNo		FEV1 Pre = 82	
FEV1 Value - Post		Injection Spiro/FeNo		FeNo = 15	
Does the Asthma Action Plan need to be adjusted?		Asthma Follow-up Spiro/FeNo		FEV1 Post = 25	
Asthma Action Plan		At Home Spirometry		Provider/Allergist Consultation	
Document Copies				Allergy Alerts	
Take picture of PDF and drag or copy into this box.					
This will take you to the Spirometry Graph for Asthma Only events					
<input type="checkbox"/> Nurse Visit Only!					
Clear					

### Patient Notes

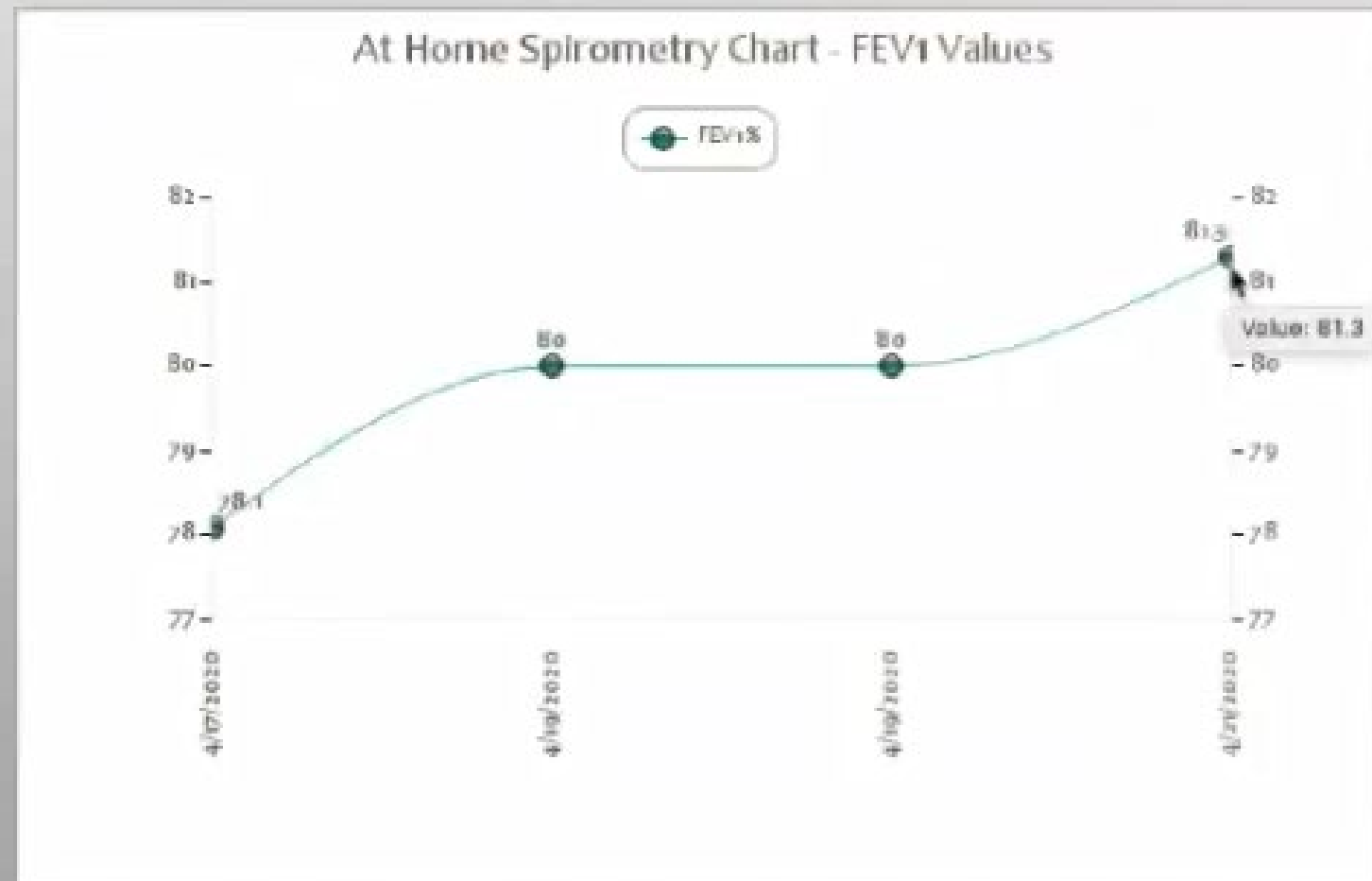
## Penicillin

# At Home Spirometry

	Date	FEV1%	Report
<input type="checkbox"/>	4/21/2020	81.3%	Report
<input type="checkbox"/>	4/19/2020	80.0%	Report
<input type="checkbox"/>	4/19/2020	80.0%	Report
<input checked="" type="checkbox"/>	4/17/2020	78.1%	Report

FEV1/FVC %

FEV1 FVC FEF2575



Date of Last Review:

4/17/2020

Days to wait until next review can be claimed:

3

Refresh

Complete and Bill

Penicillin

Crash Cart

Billing Forms

Asthma Snapshot:

ACT = 18

FEV1 Pre = 75

eNo = 12

FEV1 Post = 80

Provider/Allergist Consultation

Emergency Alerts

Adult Food Test DOS:

Patient



AdvAlgySvs\_Demo (AAS-HQ-Server.local)

158Total (Unsorted)

Layout: POSTInView As: [Table Icon] [List Icon] [Form Icon]Preview

deviceidcZ018827deviceidSM-005-Z018827

xA\_CreatedAccountzephyrx

xA\_CreatedNamezephyrx

xA\_CreatedTimeStamp4/17/2020 10:01:33 AM

xA\_ModifiedAccountnfrank

xA\_ModifiedNameNeal Alan Frank

xA\_ModifiedTimeStamp4/21/2020 9:34:44 AM

xK\_One1

xP\_Spirobank\_IDF938C8BF-D3EA-9049-983B-

fev1\_fvc-774736842

acceptable1

bev0

birthdate2/14/2013

birthGender0

deliveryTimestamp1.5871e+12

deliveryTimestamp\_calc4/17/2020 3:01:31 PM

deliveryTimestampDate4/17/2020

ethnicityCAUCASIAN

fdReviewed

fdSelectForReview

fef25753.39

fet12.2321525

fev13.68

fev1\_lln0

fev1\_predicted0

fev1\_z0

fev1DivFvc\_lln0

fev1DivFvc\_z0

fev64.53

fivc4.22560724

fivcMinusFvc-36791883

flowVolumeCurveeyJwb2ludHMiOlt7lnRpbWVzd

fvc4.75

fvc\_lln0

fvc\_predicted0

fvc\_z0

height144.779999

measurementTimestamp1.5871e+12

measurementTimestamp\_calc4/17/2020 3:01:18 PM

measurementTimestampDate4/17/2020


pef520.2

qualityGoodBlow

repeatable1

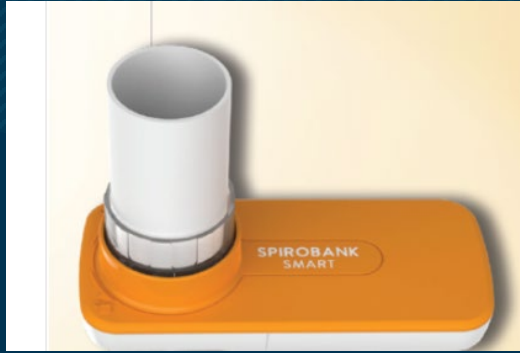
spiroPDFJVBERioxLjQKJdPr6eEKMSAwI

spiroPDFc Copy

  
SM-005-Z018827.pdf

weight50

# Respiratory Wellness Program



Digital Devices Smart watch  
O2 Saturation  
Temperature  
Blood Pressure  
Activity Level  
FENO



- Continual Patient Monitoring – Respiratory Care Management
  - Full Spirometry at home
  - FENO (Fractionated Exhaled Nitric Oxide) Home and Office based
  - Oxygen Saturation
  - Activity Level
  - Blood Pressure
  - Temperature