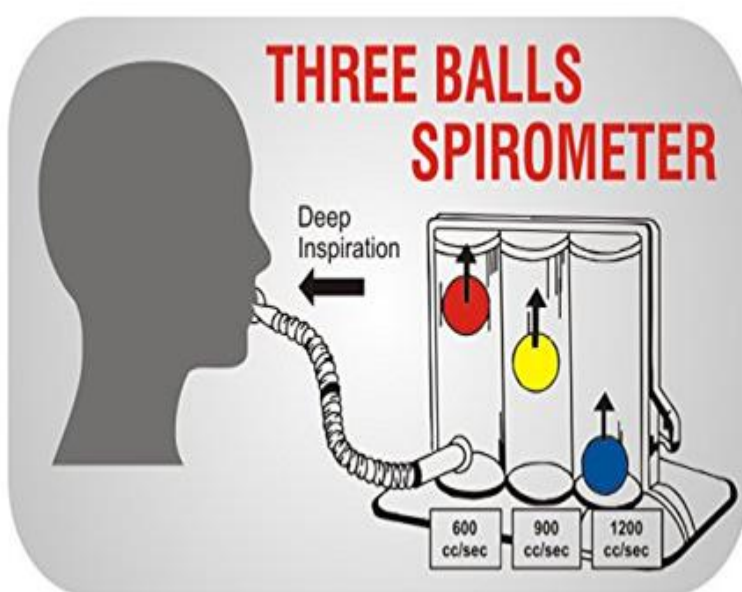


Patient information: Incentive spirometry

This leaflet explains what an Incentive spirometer is, how and when to use it.

What is an Incentive spirometer?

An Incentive spirometer is a medical device that is used to help deep breathing. It is designed to help you take deep breaths to expand your lungs fully. Deep breathing opens up the air sacs in the lungs and helps to reduce the chance of developing an infection or acute chest syndrome.



The Incentive spirometer has three balls of different weights in individual chambers and a tube (a long straw) with a mouthpiece

There are different models available, this is the one used at OUH.

Why is it important to use an Incentive spirometer?

Sickle cell crisis pain and pain medicines such as morphine, can cause shallow breathing. Shallow breathing can put you at risk of developing a chest infection or a chest crisis (acute chest syndrome) because you are not expanding your lungs fully. Using an Incentive spirometer has been shown to reduce this risk.

When should I use an Incentive spirometer?

We suggest you use an Incentive spirometer when crisis pain begins, particularly if the pain is in your chest, back or shoulders. However, any severe pain can cause people to shorten their breaths and breathe more shallowly. Sometimes we may also suggest you use the Incentive spirometer before and after you have had an operation.

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How do I use an Incentive spirometer?

Start by sitting upright and hold the Incentive spirometer upright.

1. Practice slow deep breathing, 3-4 long slow in breaths and out breaths before using the spirometer.
2. Place the mouthpiece of the Incentive spirometer into your mouth. Make sure you make a good seal with your lips.
3. Breathe out (exhale) fully, really trying to empty your lungs.
4. Breathe in (inhale) slowly and deeply. Really try to expand your lungs. The balls in the Incentive spirometer will rise as they take a breath in. You should try to raise all 3 balls.
5. You should hold your breath for 3-5 seconds, to keep the balls elevated then slowly release your breath and exhale through the nose mouthpiece removed.
6. Repeat this routine for 10 breaths– pause between every 3-4 breaths to prevent light headedness.
7. You should use the Incentive spirometer every 2 hours when you are awake.

**Can I use an Incentive spirometer at home?**

Yes, once you have been given an Incentive spirometer please use it when you have crisis pain at home and bring it with you if you are being admitted or reviewed in hospital.

There is a great clip on You tube: to help you remember how to use it. Please type: How to use an Incentive Spirometer, type the link below or scan the QR code.

<https://www.youtube.com/watch?v=5reqyYgT65o>



How do I look after my Incentive spirometer?

Refer to manufacturer's guidance for cleaning.

Clinical teams

Please can you prescribe the use of the incentive spirometer, 2 hourly when awake. Please also support your patient by ensuring they have adequate pain relief and or a pillow to hold tightly across their chest if it is sore whilst they use the Incentive spirometer.

For more information speak to your named nurse or nurse specialist.

References

1. Sickle cell disease in adults: Standards and recommendations for clinical care. 3rd Ed. 2018
2. Incentive Spirometry to Prevent Acute Pulmonary Complications in Sickle cell diseases. Bellett et al, N Engl J Med 1995; 333:699-703

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Incentive spirometry patient recording

Physiotherapist/Doctor/ Specialist nurse incentive spirometry prescription

How many balls should the patient aim to rise?	
Number of deep breaths	
How often	
Prescribed by:	Designation:
Date:	Time:

This table can be filled out by you or your nurse, if you feel too unwell to do it.

Date	Time	10-15 exercises performed	Amount reached

Product: Respirogram, Medinet.