IAF/23/02 - Utilising Routine Data and Digitally-Enabled Care to provide regional identification, triage, and management optimisation for COPD

There are quite a number of reasons why people get Chronic Obstructive Lung Disease (COPD). The number one reason is smoking. You can also be affected from passive smoking. It can also be contracted from breathing in other pollutants that get into the lung and cause damage. An example of this is what people might have done for work, for example mining - being exposed to dust, or been exposed to fibres, chemicals or other substances that get into the lung and cause damage. There can also be a genetic component or damage to the lungs in childhood that means you can be more likely to have a lung problem as an adult, even if you don't smoke.

If damage occurs in the lung people can suffer symptoms such as breathlessness, coughing, producing phlegm or sputum, and wheeze. These symptoms can affect peoples' day to day life and also cause flare ups, or chest infections.

Currently if you have symptoms such as these people can ask their GP for help and advice on what is wrong, and how to treat the symptoms. Once you have been given a diagnosis, there are also a variety of support services who can help patients understand their symptoms such as Pulmonary Rehabilitation, Physiotherapists, Smoking cessation and charity organisations such as Chest Heart and Stroke or the British Lung Foundation.

One important thing is to be diagnosed with the condition quickly, for people to be able to understand how to manage symptoms, to be supported to stop things that make the condition worse such as smoking, and to be offered encouraged to use the best treatments available such as inhalers and other medications.

People sometimes don't access services quickly enough and they wait until their symptoms are quite bad which limits the improvements that can be seen with treatments. If we can use data and digital symptoms to target people at risk to take help more quickly and offer them the best treatments early, we can stop it the condition from getting so bad and encourage people to manage the symptoms well.

The NHS is under a lot of pressure and people have to wait to see a specialist for diagnosis, or have to wait a long time for treatments such as Pulmonary Rehabilitation or smoking cessation.

There is a lot of really good information out there for patients, and supports services but often patients don't know where to find it.

This project aims to solve the problem by:

Creating a dashboard with information gathered from primary and secondary care about patients that we can use to improve the care of those patients by

- Offering patients earlier access to services, including diagnosis
- Identifying at risk patients so that they can be offered specific treatments that will help them manage their disease.

Using digital options to help the sharing of information between patient and clinician which will :

- Ensure timely and accurate sharing of self-management information about their treatment and how to manage their symptoms.
- Help patients to understand their symptoms better and to know more about their condition.
- Improve communication between patient and clinician.

We think as we all get busier, and there are more patients to treat, that it is extremely important to ensure that people get the right treatment at the right time and that we should be using digital and data options available to us to help with that task.