What is our advice to NHSScotland?

Community based respiratory care services, such as CRTs, should be offered to patients with chronic lung conditions where appropriate.

Health and Social Care Partnerships should offer a flexible service within the context of local resources and geography. Services could include supported self-management, home based pulmonary rehabilitation and hospital care at home (including early supported discharge from hospital).

All community respiratory care services should ensure clear, ongoing engagement with patients and their carers throughout their care. This will ensure any concerns about home based care are managed as part of the service.

To inform future service development, CRTs should record data about their patients and services. This should include the lung conditions covered, the number of patients, what services are provided, hospital admission and readmission rates, and patient outcomes such as treatment success and deaths.

What are chronic obstructive pulmonary disease (COPD) and asthma?

COPD and asthma are the most common chronic lung conditions in Scotland.

People with COPD have difficulty breathing because the disease has damaged the airways in their lungs. Symptoms include persistent coughing, mucus production and frequent chest
infections. People with COPD suffer from exacerbations where their symptoms become temporarily worse.

Asthma is caused by inflammation of the airways in the lungs. People with asthma suffer from ‘attacks’ where it is difficult for them to breathe. The severity of these attacks varies from slight wheezing to severe, or occasionally, life threatening breathing difficulties.

What are community respiratory teams?

Community respiratory teams (CRTs) are a type of community service in Scotland that offer people with chronic lung conditions:

- hospital care at home to avoid being admitted to hospital
- early supported discharge from hospital to reduce the length of stay, and
- enhanced supported self-management at home (which can include personalised pulmonary rehabilitation).

Why is this important?

The UK has some of the highest rates of COPD and asthma in the developed world. COPD is more common in Scotland than other nations in the UK. COPD and asthma are linked to considerable ill health, healthcare use and deaths.

What we did

We looked at the published evidence on how effective and safe community respiratory services are for patients with chronic lung conditions. We considered whether CRTs were good value for money.

What we found

The SHTG Council recognised the lack of evidence specific to CRTs and accepted the decision to consider evidence on the components of CRTs to support this recommendation.

There was no evidence that any component of CRT services led to an increase in patient harms or poorer outcomes compared with usual care.

CRTs in Scotland for patients with COPD
One study found that introducing a CRT service in north west Glasgow resulted in approximately 13 fewer people per year being admitted to hospital because of COPD.

**Hospital care at home for patients with COPD**

We found evidence on hospital care at home for two groups of patients:

- those who were experiencing a COPD exacerbation but wanted to avoid going to hospital, and
- those who wanted discharged from hospital early, to continue their care at home.

There was no difference in the rate of hospital readmission or death between patients treated with hospital care at home and patients treated in hospital.

**Supported self-management and pulmonary rehabilitation for patients with COPD**

Supported self-management for patients with COPD who were discharged from hospital resulted in improved quality of life. Enhanced supported self-management (with more intensive support) resulted in additional reductions in hospital admissions among patients with COPD.

Compared with usual care, home based pulmonary rehabilitation led to greater improvements in quality of life and exercise capacity. Comparisons of home based and centre based pulmonary rehabilitation found no differences in quality of life or exercise capacity.

**Supported self-management for patients with asthma**

Supported self-management was associated with improved quality of life, fewer hospital admissions, fewer visits to A&E and fewer unscheduled consultations among patients with asthma. More intense support for self-management resulted in more patient benefits and less healthcare use.

**Patient views and experiences**

The benefits of hospital care at home were described as having access to home comforts, feeling independent, recovering quicker, improved sleep, convenience for visitors and developing relationships with healthcare professionals.

Patients with COPD, asthma or both described self-management support as empowering them through knowledge. They felt that psychological support, person centred care, a collaborative relationship, trust, continuity of carer and easy access to support were important.
Patients with COPD expressed a desire for more information about pulmonary rehabilitation and described perceived barriers to access, such as time and place of classes. There were concerns about the safety of exercise and feeling inferior in a group setting.

**Value for money of CRTs in Scotland**

Based on data about patient quality of life from the Glasgow CRT service and high level cost estimates:

- CRT services are associated with improvements in quality of life.
- Supported self-management may be more expensive and more beneficial than usual care.
- It is likely that early supported discharge from hospital and hospital care at home are cost saving compared with hospital care. Compared with hospital care, these components provide similar patient benefits in terms of quality of life, hospital readmission rates and deaths.

**What SHTG considered when developing advice for NHSScotland**

1. The Council noted there is currently variation in CRT service provision across Scotland. They agreed that they were not recommending that all areas provide all service components.

2. The Council discussed inequalities relating to COPD and asthma. They emphasised the importance of ensuring equal access to CRT services across Scotland. This should include providing services for housebound patients and taking into consideration the social, economic and ethnic characteristics of patients in each area.

**Future work**

We need more evidence about the impact of CRT services in patients with chronic lung conditions.

This plain language summary has been produced based on SHTG Recommendations August 2023