Services for people with chronic obstructive pulmonary disease

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1 Commissioning services for people with chronic obstructive pulmonary disease

Chronic obstructive pulmonary disease (COPD) is characterised by airflow obstruction that is not fully reversible. The airflow obstruction does not change markedly over several months and is usually progressive in the long term. COPD is predominantly caused by smoking although other factors, particularly occupational exposures, may also contribute to its development. Exacerbations often occur, in which there is a rapid and sustained worsening of symptoms beyond normal day-to-day variations.

Around 640,000 people in England have been diagnosed with COPD[^1], and it is estimated that up to a further 1.3 million people may have COPD that has not yet been diagnosed[^1]. Prevalence increases with age (it is rare before the age of 35[^1]). COPD remains one of the most common causes of death in England; in 2009 more than 23,500 deaths were primarily attributable to COPD[^4]. It is the fifth largest cause of emergency hospital admissions; in 2009/10 there were more than 100,000 emergency admissions to hospital in England for exacerbations of COPD[^5]. COPD also accounts for more than 750,000 'bed days' each year in hospitals in England[^6].

1.1 Commissioning for outcomes

Commissioners also should refer to NICE clinical guideline 101, 'chronic obstructive pulmonary disease' (2010) and the NICE quality standard for COPD when commissioning services that contribute to delivering the following objectives from an outcomes strategy for chronic obstructive pulmonary disease (COPD) and asthma in England:

- **Objective 1:** To improve the respiratory health and well-being of all communities and minimise inequalities between communities.

- **Objective 2:** To reduce the number of people who develop COPD by ensuring they are aware of the importance of good lung health and well-being, with risk factors understood, avoided or minimised, and proactively address health inequalities.
Objective 3: To reduce the number of people with COPD who die prematurely, through a proactive approach to early identification, diagnosis and intervention, and proactive care and management at all stages of the disease, with a particular focus on the disadvantaged groups and areas with high prevalence.

Objective 4: To enhance quality of life for people with COPD, across all social groups, with a positive, enabling experience of care and support right through to the end of life.

Objective 5: To ensure that people with COPD, across all social groups, receive safe and effective care that minimises progression, enhances recovery and promotes independence.

Achieving outcomes set out in an outcomes strategy for chronic obstructive pulmonary disease (COPD) and asthma in England will help the NHS to improve against the measures in the NHS Outcomes Framework:

- preventing people from dying prematurely, for which the indicator 'under 75 mortality rate from respiratory disease' will be used
- enhancing the quality of life for people with long-term conditions
- helping people to recover from episodes of ill health or following injury
- ensuring that people have a positive experience of care.

Commissioners will also need to take account of 'No health without mental health: a cross-government mental health outcomes strategy for people of all ages' and 'Transparency in outcomes: a framework for quality in adult social care' when commissioning services for people with COPD.

1.2 Key clinical and quality issues

Key clinical and quality issues in providing effective services for people with COPD include:

- Identification and accurate diagnosis of COPD in people presenting with symptoms and signs of COPD, and confirmation by performing post-bronchodilator spirometry.

- Optimally supporting people with COPD to stop smoking by providing brief interventions at the point of contact, and making appropriate referrals to specialist services.
• Offering pulmonary rehabilitation, including physical training, disease education, and nutritional, psychological and behavioural interventions.

• Providing effective pharmacological treatment, including inhaled and oral therapies and oxygen therapy.

• Early identification and partnership working to meet the supportive and palliative care needs of people with COPD, including managing disabling breathlessness, identifying patients at risk of oxygen poisoning and providing information about non-invasive ventilation and end-of-life care.

• Educating people with COPD, their families and carers about their condition and providing options for supported self management.

• Ensuring that services for people with COPD are integrated with other services to provide a holistic patient-centred approach to care with good communication and multidisciplinary working.

• Ensuring that people with COPD are aware of and have access to relevant services, including psychological therapies, secondary prevention, and voluntary and other community service support.

• Reducing inequalities and providing the best possible outcomes for individual patients, their carers and local communities.

• Providing a quality assured service.


2 An integrated approach to commissioning high-quality integrated care for people with COPD

Commissioning integrated services for people with COPD is part of the wider commissioning strategy for respiratory care and long-term conditions. This guide for commissioners covers services for people with COPD within the NICE pathway for COPD and the areas of care map for the quality standard for COPD.

Commissioners should consider the whole care pathway for respiratory care and long-term conditions when commissioning services for people with COPD. They should consider how services for people with COPD are integrated across health and social care. Commissioners should work with emerging clinical commissioning groups, service-users, health and wellbeing boards, local authorities, primary care, acute and secondary care, community services and social care.

An outcomes strategy for chronic obstructive pulmonary disease (COPD) and asthma in England sets out outcomes for COPD that organisations need to achieve in order to deliver on the Government’s commitment to improve health outcomes and reduce inequalities.

The long-term conditions workstream of the Quality, Innovation, Productivity and Prevention (QIPP) programme advocates a proactive generic management model of care for people with long-term conditions. Commissioners should ensure that people with COPD and their carers have appropriate access to specialist, condition-specific information and support when indicated. Commissioners should ensure joint working across health and social care using the generic long-term conditions model and long-term conditions commissioning pathway. This approach is reflected in the outcomes strategy for chronic obstructive pulmonary disease (COPD) and asthma in England.

The end of life care workstream of the Quality, Innovation, Productivity and Prevention (QIPP) programme focuses on improving systems and practice for identifying people as they approach the end of life and planning their care, particularly for high-risk groups such as those in residential and nursing homes.

Commissioners may wish to work with service providers to carry out baseline assessment and clinical audit using NICE implementation support for NICE clinical guideline 101. This will enable
commissioners to identify where recommendations from NICE clinical guideline 101 have been implemented and highlight areas for improvement.
3 Assessing service levels for people with COPD

3.1 Benchmarks for a standard population

A population benchmark is offered for commissioners to consider when planning services for people with COPD in each of the following areas:

- pulmonary rehabilitation
- assisted discharge schemes
- supportive and palliative care.

Each of the areas and the assumptions used to arrive at the benchmark will be explored.

Available data suggest that the indicative benchmark rate for the number of people with diagnosed COPD is 1.6%, or 1600 per 100,000 population, of those aged 18 years or older per year[7].

However, commissioners should take into account local socioeconomic and demographic factors such as age and the number of people who smoke, which can affect local rates, and recognise that COPD is under-diagnosed in the population.

For the purpose of this commissioning guide, the adult population has been defined as people aged 18 years or older. This is because of the availability of population data at general practice level within certain age bands, and its use within the commissioning and benchmarking tool. Approximately 80% of the population in England is aged 18 years or older.

For a standard population of 100,000, around 80% of the population would be aged 18 years or older. Around 1.6% of this population, or around 1280 people, would be diagnosed with COPD.

For an average practice with a list size of 10,000, around 80% of the population would be aged 18 years or over. Around 1.6% of this population, or around 128 people, would be diagnosed with COPD.

The Healthcare Commission report 'Clearing the air'[8] stated that there are 900,000 people diagnosed with COPD in the UK, and an estimated 2 million people with undiagnosed COPD. If
the number of people with undiagnosed COPD is taken into account, the above figures could be increased by approximately a factor of two.

This service is likely to fall under the programme budgeting category 211A (problems of the respiratory system – obstructive airways disease).

Use the commissioning and benchmarking tool for services for people with COPD to determine the level of service that might be needed locally and to calculate the cost of commissioning the service using the indicative benchmark and/or your own local data.

3.2 Assumptions used in estimating a population benchmark

The assumptions used in estimating a population benchmark for COPD are based on the following sources of information:

- **epidemiological data** on the prevalence and incidence of COPD
- **activity data** to establish hospital activity
- **current practice** where there is an existing example of a COPD care scheme
- **published research** on COPD
- **expert clinical opinion** of the topic-specific advisory group, based on experience in clinical practice and literature review.

The areas of care that will be examined in the population benchmark can be found in the following sections:

- pulmonary rehabilitation – section 3.3
- assisted discharge schemes – section 3.4
- supportive – section 3.5.
3.3 Benchmark for establishing a new pulmonary rehabilitation service

Experience of current practice suggests that the benchmark population rate for uptake of pulmonary rehabilitation when establishing a new service would be 0.41%, or 410 per 100,000 population aged 18 years or older, per year.

However, when planning services, commissioners should take into account local socioeconomic and demographic factors such as age and the number of people who smoke, and recognise that COPD is under-diagnosed in the population.

For a standard population of 100,000, around 80% of the population is aged 18 years or older. The average number of people expected to receive pulmonary rehabilitation annually is likely to be around 330.

For an average practice with a list size of 10,000, around 80% of the population is aged 18 years or older. The average number of people expected to receive pulmonary rehabilitation annually is likely to be around 33.

This service is likely to fall under the programme budgeting category 211A (problems of the respiratory system – obstructive airways disease).

Activity data for establishing a new pulmonary rehabilitation service

When commissioning a new pulmonary rehabilitation service, it is appropriate to use the population prevalence of COPD to determine the levels of service needed. Commissioners may have to plan services over a number of years to cover unmet needs and prioritise initial demand against capacity. This is because there will be a significant number of people with COPD who are eligible for, but who have not previously received, pulmonary rehabilitation.

Quality and outcomes framework (QOF) data for 2009/10[^1] indicate that the national prevalence of diagnosed COPD is 1.6%. The clinical opinion of the topic advisory group is that the proportion of people with diagnosed COPD at Medical Research Council grade 3 or above is approximately 38%. Therefore, around 38% of people with diagnosed COPD would be eligible for pulmonary rehabilitation.
Conclusion for establishing a new pulmonary rehabilitation service

When establishing new pulmonary rehabilitation services consider commissioning services for 0.41% of the adult population aged 18 years or older (410 per 100,000). This is based on:

- 1.6% prevalence of diagnosed COPD, of which
  - 38% are eligible for pulmonary rehabilitation, of which
    ◇ there is an uptake of 67%.

Benchmark for an existing pulmonary rehabilitation service

Experience of current practice suggests that the benchmark population rate for uptake of pulmonary rehabilitation for an existing pulmonary rehabilitation service would be 0.026%, or 26 per 100,000 aged 18 or older, per year. However, when planning services commissioners should take into account local socioeconomic and demographic factors such as age and the number of people who smoke, and recognise that COPD is under-diagnosed in the population.

For a standard population of 100,000, around 80% of the population is aged 18 years or older. The average number of newly diagnosed people expected to receive pulmonary rehabilitation annually is likely to be around 20.

A proportion of the prevalent population would also need pulmonary rehabilitation services.

Activity data for an existing pulmonary rehabilitation service

Where pulmonary rehabilitation services are already established, local incidence and referral rates would be the most appropriate data on which to base commissioning intentions.

Data from the IMS Disease Analyzer, which collects anonymised data from a sample of GP practice systems, shows that new diagnoses of COPD are around 0.1% of the patient population. Of these 38% had Medical Research Council grade 3 or above.

Conclusion for an existing pulmonary rehabilitation service

Clinical experience of existing pulmonary rehabilitation services suggests that the uptake rate in the population eligible for pulmonary rehabilitation is approximately 67%.
For an **existing** pulmonary rehabilitation service consider commissioning for 0.026% of the population aged 18 years or older (26 per 100,000 adults). This is based on:

- 0.1% incidence of new cases of COPD annually, **of which**
  - 38% are eligible for pulmonary rehabilitation, and **of which**
    - there is an uptake of 67%.

### 3.4 Benchmark for assisted discharge schemes

Existing data suggest that the benchmark population rate for eligibility for an assisted-discharge scheme is **0.086%**, or 86 per 100,000 people aged 18 years or older, **per year**. This is based on a mean non-elective admission rate of 258 per 100,000 population for exacerbations of COPD and a 33% uptake rate for assisted discharge.

For a **standard population** of 100,000, around 80% of the population is aged 18 years or older. The average number of COPD patients admitted with an exacerbation and expected to need assisted discharge is likely to be around **69** per year.

For an **average practice** with a list size of 10,000, around 80% of the population is aged 18 years or older; the average number of COPD patients admitted with an exacerbation and expected to need assisted discharge is likely to be around **7** per year.

However, commissioners should take into account the local socioeconomic and demographic factors that may impact on rates of admission, such as age and the number of people who smoke. They should also recognise that COPD is **under-diagnosed** in the population.

#### Hospital episode statistic data on assisted discharge

Data from the Hospital Episode Statistics (HES) database (2009/10) indicate the mean rate of admissions for a COPD exacerbation is 258 per 100,000 population aged 18 years or older.

Published models exist that aim to estimate the number of readmissions for COPD. Successful pulmonary rehabilitation, assisted discharge schemes and supportive and palliative care schemes are likely to reduce non-elective admissions and re-admissions for exacerbations of COPD.
This is examined further in the COPD commissioning and benchmarking tool.

**Current practice assisted discharge schemes**

Published research\(^1\) suggests that between 25 and 35% of patients are eligible for assisted discharge. Research relating to the UK national COPD audit of assisted discharge schemes indicates that 30% of people who are admitted to hospital with an exacerbation of COPD can be safely managed in an assisted-discharge scheme\(^2\).

Expert clinical opinion suggests that approximately one in three (33%) people admitted for a COPD exacerbation may benefit from assisted discharge.

**Conclusions on assisted discharge schemes**

From the information above, we can conclude that:

- the mean non-elective admission rate for COPD exacerbations is 258 per 100,000 population aged 18 years or older, **of which**

- 33% of patients would be eligible for assisted discharge, based on views of the topic-specific advisory group, experience from current practice and information from recent research.

This gives a benchmarking estimate for a population rate for eligibility for an assisted discharge scheme as **0.086**, or 86 per 100,000 aged 18 years or older, **per year**.

**3.5 Supportive and palliative care for patients with COPD**

Available data suggest that the indicative benchmark rate for the number of deaths from COPD is **0.054%**, or 54 per 100,000 population aged 18 years or older, **per year**.

For a **standard population** of 100,000 the average number of people aged 18 or over is approximately **80%** of the population. Of these, the number of people who will die from COPD is **44** per year.

For an **average practice** with a list size of 10,000, the average number of people aged 18 or over is approximately **80%** of the population. Of these, the number who will die from COPD would be **4** per year.
Epidemiological data

The Office for National Statistics (ONS)\(^1\) publishes figures for death registrations by cause in England and Wales. In 2009 more than 23,500 deaths were primarily attributable to COPD (ICD-10 codes J40–J44). This equates to 0.054% of the population of England and Wales aged 18 or older.

Current practice

Because of the limited provision of supportive and palliative care for people with COPD, many patients with COPD will not have access to supportive and palliative care services at the end of their life.

According to the national 2008 COPD audit\(^2\), 44% of primary care organisations have formal arrangements for patients with COPD to receive palliative care.

The 2010 article 'Current and planned palliative care service provision for chronic obstructive pulmonary disease patients in 239 UK hospital units: comparison with the gold standards framework\(^3\)' reported that only 49% of the 239 units that admitted COPD patients had a formal referral pathway for palliative care. Furthermore, only 13% had a policy of initiating end-of-life care discussions with appropriate patients.

Conclusions

Based on the epidemiological data and other information outlined above, there is limited provision of or access to palliative care at the end of life for patients with COPD. This is based on the following assumptions:

- that 0.054% of the population of England and Wales have deaths attributable to COPD
- applied to the adult population of England, there are approximately 22,000 deaths attributable to COPD annually
- fewer than half of acute trusts (49%) and primary care organisations (44%) have formal provision for palliative care for patients with COPD.
3.6 Overall conclusions for benchmark for services for people with COPD

Based on the epidemiological data and other information outlined above:

- when establishing new pulmonary rehabilitation services, consider commissioning services for 0.41% of the general adult population (410 per 100,000 adults)
- for an existing pulmonary rehabilitation service consider commissioning for 0.026% of the general adult population (26 per 100,000 adults)
- eligibility for an assisted discharge scheme is 0.086% (86 per 100,000 adults)
- the annual number of deaths attributable to COPD is 0.054% (54 per 100,000 adults).

The population benchmark for the number of people with diagnosed COPD is 1.6%. It has been estimated that there are twice as many undiagnosed people with COPD.

Commissioners should use their local needs assessment to determine optimum levels for local service provision. Commissioners should note that the benchmark rates do not represent NICE’s view of desirable, or maximum or minimum, service levels.

Commissioners should use this benchmark and local data to facilitate local discussion on optimum service levels. There is considerable variation in the prevalence and identification of COPD. This is influenced by the social, economic and demographic profile of the local population. Therefore commissioners are encouraged to consider local assumptions.

Use the COPD commissioning and benchmarking tool to determine the level of service that might be needed locally and to calculate the cost of commissioning the service.


Services for people with chronic obstructive pulmonary disease


4 Specifying services for people with Chronic Obstructive Pulmonary Disease

This guide focuses on the following areas of care for people with COPD:

Section 4.1 – Pulmonary rehabilitation

Section 4.2 – Assisted discharge

Section 4.3 – Supportive and palliative care

Section 4.4 – Commissioning high-quality care for people with COPD

Section 4.4 considers the implications for commissioning high-quality care across the whole pathway of services for people with COPD. This includes assessment and diagnosis, smoking cessation, oxygen therapy and the management of anxiety and depression.
4.1 Specifying a pulmonary rehabilitation service

Pulmonary rehabilitation is a multidisciplinary programme of care for people with chronic respiratory impairment, individually tailored and designed to optimise each participant's physical and social performance and autonomy. People with COPD make up the largest proportion of those referred to pulmonary rehabilitation. Research has demonstrated that pulmonary rehabilitation:

- reduces dyspnoea and increases exercise tolerance
- improves health-related quality of life
- reduces admissions to hospital
- decreases the high re-admission rate seen in people with COPD[17,18].

The Report of the National Chronic Obstructive Pulmonary Disease Audit 2008, UK primary care organisations: resources and organisation of care indicated that pulmonary rehabilitation programmes were provided in 70% of primary care organisations across the UK. Of these, 83% were funded by a primary care organisation and 11% were jointly funded by a primary care organisation and a local hospital.

Commissioning pulmonary rehabilitation, underpinned by NICE guidance and quality standards, is likely to contribute to achieving outcomes under domains 1, 2, 3 and 4 of the NHS outcomes framework 2011/12 by:

- providing an evidence-based pulmonary rehabilitation programme
- ensuring people with COPD feel supported to manage their own condition through pulmonary rehabilitation
- providing timely pulmonary rehabilitation following discharge from hospital

The key components of an effective pulmonary rehabilitation service are:

- identification and referral (see section 4.1.1)
- improving access, uptake and completion (see section 4.1.2)
• content, frequency and duration (see section 4.1.3).

4.1.1 Identification and referral

Appropriate identification and referral is an important step in managing the flow of people into a rehabilitation service. NICE clinical guideline 101 recommends:

- Pulmonary rehabilitation should be made available to all appropriate people with COPD (see below) including those who have had a recent hospitalisation for an acute exacerbation. [new 2010] (Recommendation 1.2.8.1.)

- Pulmonary rehabilitation should be offered to all patients who consider themselves functionally disabled by COPD (normally Medical Research Council grade 3 and above). Pulmonary rehabilitation is not suitable for patients who are unable to walk, have unstable angina or who have had a recent myocardial infarction. (Recommendation 1.2.8.2.)

Commissioners should ensure that services are implementing NICE recommendations, and if necessary, changing practice to achieve quality statement 6 from the NICE quality standard for COPD:

Quality statement 6: Pulmonary rehabilitation

People with COPD meeting the appropriate criteria are offered an effective, timely and accessible multidisciplinary pulmonary rehabilitation programme.

Pulmonary rehabilitation programmes should be made available for people with COPD in accordance with the NICE clinical guideline 101. Commissioners should work with clinicians in primary and secondary care to develop a process for referral to a rehabilitation scheme, including clear inclusion and exclusion criteria, using the Medical Research Council dyspnoea scale (see table 1). This should also be in accordance with NICE guidance.

Table 1 Medical Research Council dyspnoea scale

<table>
<thead>
<tr>
<th>Grade</th>
<th>Degree of breathlessness related to activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Not troubled by breathlessness except on strenuous exercise</td>
</tr>
<tr>
<td>2</td>
<td>Short of breath when hurrying or walking up a slight hill</td>
</tr>
<tr>
<td></td>
<td>Description</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------------------------------</td>
</tr>
<tr>
<td>3</td>
<td>Walks slower than contemporaries on level ground because of breathlessness, or has to stop for breath when walking at own pace</td>
</tr>
<tr>
<td>4</td>
<td>Stops for breath after walking about 100 metres or after a few minutes on level ground</td>
</tr>
<tr>
<td>5</td>
<td>Too breathless to leave the house, or breathless when dressing or undressing</td>
</tr>
</tbody>
</table>


Commissioners may wish to carry out a **baseline assessment** to ensure that the pulmonary rehabilitation service is working towards achieving statement 6 of the **NICE quality standard for COPD**.

Recommendation 1.2.8.1 (above) is a **new recommendation** in the updated **NICE clinical guideline 101**. Commissioners should ensure that this new recommendation is implemented and that there is sufficient capacity within pulmonary rehabilitation services to meet any increase in demand.

When planning services commissioners may also wish to consider the following:

- Benchmarking current provision of pulmonary rehabilitation, particularly to identify where it is/is not provided for people who have had a recent hospital admission for an acute exacerbation.
- Ensuring there is a proactive approach to identifying people suitable for pulmonary rehabilitation within primary and secondary care.
- Promoting the benefits of pulmonary rehabilitation to clinicians across primary and secondary care and increasing awareness of the criteria for referral among non-respiratory specialists, to ensure that all people for whom pulmonary rehabilitation is appropriate are referred.
- Measuring current practice against a baseline and monitoring the sources of referral to pulmonary rehabilitation in order to target teams that are under-referring.
• How information regarding physical activity is provided to people with COPD who are not sufficiently limited by breathlessness to attend pulmonary rehabilitation (Medical Research Council dyspnoea scale 1 and 2). See also 'behaviour change' public health guidance 6.

4.1.2 Improving access, uptake and completion

NICE clinical guideline 101 recommends:

• For pulmonary rehabilitation programmes to be effective, and to improve concordance, they should be held at times that suit patients, and in buildings that are easy for patients to get to and have good access for people with disabilities. Places should be available within a reasonable time of referral. (Recommendation 1.2.8.3.)

• Patients should be made aware of the benefits of pulmonary rehabilitation and the commitment required to gain these. (Recommendation 1.2.8.5.)

Therefore, commissioners should consider the following when commissioning a pulmonary rehabilitation service:

• The needs of the local population, to enable equity of access. For example providing sessions in an appropriate language and in the appropriate place for the local population.

• Geographical location to enable care closer to participants' homes. For example, commissioners may wish to consider a number of sessions across a locality rather than one central location.

• Specifying the maximum waiting times expected from date of referral to a pulmonary rehabilitation programme.

• Buildings that are both accessible for people with disabilities and suitable for exercise and education sessions.

• Timing of sessions, for example whether evening classes are appropriate.

• Availability of transport to the group, because this may have an impact on uptake and attendance, particularly for people who experience breathlessness at Medical Research Council grade 5 ('too breathless to leave the house, or breathless when dressing or undressing'). This includes the availability and cost of public, community and hospital transport.
• The impact of seasonal changes, for example on hospital admissions for exacerbations of COPD and the potential increase on demand for the service, and the ability of people with COPD to travel to sessions, particularly in cold weather.

• How the benefits of pulmonary rehabilitation are promoted to people with COPD and their carers.

• How people are supported to join and persevere with pulmonary rehabilitation programmes.

• How uptake, retention, completion and outcomes are monitored and recorded. Commissioners should be aware that different definitions are used across the country to define completion of a programme. Commissioners and clinicians should agree local methods of measuring completion rates.

4.1.3 Content, frequency and duration

A multidisciplinary programme of care pulmonary rehabilitation contains a number of interventions or components. NICE clinical guideline 101 recommends:

• Pulmonary rehabilitation programmes should include multicomponent, multidisciplinary interventions, which are tailored to the individual patient's needs. The rehabilitation process should incorporate a programme of physical training, disease education, nutritional, psychological and behavioural intervention. (Recommendation 1.2.8.4)

Therefore, commissioners should ensure that:

• Pulmonary rehabilitation programmes are commissioned to address the components recommended above, and that they include staff of the appropriate professional background with relevant skills and competencies.

• There are sufficient numbers of staff available at rehabilitation sessions of the programme to meet the individual needs of participants.

Commissioners should ensure that a pulmonary rehabilitation programme implements the recommendations relating to smoking cessation and multidisciplinary management (see section 4.4, ‘Commissioning high-quality integrated care for people with COPD’). This should be in addition to the specific recommendations on pulmonary rehabilitation made in section 1.2.8 of NICE clinical guideline 101.
Commissioners should specify that a person's assessment at the start of a pulmonary rehabilitation programme is in line with NICE guidance on the assessment of people with COPD: breathlessness, health status, exercise capacity (for example, 6-minute walk test), smoking status and body mass index.

Referral pathways should be in place so that people with COPD can be referred on to other services in addition to, or as an alternative to, pulmonary rehabilitation. These may include relevant community services such as weight management and smoking cessation services. Weight management services should be available for people who need to gain weight as well as for those who need to lose it. There should also be a clear process for sharing patient information with the multidisciplinary team, including the patient's GP and consultant.

The programme should be of sufficient duration and frequency to enable improvements in exercise tolerance. Therefore, commissioners should consider the number of weeks, number of sessions per week and length of each session offered. There is no conclusive evidence regarding the optimal duration of a pulmonary rehabilitation programme. The consensus of the Guideline Development Group for NICE clinical guideline 101 was that outpatient programmes should contain a minimum of 6 weeks and a maximum of 12 weeks of physical exercise, disease education, and psychological and social interventions.[19]

Commissioners may also wish to consider the following:

- The availability of equipment to enable safe and effective sessions, including basic life support and oxygen, in addition to exercise equipment.
- The mix of staff skills and the ratio of staff-to-participants needed for exercise sessions and for education sessions, including the minimum number of staff needed for safe provision of exercise.
- The advantages and disadvantages locally of offering a rolling programme or set start/cohort programmes, including the staffing levels needed at different stages for each.
- How health outcomes for participants are measured and recorded.
- Measurement of health outcomes in line with the NICE quality standard for COPD and the NHS Outcomes Framework.
Commissioners should specify that pathways are in place to provide and monitor ongoing care for people after completion of a pulmonary rehabilitation programme, including the options available locally for continued access to exercise and support. This may include:

- community-based programmes or support groups
- community exercise and physical activity groups, such as health walks
- weight management services
- 'stop smoking' support.

### 4.1.4 Service models

#### Quality, innovation, productivity and prevention

Commissioners may wish to work with their local Quality, Innovation, Productivity and Prevention (QIPP) lead to develop service models for pulmonary rehabilitation. Examples may include:

- Improved integration of pulmonary rehabilitation programmes with existing services such as stop smoking services, physical activity services and weight management services as part of a wider strategy for self-management and prevention for people with long-term conditions. This may include:
  - earlier identification of people with COPD who are not sufficiently limited by breathlessness to attend pulmonary rehabilitation (Medical Research Council dyspnoea scale 1 and 2) and referral to stop smoking services, exercise-on-referral, and weight management services if appropriate
  - referral to stop smoking services, exercise-on-referral and weight management services for longer term support after completing a pulmonary rehabilitation programme.

#### Commissioning for quality and innovation

Commissioners may wish to consider working with clinicians when using the Commissioning for Quality and Innovation (CQUIN) payment framework as a lever for service change. For example:
• Including a COPD discharge bundle in the London acute regional CQUIN goal pick-list for 2011/12 that includes referral to pulmonary rehabilitation following a hospital admission for an acute exacerbation of COPD.

• CQUIN to personalisation of care planning and self-management among people with long-term conditions included within exemplar CQUIN goals.

Further examples are available from the NHS Institute for Innovation and Improvement.

Case studies

Commissioners may wish to consider commissioning pulmonary rehabilitation in a number of different ways, and mixed models of provision may be appropriate across a local health economy. Commissioners may wish to consider shifting the focus of investment in pulmonary rehabilitation from secondary care services to community and primary care.

General examples include:

• The introduction of pulmonary rehabilitation within primary care in London.

• The development of community based pulmonary rehabilitation in Birmingham as part of a practice-based commissioning initiative.

• A buddy scheme for pulmonary rehabilitation in North East Lincolnshire, where people with COPD who have completed the programme offer peer support, assist with exercise and lead education sessions.

• Provision of pulmonary rehabilitation included within the remit of an integrated COPD service.

Pulmonary rehabilitation services can be delivered in a variety of settings. Traditionally, services are based in secondary care, and the majority of studies on pulmonary rehabilitation have been performed in a hospital outpatient setting[^1]. However, there is growing interest in developing services in community settings, making it easier for people with COPD to attend. Alternatively, a rehabilitation service could be delivered in partnership between primary and secondary care, with the different teams being responsible for specific steps in referral, rehabilitation, and continuing care delivery. The decision about whether to hold groups within the community and/or hospital settings should take into account a range of factors, including those discussed in 4.1.2.
A number of examples can also be found within the good practice in respiratory services section of NHS Improvement: lung.

(Please note – these examples are offered to share good practice and NICE makes no judgment on the compliance of this service with its guidance. Examples from NHS evidence QIPP collection have all been assessed against a set of criteria and then subject to an external peer review process. The best of these are highlighted on the NHS evidence website as 'highly recommended' examples.)


[18] Puhan MA, Gimeno-Santos E, Scharplatz M et al. (2009) Pulmonary rehabilitation following exacerbations of chronic obstructive pulmonary disease. Cochrane Database of Systematic Reviews 1


4.2 Specifying an assisted discharge scheme

Assisted discharge schemes are an important component of care for some people admitted to hospital with an exacerbation of COPD. They facilitate the early discharge of patients admitted with an exacerbation by providing increased medical, nursing and social support in the community. They also identify patients in hospital who could be discharged earlier by providing increased support in their homes[21].

NICE clinical guideline 101 recommends:

- Hospital-at-home and assisted discharge schemes are safe and effective and should be used as an alternative way of caring for patients with exacerbations of COPD who would otherwise need to be admitted or stay in hospital. (Recommendation 1.3.4.1.)

Statement 10 from the NICE quality standard for COPD states:

Quality statement 10: Care in hospital

People admitted to hospital with an exacerbation of COPD are cared for by a respiratory team, and have access to a specialist early supported discharge scheme with appropriate community support.

There is variation in the literature regarding definitions of 'assisted discharge schemes' and 'hospital at home'. Furthermore, different terminology is used – including 'early discharge' and 'early supported discharge'.

Commissioners should be aware that approaches to commissioning and providing in this area of care differ widely across the country in terms of remit, criteria and level of support provided to patients.

The Topic Specific Advisory Group (TAG) agreed that the scope of this section of the guide for commissioners would focus on assisted discharge rather than hospital at home. This is because assisted discharge can be clearly defined as a scheme for anyone who had been admitted to hospital with an exacerbation of COPD and is consistent with statement 10 of the NICE quality standard for COPD. It was also agreed that for the purposes of the benchmark it would be possible to identify the number of people appropriate for an assisted discharge scheme. This is examined further in the commissioning and benchmarking tool.
Although this guide focuses on assisted discharge rather than hospital at home, this does not preclude service models where assisted discharge and hospital at home are provided as a combined service.

Commissioning an assisted discharge scheme that is underpinned by NICE guidance and quality standards is likely to contribute to achieving outcomes under domains 3 and 4 of the NHS outcomes framework 2011/12 by:

- Providing high quality care within a person's own home as an alternative to hospital-based care
- Proving personalised care within a person's own home

The key components of an assisted discharge scheme are:

- identification and assessment (see section 4.2.1)
- safe and effective discharge from hospital to the community (see section 4.2.2)
- community-based intervention and care planning (see section 4.2.3).

### 4.2.1 Identification and assessment

**NICE clinical guideline 101** recommends:

- There are currently insufficient data to make firm recommendations about which patients with an exacerbation are most suitable for hospital-at-home or early discharge. Patient selection should depend on the resources available and absence of factors associated with a worse prognosis, for example, acidosis. (Recommendation 1.3.4.3.)

Commissioners should work with clinicians when planning services and consider the following points specifically for assisted discharge schemes:

- Local needs-assessment to identify local priorities for an assisted discharge scheme, such as admission and readmission rates, emergency department attendances and hospital length of stay for people with COPD.
- Expected outcomes for the service, such as reduced length of stay and bed days.
• Scope existing services and capacity, including both health and social care to determine 
existing level of care and support within the community following hospital discharge.

• The population that the service will or will not be available for, for example people living in 
their own homes, residential homes, care homes with nursing, prisons and the homeless 
population.

• Specific interventions that will be provided by the scheme, and the staffing and equipment 
needed in order to provide this.

• The teams and services that will refer into the scheme, and the infrastructure and resources 
needed to ensure a rapid response to referrals.

Commissioners should work with clinicians to ensure that there is a robust system in place to 
identify patients eligible for the assisted discharge scheme across all sectors within secondary 
care, which may be enabled by the following:

• clear inclusion and exclusion criteria

• a system for promoting the service to secondary care staff.

Commissioners should ensure that patients' preferences about place of treatment are included in 
the assessment process, as recommended in NICE clinical guideline 101:

• Patients' preferences about treatment at home or in hospital should be considered. 
(Recommendation 1.3.4.4.)

Commissioners should expect providers to demonstrate how patients and carers receive 
information about an assisted discharge scheme, including clear written information and web-
based information. This should be available in a range of formats to meet the diverse needs of all 
patients.

Commissioners should be aware that the symptoms experienced by patients during an acute 
exacerbation, particularly breathlessness, can be disabling and frightening for the patient and 
affect a person's:

• preference of where to be cared for while unwell, because some patients may prefer to stay 
in hospital
ability to carry out activities of daily living, because this will influence their choice of place of care, and the level of support needed to enable discharge home.

A comprehensive assessment of the patient should consider their medical, psychological and social needs in order to enable safe discharge from hospital. Commissioners should expect providers to demonstrate that the holistic needs of patients are considered and that assessment is in line with NICE guidance. It is likely that a person would have an existing assessment and care plan in place before admission. Commissioners should expect providers to demonstrate that information is shared to reduce duplication.

**4.2.2 Safe and effective discharge from hospital to the community**

Commissioners should specify within the service contract and ensure that policies and procedures are in place to enable appropriate, safe and timely discharge from hospital to the community.

The service specification for an assisted discharge scheme should consider the following:

- Hours of operation and response times to enable the assisted discharge of patients from hospital, including the appropriateness of out-of-hours services such as community nursing services.

- Commissioning decisions should be based on local needs assessment, existing services and resources.

- How equipment will be provided in a timely manner to support patients and staff in the community, and protocols for ensuring it is in place promptly.

- Options for transportation and settling in at home.

Commissioners should be aware that patients are likely to be experiencing symptoms associated with an acute exacerbation, specifically breathlessness, and may require oxygen therapy. Therefore, the care pathway from hospital to home should ensure that the patient is seen promptly by the staff from the assisted discharge service on returning home.

*Statement 12 from the NICE quality standard for COPD states:*
Quality statement 12: care in hospital

People admitted to hospital with an exacerbation of COPD are reviewed within 2 weeks of discharge.

Commissioners should agree clear local processes for ensuring that people discharged from hospital are reviewed within 2 weeks of discharge from hospital in order to achieve the quality standard.

4.2.3 Community-based intervention and care planning

NICE clinical guideline 101 recommends:

- The multiprofessional team required to operate these schemes should include allied health professionals with experience in managing patients with COPD, and may include nurses, physiotherapists, occupational therapists and generic health workers. (Recommendation 1.3.4.2.)

Commissioners should ensure that the assisted discharge scheme offers a broad range of interventions for people with an exacerbation of COPD. The interventions should be provided by a multidisciplinary professional team.

Commissioners may also wish to liaise with social care commissioners when planning community-based intervention for an assisted discharge scheme. This would help in determining how support is to be provided for daily living activities, if appropriate, while a person is recovering from an exacerbation of COPD and being cared for by the scheme.

Commissioners may wish to consider how best to provide community-based intervention and care planning locally. They may also wish to consider whether to commission a specific service for the discharge of people with COPD from hospital, or whether this could be incorporated in or enhance existing mainstream discharge support services – particularly intermediate care services.

The assisted discharge scheme should take steps to implement relevant recommendations on multidisciplinary management and the management of exacerbations, including pharmacological management and oxygen therapy. This should be in addition to specific recommendations on assisted discharge made in section 1.3.4 of NICE clinical guideline 101.
Therefore, intervention and care provided in the community by the assisted discharge scheme may include:

- nursing care and supervision from respiratory nurse specialists
- respiratory physiotherapy
- occupational therapy
- social worker assessment, for example of acute and ongoing social needs
- assistance with activities of daily living, such as support workers or increased social service input
- additional equipment for use by the team such as nebulisers, compressors, oxygen concentrators and pulse oximetry, as well as equipment to support activities of daily living.

In order to be cost effective, assisted discharge schemes should provide interventions according to individual needs and for a defined time period, rather than being an ongoing service. Therefore, commissioners should ensure that procedures are in place to monitor the patient's health outcomes. They should also plan for discharge from the service in accordance with the relevant recommendations in sections 1.3.10 and 1.3.11 of NICE clinical guideline 101.

Commissioners should ensure that ongoing care and support for the patient is available according to individual need. This should include:

- identifying people at high risk of exacerbations
- access to specialist assessment if needed
- pulmonary rehabilitation following a hospital admission for an acute exacerbation
- evidence-based stop-smoking support and management
- supportive and palliative care.

4.2.4 Service models for assisted discharge schemes

Quality, innovation, productivity and prevention
Commissioners may wish to work with their local Quality, Innovation, Productivity and Prevention (QIPP) lead to develop service models for assisted discharge schemes. Example outputs may include:

- reducing the number of bed days for people with COPD
- increasing referrals to assisted discharge schemes locally.

**Case studies**

Commissioners may wish to consider commissioning assisted discharge schemes in a number of different ways. Existing service models for providing assisted discharge schemes vary widely across the country. They include schemes provided by respiratory specialist teams or recruiting COPD specialists within mainstream teams, such as intermediate care services.

Commissioners may wish to consider how commissioning an assisted discharge scheme will best support the overall needs of people with one or more long term conditions.

There are a variety of models for assisted discharge schemes, including:

- provision of assisted discharge by a specialist COPD service
- provision of assisted discharge by an intermediate care team or service.

In some models patients remain under the care of the hospital consultant and GPs are informed about the assisted discharge service. In other models (the usual model for generic assisted discharge schemes) patients are under the care of their GP. This is standard practice for patients who are in their homes rather than in hospital.

In all service models commissioners should ensure that the overall responsibility for patient care is defined and clinical governance arrangements agreed.

Examples can also be found in the good practice in respiratory services section of NHS Improvement: lung.

(Please note – these examples are offered to share good practice and NICE makes no judgment on the compliance of this service with its guidance. Examples from NHS evidence QIPP collection have all been assessed against a set of criteria and then subject to an external peer review.)
review process. The best of these are highlighted on the NHS evidence website as 'highly recommended' examples.)

4.3 Specifying supportive and palliative care for people with COPD

Commissioning supportive and palliative care for people with COPD, underpinned by NICE guidance, the NICE quality standard for COPD and NICE quality standard for end-of-life care, is likely to contribute to achieving outcomes under domain 4 of the NHS Outcomes framework 2011/12 by:

- improving the experience of care for people at the end of their lives
- enabling people to die in the place of their choice
- developing a skilled workforce in supportive and palliative care.

The needs of people with advanced COPD are very different from those of people who are dying from cancer, including the difficulty of predicting prognosis\(^\text{[22]}\). COPD follows a progressive course causing death from respiratory failure or complications from associated diseases, which include coronary artery disease, lung cancer and stroke\(^\text{[23]}\). The pattern of decline is usually gradual but interspersed with episodes of acute ill health or severe breathlessness for months or years before death. Breathlessness is the main symptom of advanced COPD.

Deaths from respiratory disease: Implications for end of life care in England indicates that chronic lung diseases, which include COPD, account for 5% of all deaths in England. It states that COPD accounts for the majority of chronic lung disease deaths (85%; 67,253 deaths over the 3-year period 2007–9) and that COPD accounts for 48% of all deaths in England between 2007 and 2009. The report recommends that this highlights the need to focus particular attention on the needs of patients with COPD and the need to raise awareness of COPD as a life limiting condition.

The expert opinion of the Topic Advisory Group suggests that many people with COPD do not receive good end-of-life care. This is because it is often difficult to identify the stage at which a person with COPD is likely to die, and therefore difficult to predict when to begin to offer supportive and palliative care.

The End of Life Care strategy recommends a whole system approach to commissioning integrated services across the care pathway (see figure 1).
The NHS outcomes framework 2011/12 includes actions for end-of-life care as follows:

- **4.33** The NHS should continue to ensure implementation of the ‘End of life care strategy – promoting high quality care for all adults at the end of life’, working to offer individuals the choice of where to be cared for as they approach the end of life, and where to die, regardless of their condition. It should ensure that staff are trained for this, including using the e-learning modules available as part of blended learning.

- **4.34** The QIPP End of Life Care workstream is driving the first two steps on the strategy’s end-of-life care pathway – identifying people as they approach the end of life and planning for their care, including asking about their preferences for care. Making that choice a real option requires implementation of the other strands of the strategy – commissioning the care people want, coordinating care across sectors and training the workforce to provide it. In particular, commissioners need to ensure that adequate 24/7 community services are available in their locality.

Commissioners should ensure that they are working towards the NICE quality standard on end-of-life care.
The key components of a care pathway for supportive and palliative care for people with advanced COPD are:

- early recognition, assessment and care planning (see section 4.3.1)
- advance care planning (see section 4.3.2)
- continued intervention (see section 4.3.3)
- coordination of care and access to a full range of services (see section 4.3.4)
- care in the last days of life (4.3.5)
- care and support after death (4.3.6).

### 4.3.1 Early recognition and assessment

**NICE clinical guideline 101** recommends:

- Patients with end-stage COPD and their family and carers should have access to the full range of services offered by multidisciplinary palliative care teams, including admissions to hospices. (Recommendation 1.2.12.10.)

**Statement 13 from the NICE quality standard for COPD states:**

Quality statement 13: Palliative care

**People with advanced COPD, and their carers, are identified and offered palliative care that addresses physical, social and emotional needs.**

To enable early recognition and assessment of the supportive and palliative care needs of people with COPD, commissioners should:

- Work with clinicians to agree the indicators or triggers for advanced COPD, which can be used to identify when a person's supportive and palliative care needs should be assessed (see definitions under statement 13 of the NICE quality standard for COPD for examples).
- Ensure end-of-life care is an integral component of the care plan of people with advanced COPD.
Be satisfied that primary care teams ensure that the palliative care needs of people with advanced COPD are regularly assessed, and that information is communicated within the primary care team. This includes out-of-hours services and other health and social care staff.

Be satisfied that a key worker is identified for people with advanced COPD and that the person, their family and carers know who their key worker is and how to contact them.

Ensure that information regarding long term oxygen therapy (see section 4.4.5), non-invasive ventilation and end-of-life care is made available for people with COPD, their families and carers while they are in a stable state. This is so that decisions regarding future care can be made in advance (for examples see Planning your future care: a guide and the End of Life Care Strategy).

Commissioners should consider the **skills and competencies** needed by health and social care staff to identify and address the supportive and palliative care needs of people with advanced COPD, for example:

- communication skills
- assessment and care planning
- advance care planning
- symptom management.

For further information commissioners may wish to refer to:

- common core competencies and principles for health and social care workers working with adults at the end of life
- a framework of national occupational standards to support common core competencies and principles for health and social care workers working with adults at the end of life
4.3.2 Advance care planning

It is important to offer discussions about advance care planning, which can result in a range of outcomes, such as preferred priorities for care, an advance decision to refuse treatment, and/or appointment of a legal power of attorney.

Advance care planning should be high quality and in line with legislation and best practice, therefore commissioners should:

- expect providers to record the number of patients with COPD who have a care plan in place for supportive and palliative care

- expect providers to demonstrate that care planning addresses the holistic needs of people with advanced COPD, including psychological and social needs and financial help, for example access to benefits and entitlements

- expect providers to demonstrate that a carer's assessment is offered to carers of people with advanced COPD

- specify that providers involved in the care of people with advanced COPD are aware of legislation regarding end-of-life care and follow, in particular, the provisions of the Mental Capacity Act 2005

- ensure that advance care planning includes 'preferred priorities for care' to enable people with COPD to plan their preferred place of death if they choose (see Advance care planning: a guide for health and social care staff)

- be aware that although it is important that people with advanced COPD are supported to make informed decisions and offered the opportunity to discuss their future care, some may chose not to do so and this should be respected

- be satisfied that a key worker is identified for people with advanced COPD and that the person, their family and carers know who their key worker is and how to contact them

- ensure people with advanced COPD are able to discuss and agree decisions regarding future care should they wish – for example, Advanced Decisions to Refuse Treatment (ADRT) and Decisions relating to cardiopulmonary resuscitation – and that the infrastructure is in place to make this information available to relevant services – for example, the ambulance service and out-of-hours services.
4.3.3 Continued intervention

People with advanced COPD should continue to have access to appropriate interventions when nearing the end of life. Pharmacological management (see section 4.4.4), long term oxygen therapy (see section 4.4.5) and non-invasive ventilation should continue in line with the recommendations in NICE clinical guideline 101.

In addition to pharmacological management, commissioners should ensure that people with COPD have access to ongoing non-pharmacological intervention and support, according to individual need, such as:

- psychological support
- physiotherapy, including strategies for coping with breathlessness and maintaining functional abilities
- occupational therapy, for example energy-conservation techniques, equipment and adaptations
- dietitian, including nutritional support
- access to specialist teams when appropriate.

4.3.4 Coordination of care and access to a full range of services

Once assessment and care planning has taken place, services should provide coordinated care for people with advanced COPD. People with advanced COPD may require care from a range of services in a variety of settings, as described in chapter 4 of the 'End of life care strategy'. Therefore commissioners should:

- Ensure that care pathways and services for end-of-life care for people with advanced COPD include access to palliative care teams, respite services, hospices, nursing homes and support to die at home (as appropriate).
• Ensure that health and social care managers integrate working across all agencies involved in the treatment and care of people with advanced COPD. This includes jointly agreeing written policies and procedures (see "Supporting people to live and die well: a framework for social care at the end of life" for information on integrated health and social care at the end of life).

• Ensure that palliative care is well integrated with the chronic disease management provided by primary and community care teams.

• Ensure that palliative care services work jointly with respiratory specialist teams, have access to specialist respiratory clinicians and agree clear local guidance on the role of specialist palliative care for people with advanced COPD.

• Ensure that all staff working with people with COPD at the end of life, including in hospices, are competent in the provision of palliative care for people with COPD, including symptom control and disease-specific needs.

• Expect providers to demonstrate that management of breathlessness for patients with end-stage COPD is in line with NICE clinical guideline 101.

Commissioners should ensure that integrated care coordination and delivery of care is available 24 hours a day, linking all agencies across geographic boundaries. This may include housing associations, care homes, the voluntary sector, and health and social care organisations, ensuring a high standard of care out-of-hours and rapid access to a person's preferred place of death.

Commissioners should assess unmet needs and the impact of supportive and palliative care services on local out-of-hours services, such as community nursing teams.

Commissioners should ensure a high standard of care out of hours. Commissioners should assess unmet needs and assess the impact of the supportive and palliative care services on out-of-hours services locally, such as community nursing.

More information on out-of-hours care is available from the Gold Standards Framework and the Macmillan out-of-hours toolkit available through the Macmillan learn zone (please note, you will need to register to use this toolkit).
End-of-life care for people with COPD is one pathway within a wider commissioning strategy for COPD or long term conditions. Therefore, to improve the quality of end-of-life care for people with COPD, commissioners should ensure that services:

- provide access to earlier diagnosis and better information
- create greater capacity and capability in the workforce
- make care available closer to home.

Commissioners should also ensure that there is an informed and effective workforce in specialist as well as mainstream services. The level of skill and expertise should be proportionate to the level of contact that staff have with people with COPD. Commissioners should ensure that:

- respiratory and primary care clinicians are competent in assessing palliative care needs
- palliative care clinicians are competent in identifying a person's respiratory care needs.

Commissioners should ensure that people with COPD have access to good quality palliative care whether the cause of death is COPD, comorbidity or multiple comorbidities. Health and social care staff in hospitals, nursing homes and hospices should be able to identify when a person needs additional expert care for a comorbidity. A person receiving care and support for COPD should also have access to expert dementia care, cancer and/or cardiac care and pain control if needed.

Commissioners may also wish to refer to:

- NICE clinical guideline 108 on chronic heart failure, particularly relating to end-of-life care (1.5.9)
- NICE commissioning guide on end-of-life care for people with dementia
- 'Improving supportive and palliative care for adults with cancer: the manual' for definitions on supportive and palliative care.
4.3.5 Care in the last days of life

Commissioners should ensure high-quality care is available during the last days of life, and ask providers to demonstrate that they are working towards achieving the NICE quality standard on end-of-life care (expected publication date late 2011) and the End-of-Life Care Strategy.

Commissioners should ensure that care in the last days of life is available 24 hours a day, including rapid access services, integrated delivery of care and care coordination across geographic boundaries. This may include:

- access to medication
- hospices
- care homes
- the voluntary sector
- domiciliary home care
- health and social care organisations, including domiciliary palliative care services
- transport services.

People with advanced COPD should have access to a full range of services that enables them to die in their preferred place of death, if stated. Commissioners should ensure there is a choice of settings available locally as a place of death for people with advanced COPD, including home, hospice and hospital. Care pathways should be in place to enable this to happen, in accordance with the End-of-Life Care Strategy and the Operating Framework for the NHS in England 2011/12. See also the Liverpool Rapid Discharge Pathway.

4.3.6 Care and support after death

Expert opinion suggests that care after death, step 6 of the national end-of-life care pathway, is under-resourced in all clinical areas including COPD.

Commissioners may wish to consider the following:
• ensure services are available to provide support to family and carers after death, for example bereavement support.

• ensure there is access to spiritual care and chaplaincy services.

For further information see the End-of-Life Care Strategy. A number of resources on care after death are also available from the National End of Life Care Programme.

### 4.3.7 Service models

**Quality, innovation, productivity and prevention**

The End of Life Care workstream of the QIPP programme focuses on improving systems and practice for identifying people as they approach the end of life and planning their care. The aims of the workstream include helping clinicians know when and how to start the conversation about end-of-life care and supporting systematic care planning, including advance care planning, for people approaching the end of life.

Commissioners may wish to work with their local Quality, Innovation, Productivity and Prevention (QIPP) lead and develop service models for the supportive and palliative care for people with advanced COPD. Example models are included in table 2.

**Table 2 Delivering QIPP through supportive and palliative care in COPD**

<table>
<thead>
<tr>
<th>QIPP model</th>
<th>Example output</th>
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| Advance care planning | Increased number of people with COPD with an advanced care plan  
                         | Reduced number of inappropriate interventions – for example, cardiopulmonary resuscitation where an Advanced Decisions to Refuse Treatment (ADRT) or Decision relating to cardiopulmonary resuscitation is in place |
| Place of death    | Increased proportion of people dying within their preferred place of death  
                         | Reduction in the number of inappropriate deaths within a hospital setting |
Access to palliative care services 24 hours a day

| Use of recognised tools already developed, such as the Liverpool care pathway for the dying patient | Individualised care |
| Development of a skilled workforce across all services providing end-of-life care | Improved patient, family and carer satisfaction |
| | Increased competency |

Use of recognised tools already developed, such as the Liverpool care pathway for the dying patient

Development of a skilled workforce across all services providing end-of-life care

See NHS evidence: QIPP for further examples.

Commissioning for quality and innovation

Commissioners may wish to consider working with clinicians when using the Commissioning for Quality and Innovation (CQUIN) payment framework as a lever for service change. For example:

- **Death in place of choice: an exemplar CQUIN goal**

- **End of life care CQUIN for Central Manchester University Hospitals Foundation Trust in 2010/11**, which included use of the Liverpool care pathway and recording preferred place of death.

Case studies

Commissioners may wish to consider delivering end-of-life care for people with COPD in a number of different ways. Examples of service models are provided in table 3 below.

Table 3 Examples of service models for the supportive and palliative care of people with COPD
| Primary care and community | North Cumbria Palliative Care: an online palliative care educational and information resource for primary care teams  
End of life core care competencies: use of hospice-based placements to provide teaching, mentorship and support for community nursing staff. |
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>Home</td>
<td>Training and education for domiciliary care staff in end of life care</td>
</tr>
</tbody>
</table>
| Hospices | Hospice-based respite and day services for people with supportive and palliative care needs  
Respite day care facilities in North Northamptonshire, South Leicestershire and Rutland  
End-of-life core care competencies: community hospital project |
| All | Improvement of supportive and palliative care services for heart failure and COPD |

A number of examples can also be found at National End of Life Care Programme and NHS Improvement lung.

(Please note – these examples are offered to share good practice and NICE makes no judgment on the compliance of this service with its guidance. Examples from NHS evidence QIPP collection have all been assessed against a set of criteria and then subject to an external peer review process. The best of these are highlighted on the NHS evidence website as 'highly recommended' examples.)

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4.4 Commissioning high-quality integrated care for people with COPD

High-quality care for people with COPD should be commissioned to achieve the quality standard for COPD, as set out in figure 2 below.

Commissioners should consider the whole care pathway for long term conditions when commissioning services for people with COPD. They should also consider how services for people with COPD are integrated. The long term conditions workstream of the Quality, Innovation, Productivity and Prevention (QIPP) programme advocates a proactive generic management model of care for people with COPD and other long-term conditions. Commissioners should ensure that people and their carers have appropriate access to specialist, condition-specific support when indicated.

The long term conditions workstream aims to improve clinical outcomes and experience for patients with long-term conditions, and to maximise the use of resources. In doing so the
workstream aims to reduce unscheduled hospital admissions by 20%, reduce length of stay by 25% and maximise the number of patients controlling their own disease through systematic knowledge transfer and care planning. The workstream is currently engaged with 60% of all health economies, which are all working towards delivering a long term conditions commissioning pathway that will achieve these results. This commissioning pathway focuses on three key drivers:

- Commissioners understanding the needs of their population and managing those at risk to prevent disease progression.
- Empowering patients to maximise self-management, including ensuring that patients have a care plan and appropriate information and knowledge about how to manage their condition.
- Providing joined up and personal services particularly in community and primary care, and working closely and effectively.

The importance of this approach for people with COPD is reflected in an outcomes strategy for chronic obstructive pulmonary disease (COPD) and asthma in England.

Commissioning high quality care for people with COPD, underpinned by NICE guidance and NICE quality standards, is likely to contribute to achieving outcomes under domains 1, 2, 3 and 4 of NHS Outcomes framework 2011/12 by:

- providing accurate and timely diagnosis of COPD
- providing annual comprehensive assessment of people with COPD
- ensuring people feel supported to manage their conditions through personalised care planning and strategies for promoting self management
- sharing a person's management plans with their GP in a timely manner following an admission to hospital
- providing smoking cessation support in line with NICE guidance
- prescribing oral and inhaled therapies in line with NICE guidance
- providing specialist assessment and review for long-term oxygen therapy
- supporting people with anxiety and depression in line with NICE guidance
Commissioners may wish to work with service providers to carry out baseline assessment and clinical audit using NICE implementation support for NICE clinical guideline 101 and NICE clinical guideline 91, ‘Depression with a chronic physical health problem’. This will enable commissioners to identify where recommendations from NICE clinical guideline 101 have been implemented and highlight areas for improvement. Implementing the NICE recommendations that underpin the quality standard will enable commissioners to ensure that services are taking steps to meet the NICE quality standard on COPD.

### 4.4.1 Assessment and diagnosis

Commissioners should expect providers to demonstrate that COPD is assessed and diagnosed in accordance with NICE guidance, including the use of post-bronchodilator spirometry. They should also expect providers to be working to achieve quality statement 1 of the NICE quality standard for COPD:

**Quality statement 1: Diagnosis**

**People with COPD have one or more indicative symptoms recorded, and have the diagnosis confirmed by post-bronchodilator spirometry carried out on calibrated equipment by healthcare professionals competent in its performance and interpretation.**

Commissioners should work with clinicians to ensure that practice in the diagnosis of COPD is in line with NICE clinical guideline 101. This should be implemented across all areas of care, including primary care, and may include educating and promoting awareness among GPs.

Commissioners should expect providers to demonstrate that healthcare professionals carrying out post-bronchodilator spirometry are competent in its performance and interpretation and have received adequate training, for example quality-assured training on spirometry.

Commissioners should be aware that COPD is currently under diagnosed and they may wish to consider strategies to address local variation in the number of people diagnosed with COPD in the local population against the Association of Public Health Observatories models of prevalence for GP practice, PCT or local authority. Commissioners should also refer to an outcomes strategy for chronic obstructive pulmonary disease (COPD) and asthma in England for more information. When addressing the needs of the local population, commissioners should be mindful of the fact that COPD is a term that is not fully understood by the public.
Commissioners should also expect providers to demonstrate they are working towards achieving quality statement 4 of the quality standard for COPD. This recommends providing annual comprehensive clinical and psychosocial assessment for people with COPD:

**Quality statement 4: Annual comprehensive assessment**

People with COPD have comprehensive clinical and psychosocial assessment, at least once a year or more frequently if indicated, which includes degree of breathlessness, frequency of exacerbations, validated measures of health status and prognosis, presence of hypoxaemia and comorbidities.

Annual assessment should be provided as part of an integrated care pathway. Mixed models of provision may be appropriate, including assessment in primary care, assessment by a community COPD service or assessment by community matrons. Commissioners may wish to estimate needs and ensure there is capacity within services. They may also wish to ensure that there are sufficient trained and competent clinicians.

Commissioners may consider how:

- information on assessment, diagnosis and annual review is currently recorded within primary care
- this could be improved locally in terms of content and accuracy
- this information may be used to plan and improve local service provision for people with COPD.

### 4.4.2 Care planning and self management

The NICE quality standard on COPD includes two quality statements that relate to this area of care for people who have COPD:

**Quality statement 2: Management planning**

People with COPD have a current individualised comprehensive management plan, which includes high quality information and educational material about the condition and its management, relevant to the stage of disease.
Quality statement 7: Management of exacerbations

People who have had an exacerbation of COPD are provided with individualised written advice on early recognition of future exacerbations, management strategies (including appropriate provision of antibiotics and corticosteroids for self treatment at home) and a named contact.

Therefore, commissioners should:

- expect providers to demonstrate that people with COPD have an individualised comprehensive management plan
- ensure that information is available in a format to suit the diverse needs of the population
- expect providers to demonstrate that people with COPD are offered strategies for supported self-management, particularly relating to future exacerbations of COPD.

Commissioners should expect providers to demonstrate that management plans and care plans are based around a patient's personal goals, and include a holistic assessment of their needs, and the agreed interventions to achieve the patient's goals, with a disease-specific management plan forming part of this. Commissioners may wish to refer to the Department of Health’s information leaflet for professionals on personalised care planning.

Commissioners should expect providers to demonstrate that policies and procedures support the prevention of future exacerbations and that these include:

- protocols for providing antibiotics and corticosteroids for self-treatment at home
- identifying a person's named contact, including arrangements for a designated contact out-of-hours, and how this integrates with arrangements for care coordination, where relevant
- processes for monitoring and audit.

Commissioners may also wish to consider the availability locally of IT infrastructure that supports the sharing of management plans across organisations, with a person's consent. They may also wish to consider how a person's management plan is kept 'live' and up-to-date.
Commissioners should consider how comprehensive management plans and self-management for people with COPD are integrated with existing services that support and educate people regarding self-care and self-management – for example, personalised care planning, the Expert Patients programme and the use of telehealth and assistive technology.

Care planning and self-management are key elements of the generic long term conditions model and long term conditions workstream of the QIPP programme. See the Department of Health's web page on long term conditions, including the E's of self management for more information.

### 4.4.3 Smoking cessation support

Supporting people with COPD to stop smoking is one of the single most important interventions for people with COPD. Stopping smoking slows the rate of decline in FEV$_1$ (forced expiratory volume in 1 second) with consequent benefits in terms of progression of symptoms and survival$^{[25]}$. NICE clinical guideline 101 recommends that:

- An up-to-date smoking history, including pack years smoked (number of cigarettes smoked per day, divided by 20, multiplied by the number of years smoked) should be documented for everyone with COPD. (Recommendation 1.2.1.1.)

- All COPD patients still smoking, regardless of age, should be encouraged to stop, and offered help at every opportunity. (Recommendation 1.2.1.2.)

**Statement 5 of the NICE quality standard for COPD states:**

**Quality statement 5: Smoking cessation support**

People with COPD who smoke are regularly encouraged to stop and offered the full range of evidence-based smoking cessation support.

Therefore, commissioners should ensure that stop-smoking services are integrated with services for people with COPD. They should also ensure that people with COPD are offered advice and support in line with:

- NICE clinical guideline 101
Commissioners may wish to use levers or incentives such as Commissioning for Quality and Innovation (CQUIN) for stop-smoking interventions – for example a stop smoking CQUIN to incentivise stop smoking support for people admitted to hospital.

Commissioners should also ensure that clinicians are trained and competent to deliver brief interventions to patients requiring smoking cessation across the pathway. Commissioners should refer to NICE public health guidance 6 on behaviour change at population and community levels. See also NICE pathway on smoking.

### 4.4.4 Oral and inhaled therapies

Commissioners should expect providers to demonstrate that the prescribing of oral and inhaled therapies is in line with NICE clinical guideline 101. Commissioners may need to consider how service models and referral pathways facilitate optimal use of inhaled and oral therapies, underpinned by the appropriate skills and competencies. Commissioners and providers can use the NICE clinical guideline101 costing report and costing template to estimate local costs for prescribing inhaled therapies for people with COPD.

### 4.4.5 Oxygen therapy

The NICE quality standard for COPD includes two quality statements that relate to long term oxygen therapy:

Quality statement 8: Initial assessment for long term oxygen therapy
People with COPD potentially requiring long term oxygen therapy are assessed in accordance with NICE guidance by a specialist oxygen service.

Quality statement 9: Review of long term oxygen therapy

People with COPD receiving long term oxygen therapy are reviewed in accordance with NICE, at least annually, by a specialist oxygen service as part of the integrated clinical management of their COPD.

The national COPD audit 2008 resources and organisation of care in acute units across the UK indicates that 76% of acute units had a hospital-based long term oxygen therapy assessment service. The report identified a number of areas needing improvement, including follow-up arrangements for patients' prescribed home oxygen, and regular audit of oxygen prescribing. This report indicates variation in practice in terms of the prescription, provision and review of a person's use of long term oxygen therapy. Long term oxygen therapy may therefore be an area for increased efficiency and potential cost savings, through improved prescription, procedures and procurement. See 'Home oxygen service – assessment and review: good practice guide' for further information on cost benefit analysis.

Commissioners should ensure that home oxygen services provide long-term oxygen therapy in line with NICE guidance and that home oxygen services are working towards achieving statements 8 and 9 of the NICE quality standard for COPD. Procedures should be in place to ensure that patients suitable for home oxygen therapy are assessed and reviewed at least annually. Commissioners should also refer to 'Home oxygen service – assessment and review: good practice guide' for further information on the commissioning of home oxygen services.

Commissioners may wish to explore a range of service models for the provision of a specialist home oxygen service to determine the most suitable model for their local area. Further clinical guidance and procurement information are available from the NHS 'Home oxygen service manual'.

Commissioners should be aware that a person's need for long term oxygen therapy is a clinical indicator of advanced disease (see the Gold Standards Framework'Prognostic indicators guide' for more information). Therefore, it is important that clinicians working in a specialist oxygen service have the necessary skills and competencies in this area of care, and are aware of supportive and palliative care services in their area.
4.4.6 Anxiety and depression

COPD leads to disabling and distressing symptoms. Patients often become socially isolated and have to give up activities that they enjoy. These factors may lead to the development of anxiety and depression.[26]

NICE clinical guideline 101 recommends that:

- Healthcare professionals should be alert to the presence of depression in patients with COPD. The presence of anxiety and depression should be considered in patients:
  - who are hypoxic
  - who have severe dyspnoea
  - who have been seen at or admitted to a hospital with an exacerbation of COPD. (Recommendation 1.2.12.5)

The NICE quality standard for depression in adults includes a number of quality statements relating to the assessment of depression and provision of psychological therapy for people with a chronic physical health problem.

Commissioners should specify that clinicians working with people with COPD are able to address the psychological needs of people with COPD in line with:

- 'Chronic obstructive pulmonary disease' NICE clinical guideline 101 (2010)
- 'Depression with a chronic physical health problems' NICE clinical guideline 91 (2009)
- 'Anxiety' NICE clinical guideline 113 (2011)
- NICE quality standard for depression in adults
- An outcomes strategy for chronic obstructive pulmonary disease (COPD) and asthma in England
- No health without mental health: a cross-government mental health outcomes strategy for people of all ages.
Assessment and intervention for anxiety and depression should form part of the care planning process for a person with COPD. Holistic assessment and psychological therapies should be available to support patient goals, should be in line with the NICE guidance above and should be integrated with other aspects of a person’s care.

Commissioners may also wish to consider the procedures to recognise the signs and symptoms of depression in people with COPD, routine screening for anxiety and depression and clear referral pathways for psychological interventions (see the NICE guide for commissioners on common mental health disorder services and the NICE cost impact and commissioning assessment for the quality standard on depression for further information).

### 4.4.7 Multidisciplinary care

**NICE clinical guideline 101** recommends that care for people with COPD should be delivered by a multidisciplinary team. Commissioners should ensure that all members of staff working with people who have COPD have the relevant training and competencies to provide high-quality care. Some training and competencies may relate to specific areas of care, such as spirometry and provision of exercise for people with COPD, whereas others may apply across the care pathway, such as behaviour change and motivational interview.

### 4.4.8 Service models

**Quality, innovation, productivity and prevention**

Commissioners may wish to work with their local Quality, Innovation, Productivity and Prevention (QIPP) lead and develop an integrated care pathway for people with COPD. Example models are included in table 4.

**See also** Improving Quality and Productivity in the treatment of COPD.

Table 4 Delivering QIPP through integrated care for people with COPD

<table>
<thead>
<tr>
<th>QIPP model</th>
<th>Example output</th>
</tr>
</thead>
</table>

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<table>
<thead>
<tr>
<th>Service Description</th>
<th>Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regular multidisciplinary team discussion of patients</td>
<td>Review of people with COPD, including outcomes, current care plan and possible improvements and potential discharge/referrals. Improved relationship between team members. Use of online video conferencing for weekly multidisciplinary team meetings to reduce travel time and costs.</td>
</tr>
<tr>
<td>Use of NHSnet email accounts to support confidential sharing of information across organisations</td>
<td>Better coordinated care across services. Reduced duplication and unnecessary service provision due to lack of information.</td>
</tr>
<tr>
<td>Shared electronic records</td>
<td>Better coordinated care across services. Reduced duplication and unnecessary service provision due to lack of information.</td>
</tr>
<tr>
<td>Personalised care plans for long-term conditions</td>
<td>Increased proportion of people with COPD with a personalised care plan in place. Interventions and actions set around a person's own goals and objectives to support patient self-management and achieve desired clinical outcomes. Example: Personalised care plans for people with long term conditions</td>
</tr>
<tr>
<td>Self care support for long-term conditions</td>
<td>Reduce reliance on care services. Increase confidence and capability of individuals to manage their conditions and improve quality of life. Example: Self-care support for people with long term conditions: providing patients with long term conditions with better information about their disease, choices for treatment, care pathways, and promoting self-care are all hallmarks of high-quality care.</td>
</tr>
<tr>
<td>Smoking cessation</td>
<td>Collection of smoking status part of every specialist respiratory consultation and recorded in a person's records. Increased staff trained across the care pathway to help people change their behaviour (behaviour change) and provide brief interventions.</td>
</tr>
</tbody>
</table>
Oxygen services

| Improved efficiency in oxygen prescribing |
| Example: Using a QIPP approach to improve specialist oxygen review and prescription services: savings were made through avoiding initiating or withdrawal of inappropriate therapy, and by identifying inaccuracies in the primary care trust database. |

See NHS evidence: QIPP for further examples and also IMPRESS 'More for Less'.

Commissioning for quality and innovation

Commissioners may wish to consider working with clinicians when using the Commissioning for Quality and Innovation (CQUIN) payment framework as a lever for service change. For example commissioners may wish to consider using CQUIN schemes for smoking cessation referral targets for people admitted to hospital. There are also two CQUIN goals relating to long-term conditions included within exemplar CQUIN goals.

Case studies

Commissioners may wish to consider delivering an integrated care pathway for people with COPD in a number of different ways. Mixed models of provision may be appropriate across a local health economy.

General examples include:

- To challenge the theoretical construct in COPD management through a practice-based approach

- Community-based teams for the management of COPD developed in Leeds and Carmarthenshire. These teams use guideline-based systematic management to reduce unwarranted variation in care as well as improving clinical effectiveness and patient experience. Emergency admissions for COPD were reduced by 36% in Carmarthenshire.

- Improving COPD care in line with NICE recommendations across primary care in Wearside. A bespoke educational programme was deployed as a part of evidence based care pathway ensuring patients received optimal treatment in most appropriate setting.
- Hospital based smoking cessation practice including pre-operative assessment to ensure hospital patients were routinely offered advice and support regarding smoking cessation

- Healthy Outlook COPD forecast alert service.

A number of examples can also be found on the commissioning for long term conditions website and on the long-term conditions commissioning pathway on NHS networks and the good practice in respiratory services section of NHS Improvement: lung.

(Please note – these examples are offered to share good practice and NICE makes no judgment on the compliance of this service with its guidance. Examples from NHS evidence QIPP collection have all been assessed against a set of criteria and then subject to an external peer review process. The best of these are highlighted on the NHS evidence website as 'highly recommended' examples.)


5 Service specification for COPD services

In order to meet local needs, commissioners should collaborate with clinicians, local stakeholders, and service users when determining what is needed from services for people with COPD. The care pathway should be person/patient-centred and integrated with other elements of care for people/patients with COPD.

Commissioners may wish to consider commissioning services for people with COPD in a number of different ways, and mixed models of provision are likely to be appropriate within a local area. Commissioners may wish to take action to stimulate the local market if there are identified shortages of providers at any point in the pathway and should note that any qualified providers may include health, local authority, and other statutory partners, private or third sectors.

Commissioners must ensure that providers implement the recommendations stipulated in NICE guidance and that providers are taking steps to achieve the standards set out in NICE quality standard for COPD.

Commissioners should ensure the services they commission represent value for money and offer the best possible outcomes for their service users. Commissioners should refer to the NICE quality standard for COPD when commissioning services and should include quality statements and measures in the service specification element of the standard contract where appropriate. If poor performance is identified, commissioners can discuss the level of performance with their providers and address any issues and concerns before introducing more formal contractual remedies.

Commissioners may choose to use quality standards to ensure that high-quality care is being commissioned through the contracting process, to establish key performance indicators as part of a tendering process and/or to incentivise provider performance by using the indicators in association with incentive payments such as Commissioning for Quality and Innovation (CQUIN).

Commissioners should ensure that they consider both the clinical and cost effectiveness of the service, and any related services, and take into account clinicians’ and patients’ views and those of other stakeholders when making commissioning decisions.

Table 5 includes considerations for commissioners when developing a contract specification for COPD services.
Table 5 Considerations for contract specification

<table>
<thead>
<tr>
<th>Heading</th>
<th>Section</th>
<th>To be described in service specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy context</td>
<td></td>
<td>National policy drivers for COPD, long term conditions and end-of-life care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evidence base, for example NICE guidance and quality standards, NHS evidence and national strategy consultation</td>
</tr>
<tr>
<td>Purpose</td>
<td>Local strategic context</td>
<td>Local commissioning drivers (for example reducing hospital admissions and length of stay, QIPP, CQUIN)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Invest to save.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Results of joint strategic needs assessment (JSNA)</td>
</tr>
<tr>
<td>Aims and objectives of service</td>
<td></td>
<td>The expected outcomes of the service(s)</td>
</tr>
<tr>
<td>Service scope</td>
<td>Define service user groups</td>
<td>Demographic profile of the local population (age, gender, ethnicity, socio-economic status)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Local recorded and expected prevalence of COPD and smoking</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Estimated prevalence of comorbidities (for example, hypertension, stroke, heart failure, depression)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Evidence of inequalities in outcomes between specific groups</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of wholly attributable and partially attributable COPD-related hospital admissions, bed days and readmissions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of people currently being treated in community-based COPD services and other relevant services, such as stop-smoking services</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Number of people who see their GP and have a recorded incidence of respiratory related ill health</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Population groups that will be targeted for brief interventions such as smoking cessation support</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Population groups that will be targeted for pulmonary rehabilitation and assisted discharge schemes</td>
</tr>
<tr>
<td>Service delivery</td>
<td>Exclusion criteria</td>
<td>Define exclusion criteria for assisted discharge and pulmonary rehabilitation in accordance with NICE guidance and locally determined criteria</td>
</tr>
<tr>
<td>------------------</td>
<td>--------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
</tbody>
</table>
|                  | Geographical population | Proportion of people living in urban and/or rural areas  
Areas of higher than average need for example, areas of deprivation and areas with a high population of older people  
Population coverage required or geographical boundaries |
|                  | Service description / care package | Mapping existing services for people with COPD.  
Commissioning of core service components (case finding and spirometry, brief advice and interventions such as stop-smoking, assessment, home oxygen, pulmonary rehabilitation, structured discharge planning, care coordination and/or case management, aftercare, prescribing, end-of-life care)  
Interface with other local services including social care, residential and nursing care, hospices, intermediate care services, ambulance service, out-of-hours services, and community mental health services |
|                  | Location | Service location, defining accessibility requirements and discreet location(s)  
Integration with other services for people with COPD and long-term conditions  
Home-based, locality-based services and centrally based services |
|                  | Days/hours | Expected hours of operation, including days, evenings and weekends  
Expected number of patients for case finding, assessment, treatment, care coordination or case management, aftercare, end-of-life care, taking into account potential increased flow through the system over defined periods |
|                  | Referral processes | Referral criteria and processes for people with COPD  
Management of 'unable to attends' (UTAs) and 'did not attends' (DNAs) |
<table>
<thead>
<tr>
<th>Response times</th>
<th>This should be needs-based and outcomes-based. Setting specific times, particularly for assisted discharge and rapid response services for end-of-life care.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Care pathways</td>
<td>Agreed clinical protocols or guidelines to support decision making in the patient pathway Pathways for people with complex needs and comorbidities Use of third sector Care coordination</td>
</tr>
<tr>
<td>Discharge Processes</td>
<td>Process for discharge from services for people with COPD, including aftercare and communication with other teams</td>
</tr>
<tr>
<td>Staffing</td>
<td>Profile of existing health and social care workforce Staffing levels to be funded: minimum band or levels or level of experience and competency and expected skill mix Skill mix and competencies of staff for specific areas of care – for example, spirometry, pulmonary rehabilitation and assisted discharge</td>
</tr>
<tr>
<td>Information sharing</td>
<td>Define information sharing, confidentiality and audit requirements, including IT support and infrastructure Raising awareness of services for people with COPD. Do patients and health and social care professionals know how to access services?</td>
</tr>
<tr>
<td>Quality assurance and clinical governance</td>
<td>Processes to understand patient experience of COPD services in order to develop and monitor services Expectations of how patient opinion, preference and experience will be used to inform service delivery – for example, focus groups, representation on working groups, and surveys Monitoring of complaints and compliments and how used to inform service</td>
</tr>
</tbody>
</table>
### Quality indicators

- Use [NICE quality standards](https://www.nice.org.uk/qualitystandards) to define high-quality care
- Patient satisfaction surveys on COPD services and access to treatment
- Define outcomes and (proxy) measures including outcomes provided within the quality standard on COPD

### Performance monitoring

- Local need and demand for treatment, including brief interventions
- Impact of service(s) on admissions to A&E, inpatient hospital care and length of stay in hospital
- Measurement of referrals, starters and completers for pulmonary rehabilitation (to be determined locally using best evidence as national guidance not available)

### Equality

- Measures to ensure equality of access to services, taking into account the risks of unintentional discrimination against groups who are often under-represented, such as people who do not speak English as a first language
- Consider equity of access for people living within residential and nursing homes and those who are housebound, or people in prisons

### Staff training and competency

- Training and competencies on recruitment and for ongoing development
- Processes for monitoring clinical practice and competency, including professional registration and clinical supervision arrangements
- Skills mix and competencies required across the care pathway, including competencies in: assessment, behavioural change and motivational interview, personalised care planning, provision of exercise and identifying palliative care needs. See [Skills for health](https://www.skillsforhealth.org.uk) for examples, including a [respiratory disease competence framework](https://www.skillsforhealth.org.uk/competence_frameworks)
- Staff development – appraisal and personal development plans, and mandatory training
| Audit | Specify expectations for audit, which may include assessment, intervention, prescribing practices and successful treatment outcomes. See [audit support for NICE clinical guideline 101 on COPD](#), [audit criteria for NICE public health guidance 1 on brief interventions and referral for smoking cessation](#), [NICE audit support for smoking cessation services](#), [NICE audit support for 91 on depression with a chronic physical health problem](#) and the [Royal College of Physicians national COPD audit](#). |
| Staff and patient safety | Procedures for risk assessment  
Formal procedures for incident reporting and monitoring.  
Address any safeguarding concerns and promote the welfare of children and vulnerable adults |
| Activity Plan | Long term impact of increased access to pulmonary rehabilitation on referrals to other services, hospital admissions and bed days  
Long term impact of improved diagnosis of COPD on referrals to other services and hospital admissions  
Planned service development setting out any productivity improvements |
| Cost | Likely cost of new or additional services  
Anticipated set-up costs  
How will pricing be set?  
Potential for better value for money  
Are patients receiving the most appropriate services for COPD?  
Cost of facilities, for example venue hire for pulmonary rehabilitation  
Cost of staff travel to services and patients' homes.  
QIPP  
See the [Commissioning and benchmarking tool](#) for further information |
6 The commissioning and benchmarking tool

Download the services for people with COPD commissioning and benchmarking tool

Use the commissioning and benchmarking tool for 'Services for people with COPD' to determine the level of service that might be needed locally and to calculate the cost of commissioning the service, as described below.

6.1 Identify indicative local service requirements

There are four indicative benchmark rates used in the tool:

- For establishing a new pulmonary rehabilitation service, the indicative benchmark is 0.41% or 410 per 100,000 population aged 18 years or older per year.
- For an existing pulmonary rehabilitation service, the indicative benchmark is 0.026% or 26 per 100,000 population aged 18 years or older per year.
- For establishing eligibility for an assisted discharge scheme, the indicative benchmark is 0.086% or 86 per 100,000 population aged 18 years or older per year.
- For the annual number of deaths attributable to COPD, the indicative benchmark is 0.054% or 54 per 100,000 population aged 18 years or older per year.

The commissioning and benchmarking tool helps you to assess local service needs using the indicative benchmarks as a starting point. With knowledge of your local population and its demographic, you can amend the benchmarks to better reflect your local circumstances. For example, if your population is significantly younger or older than the average population, or has a significantly higher or lower rate of COPD, you may need to provide services for relatively fewer or more people.

The supportive and palliative care worksheet contains a benchmark that can be used as an indicator of the level of activity that may be required to be commissioned for palliative and end-of-life care for people with COPD. Because the need for palliative and end-of-life care services is subject to local variation, it is not possible to cost out a service model. However, commissioners and providers may wish to refer to the guide text that details commissioning considerations for supportive and palliative care for people with COPD.
6.2 Review current commissioned activity

You may already commission services for people with COPD for your population. The tool provides tables that you can populate to help you calculate your current commissioned activity and costs.

6.3 Identify future change in capacity required

Using the indicative benchmarks provided, or your own local benchmarks, you can use the commissioning and benchmarking tool to compare the activity that you might need to commission against your current commissioned activity. This will help you to identify the future change in capacity needed. Depending on your assessment, your future provision may need to be increased or decreased.

6.4 Model future commissioning intentions and associated costs

You can use the commissioning and benchmarking tool to calculate the capacity and resources needed to move towards the benchmark levels for pulmonary rehabilitation and assisted discharge, and to model the necessary changes over a period of 4 years.

Use the tool to calculate the level and cost of activity you intend to commission for pulmonary rehabilitation and assisted discharge. The tool is pre-populated with data on the staff resource needed and potential recurrent and non-recurrent cost elements that may need to be considered in future service planning, which can be reviewed and amended to better reflect your local circumstances.

Commissioning decisions should consider both the clinical and economic viability of the service, and take into account the views of local people. Commissioning plans should also take into account the costs of monitoring the quality of the services commissioned.
6.5 Potential savings

The pulmonary rehabilitation and assisted discharge services may generate savings in areas of the COPD pathway. The tool contains details of potential savings, and can be used to model and estimate the volume of savings that may be generated by investing in these services.
7 Further information

National priorities and initiatives relevant to commissioning services for people with COPD include those detailed in table 6.

Table 6 Relevant national policy relating to COPD

<table>
<thead>
<tr>
<th>Document</th>
<th>Author</th>
<th>Year</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>NHS Outcomes Framework 2012/13</td>
<td>Department of Health</td>
<td>2012</td>
<td>Includes measures to enhance quality of life for people with long term conditions</td>
</tr>
<tr>
<td>A strategy for services for chronic obstructive pulmonary disease (COPD) in England</td>
<td>Department of Health</td>
<td>2011</td>
<td>Identifies the best ways to improve care and outcomes for those with COPD and to reduce the overall prevalence of the disease</td>
</tr>
<tr>
<td>Quality, innovation prevention and productivity (QIPP)</td>
<td>Department of Health</td>
<td>2011</td>
<td>The workstreams on long term conditions and end-of-life care are of particular relevance when commissioning services for people with COPD</td>
</tr>
<tr>
<td>Liberating the NHS: legislative framework and next steps</td>
<td>Department of Health</td>
<td>2011</td>
<td>Describes in detail how reforms of the NHS will be put into practice, including the development of NICE quality standards</td>
</tr>
<tr>
<td>Healthy lives, healthy people: our strategy for public health in England</td>
<td>Department of Health</td>
<td>2011</td>
<td>Sets out plans for improving public health in England and the creation of Public Health England</td>
</tr>
<tr>
<td>Transparency in outcomes: a framework for quality in adult social care</td>
<td>Department of Health</td>
<td>2011</td>
<td>Sets out plans for a new approach to quality and outcomes in adult social care</td>
</tr>
</tbody>
</table>
No Health without Mental Health: a cross-government mental health outcomes strategy for people of all ages, including supporting document on the economic case of improving efficiency and quality in mental health

Sets out six shared objectives to improve the mental health and well-being of the nation, and to improve outcomes for people with mental health problems through high quality services

Using the Commissioning for Quality and Innovation (CQUIN) payment framework – a summary guide

Makes a proportion of providers’ income conditional on quality and innovation

End of Life Care Strategy - promoting high quality care for all adults at the end of life

Recommends a whole systems approach both for commissioning services and for delivery of integrated care for individuals

### Additional resources

Commissioners may also find the resources in table 7 useful when commissioning services for people with COPD.

### Table 7 Additional resources for commissioning COPD services

<table>
<thead>
<tr>
<th>Document or web page</th>
<th>Source</th>
<th>Year</th>
<th>Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>COPD commissioning pack</td>
<td>Department of Health</td>
<td>Due 2011</td>
<td>A tool to help commissioners improve the quality of services for patients, through clearly defined outcomes that help drive efficiency by reducing unwarranted variation in services</td>
</tr>
<tr>
<td>Chronic obstructive pulmonary disease pathway</td>
<td>NICE</td>
<td>2011</td>
<td>Provides a visual representation of NICE guidance on COPD</td>
</tr>
</tbody>
</table>
The workstream aims to support clinicians, commissioners, providers and patients to deliver effective clinical practice through service improvement and redesign.

<table>
<thead>
<tr>
<th>NHS Improvement: lung</th>
<th>NHS Improvement</th>
<th>Various</th>
</tr>
</thead>
<tbody>
<tr>
<td>Video on pulmonary rehabilitation</td>
<td>NHS choices</td>
<td>2011</td>
</tr>
<tr>
<td>Respiratory disease competence framework</td>
<td>Skills for Health</td>
<td>2011</td>
</tr>
</tbody>
</table>

Analyses data on place of death for those with respiratory disease and how this varies with gender, age, socioeconomic deprivation and place.

A respiratory nurse specialist and patients explain pulmonary rehabilitation and how exercise can improve the symptoms of COPD.

Describes the knowledge, skills and attitudes that are needed to deliver patient centred respiratory care.

Useful sources of information for developing a service specification may include:

- **The standard NHS contracts for acute hospital, mental health, community and ambulance services**
- **NHS Evidence**: provides free access to clinical and non-clinical information and includes a QIPP library with case studies
- **NHS networks**, including commissioning for long-term conditions section and commissioning zone
- The [NICE shared learning database](#) offers examples of how commissioners and service providers have used NICE guidance to create innovative and effective local implementation programmes for service improvements.
- Implementation support for [NICE clinical guideline 101](#).
General information on **quality and corporate assurance** can be obtained from the following sources:

- **Indicators for Quality Improvement Programme** from the NHS Information Centre. A resource of robust indicators to help local clinical teams select indicators for local quality improvement and a source of indicators for benchmarking.

- **NHS Alliance online resources.** NHS Alliance is the representational organisation of primary care and primary care trusts, and provides them with an opportunity to network and exchange best practice. The alliance supports its members with an open-access helpline, in-house and joint publications and briefings, internal newsletters and a website.

- **NHS Institute for Innovation and Improvement support for commissioners,** including the **productive series** to enable NHS teams to redesign and streamline the way they manage and work, and **Better care, better value indicators** to help inform planning, to inform views on the scale of potential efficiency savings in different aspects of care, and to generate ideas on how to achieve these savings.

- **The Quality and outcomes framework (QOF)** is a voluntary quality incentive scheme that rewards general practices for implementing systematic improvements in the quality of patient care.

- **Skills for health** works with employers and other stakeholders to ensure that those working in the sector are equipped with the right skills to support the development and delivery of healthcare services.

Sources of further information to help you in **assessing local health needs** and reducing health inequalities include:

- **Disease prevalence models** produced by the Association of Public Health Observatories provide prevalence estimates for COPD for GP practices, primary care trusts or local authorities.

- **The atlas of variation,** a tool for reducing unwarranted variation to increase value and improve quality, including COPD bed days. The InstantAtlas version allows individual PCTs to see their own indicator data.

- **Department of Health** Delivering quality and value – focus on benchmarking.
• **NICE Health equity audit – learning from practice briefing.**

• **NHS Comparators** provides comparator data for NHS commissioning and provider organisations to enable users to investigate aspects of local activity, costs and outcomes.

• The **Disease management information toolkit (DMIT)** is a good-practice tool for decision-makers, commissioners and deliverers of care for people with long-term conditions, which presents data on conditions that contribute to high numbers of emergency bed days. It models the effects of possible interventions that may be commissioned at a local level and helps users to consider the likely impact of commissioning options.

• **PARR (Patients at risk of rehospitalisation)** is a risk-prediction system for use by primary care trusts to identify patients at high risk of hospital readmission.

• **PRIMIS+** provides support to general practices on information management, recording for, and analysis of, data quality, plus a comparative analysis service focused on key clinical topics.

• **SHAPE** (strategic health asset planning and evaluation) application provides support to strategic health authorities and primary care trusts on strategic planning across a whole health economy including key policy initiatives such as QIPP, JSNA and Transforming Community Services.
8 Topic Advisory Group: COPD services

A topic advisory group was established to review and advise on the content of the guide for commissioners. This group met once, with additional interaction taking place via email.

Maria Buxton – Consultant Physiotherapist, North West London Hospital Trust and Brent Primary Care Trust

Steve Callaghan – Health Outcomes Manager, Liverpool Primary Care Trust

Jane Cass – Public Health Specialist, NHS Central Lancashire

Lisa Chandler – Respiratory Programme Manager, NHS Wakefield District

Lisa Douglas – Commissioner for Independence and Long Term Conditions, NHS Brighton and Hove

Lynne Duxbury – Commissioning Manager, Commissioning Business Service, Salford

Dr Matt Kearney – Primary Care Clinical Advisor, Respiratory Programme, Department of Health and General Practitioner

Dr Rachel Garrod – Consultant Physiotherapist, Kings College Hospital NHS Foundation Trust

Dr Gill Hawksworth – Senior Lecturer and Pharmacist, University of Huddersfield and member of Topic Expert Group for COPD Quality Standard

Anita Hayes – Deputy Director, NHS National End of Life Care Programme

Karen Heslop – Respiratory Nurse Consultant, Newcastle upon Tyne Hospital NHS Foundation Trust and member of Topic Expert Group for COPD Quality Standard

Jacqui Nettleton – Programme Director Long Term Conditions, NHS West Sussex
Sally Reed – Joint Commissioning Manager (Long Term Conditions, Physical and Sensory Impairment), East Sussex County Council (Adult Social Care) and NHS East Sussex Downs and Weald/NHS Hastings and Rother

Dr Louise Restrick – Consultant Respiratory Physician, Whittington Hospital and NHS Islington and NHS London Respiratory Team Lead

Dr Michael Rudolf – Consultant Physician, Ealing Hospital NHS Trust; Chair of Guideline development group for NICE clinical guideline 101 and chair of Topic Expert Group for COPD Quality Standard

Prof Sally Singh – Director of Rehabilitation, Coventry University; Head of Pulmonary and Cardiac Rehabilitation, University Hospitals of Leicester NHS Trust