Diagnosis and management of stable COPD

Revision History	
Guideline Author:	Alice Turner in conjunction with pan-Birmingham Respiratory Clinical Network
Guideline Sponsor:	Dr Raj Ramachandran, Chair of pan-Birmingham Respiratory Clinical Network
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2.0	23.03.17	Alice Turner	Final sign off by RCN membership

Guideline Readership

This guideline may be used by all staff in primary and secondary care across the Birmingham and Solihull region to aid their diagnosis and management of patients with suspected and confirmed COPD

Guideline Objectives

There are 2 main reasons behind this guideline

- To ensure that the diagnosis of COPD is made correctly
- To ensure rational prescribing in diagnosed COPD patients. We also wish to raise pulmonary rehabilitation referral rates, as this is an underused, evidence based treatment, and to make savings on COPD prescribing by using the most cost effective treatment.

Other Guidance

NICE guideline, NICE quality standards

BTS guideline

ATS/ERS guidelines

This guideline does not differ markedly from the NICE guidance, except that it is more specific on which drug classes to use, and includes some of the trial data issued post NICE which has shown that use of inhaled corticosteroids may not be required as much as NICE suggested.

1. Flow Chart for diagnosis of COPD

Consider a diagnosis of COPD in patients

- Aged over 35 **and** smoker or ex-smoker **and**
- Who have any of
  - exertional breathlessness
  - chronic cough
  - regular sputum production
  - frequent winter 'bronchitis'
  - wheeze
- AND do not have clinical features of asthma:
  - chronic unproductive cough
  - significantly variable breathlessness
  - night-time wakening with breathlessness and/or wheeze
  - significant diurnal or day-to-day variability of symptoms

Ask about the following factors

- occupational hazards
- weight loss
- effort intolerance
- waking at night
- ankle swelling
- haemoptysis
- family history

COPD clinically likely

- Post-bronchodilator spirometry
- Severity assessment = spirometry, MRC & CAT scores
- Chest X-ray to exclude other diagnoses
- Full blood count to identify anaemia or polycythaemia
- Body mass index (BMI) calculation

Consider alternative diagnoses in older people without typical symptoms of COPD and FEV1/ FVC ratio < 0.7

Interpreting Spirometry

Quality assessment	Is it airflow obstruction?	Post bronchodilator Spirometric severity assessment			Make sure it isn't asthma*
3 blows with FEV1 values within 100ml of one another	FEV1/FVC<0.7 and <lower limit of normal	FEV1	≥80%	Mild	Check reversibility to salbutamol >400ml = asthma
			50-79%	Moderate	
FVC obtained after blowing out >= 6 seconds			30-49%	Severe	Or check PEFR variation over 2/52 >20% = asthma
			<30%	Very severe	

COPD diagnosed → Consider multidimensional severity assessment such as ADO, DOSE or BODE

* Overlap between asthma and COPD can occur; In general there should therefore be a lower threshold for use of ICS if there is definite overlap of COPD with asthma, however if the diagnosis is not clear we would advocate use of the guideline for the condition most prominent in the patient (i.e. patients with COPD who exhibit reversibility to bronchodilators should be treated using the COPD guideline and those with lifelong asthma, with fixed airflow obstruction, should be treated using the asthma guideline). Please see Appendices for more detail.

2. Executive Summary & Overview

This guideline is intended for use in patients with a suspected or confirmed diagnosis of chronic obstructive pulmonary disease (COPD). In the latter group it is intended to direct management including prescribing. It is aimed primarily at cost-effective management.

2.1 Summary of management guidance

After making a diagnosis of COPD as per the flowchart above management should be:

1. **Stop smoking, check inhaler technique**
2. **Start SABA**
3. **Refer to pulmonary rehabilitation if indicated**
4. **If still symptomatic start LAMA**

Thereafter if symptoms still occur it will depend on spirometry results as to what inhalers the patient should be prescribed. In general those with an FEV1> 50% predicted should be on a LAMA/LABA combination inhaler, and those with an FEV1<50% may need the addition of an inhaled steroid by moving to a combination of 2 inhalers (LABA/ICS + LAMA) if they have frequent exacerbations. If they do not then they should be managed with bronchodilation alone.

2.2 Reasoning and principles behind the guideline

The diagnosis of COPD is based on standard criteria, and mimics NICE guidance in most respects. We have used the fixed ratio of 0.7 as our main criterion for airflow obstruction, but (unlike NICE) the lower limit of normal (LLN) is also highlighted. This is because use of the fixed ratio without reference to LLN can lead to over-diagnosis in older patients.

Drug choices within the guideline are based on clinical evidence as well as cost and have been designed to ensure that patients do not get too many different types of inhaler to use. The common steps up in treatment will be from LAMA to LABA/LAMA and from LAMA to LAMA + LABA/ICS. The device for each LAMA is different, and whilst we have designed our guideline to allow prescribers to step up to a LABA/LAMA in the same device, this is not possible in all cases for the addition of LABA/ICS combinations. For example, if a patient is on glycopyrronium (which comes in the Breezhaler device) and requires addition of a LABA/ICS there are no available compounds yet in the this device, so you will need to assess technique with either an MDI (Fostair) or Ellipta (Relvar 92). **Seretide 250 Evohaler (MDI) is not licensed for COPD and is much more expensive than all of our recommended products; a switch to Fostair may be appropriate for those who can only use an MDI with spacer**.

The new version (2.0) of the guidance removes 3 devices – the Accuhaler, Turbohaler and Handihaler – thus Seretide 500, Symbicort 400 and Spiriva 18mcg are no longer recommended for new patients. This does not mean that patients stable on these devices should be changed from them, unless their inhaler technique requires it.

Oxygen is a drug and should not be prescribed long term (LTOT) without assessment by a home oxygen service (HOS-AR). The evidence for efficacy of ambulatory oxygen is weak and it should not be prescribed without assessment by the HOS-AR. There is no evidence that short burst oxygen therapy (SBOT) works; therefore it should not be prescribed.

If pO2 at the end of an exacerbation meets LTOT criteria it is preferable to wait until 6 weeks after this event to prescribe it, when the levels can be rechecked to ensure that it represents their stable state level. All of the benefits of LTOT occur long term, hence waiting this period is safe; it is also preferable to the awkward situation of having to remove oxygen at a later date.

3. Body of Guideline

For <u>all</u> patients in whom diagnosis is confirmed

- Offer/refer to smoking cessation if appropriate
- Start salbutamol (SABA) prn
- **Check inhaler technique**
- Ensure have had flu and pneumonia vaccine and are on recall list for flu vaccine
- Ensure that the patient has a COPD self-management plan. Whilst the format of plans may vary to meet the needs of individual patients (taking into account language and literacy for instance) they should comply with the Accessible Information Standard (August 2016) and as a minimum detail recognition of exacerbations, who their primary point of contact for advice is (e.g. COPD nurse, GP, case manager, etc) and information on managing stable COPD.
- Assess whether they have any commonly recognised co-morbidities of COPD, such as ischaemic heart disease, heart failure, anxiety or depression, osteoporosis, diabetes, and manage them appropriately

<u>Table 1: Drug class abbreviations</u>

Abbreviation	Full name
SABA	Short acting beta agonist
LABA	Long acting beta agonist
LAMA	Long acting muscarinic antagonist
LABA/LAMA	Combination of LABA and LAMA
LABA/ICS	Combination of ICS and LABA
LTOT	Long term oxygen therapy

Assess response to treatment

This should include an assessment of symptoms and how activities of daily life have changed post treatment. Quality of life scores such as CAT (www.cattestonline.co.uk) may be useful here, but neither this nor a checklist approach to questioning the patient is advocated as the sole way of checking response; an individualised approach is more likely to engage the patient with treatment. Either CAT or MRC can be used to define severity according to GOLD.

If still symptomatic on SABA

- If walks slower than contemporaries on level ground because of breathlessness, or has to stop for breath when walking at own pace refer to pulmonary rehabilitation. Table 2 shows referral routes for local providers; forms may be obtained from the provider. If no form is mentioned in the table then referral may be made simply by providing clinical details by phone/email/letter (as shown)

- Start LAMA unless contraindicated, in which case use LABA
    - See Table 3 for prescribing guidance
    - Ensure inhaler technique is taught
    - Use Aclidinium if eGFR <30 mL/min/1.73m^2
- **Do not start multiple drugs at this assessment**

If still symptomatic at this point step up to a LAMA/LABA

- Maintain inhaler device, provided technique with this device remains good

If exacerbations occur despite this change step up to LAMA + LABA/ICS

- We do not advocate stepping up to LAMA + LABA/ICS if FEV1>50% predicted
- Step up either in the same device (if using Ellipta), or by adding MDI to a LAMA in the device that the patient was using (e.g. Breezhaler). Choose the device by checking inhaler technique.

Table 2: Pulmonary rehabilitation providers in pan-Birmingham region

Provider	Areas served	Location of classes	How to refer
Birmingham Community Healthcare (BCHC)	Old HOB PCT (parts of South Central, Cross City and Sandwell CCGs)	▪ Pannell Croft village, Newtown ▪ St Johns Church Hall, Sparkhill ▪ Moseley Hall Hospital (referral via South Doc)	Fax or email form to: 0121 245 5711 bchnt.bchcrespiratory@nhs.net
Heart of England NHS Foundation Trust	All local CCGs, HEFT inpatients	▪ Good Hope Hospital ▪ Heartlands Hospital ▪ Solihull Hospital	bhs-tr.pulmonary-rehab@nhs.net
South Doc	Cross City & South Central CCGs	▪ West Heath Medical Centre, Northfield ▪ The HUB, Kings Heath ▪ The Kenrick Centre, Quinton.	Fax or email form to: 0121 483 2127 southdocservices@nhs.net
Sandwell & West Birmingham NHS Trust	Sandwell CCG	▪ Sandwell Hospital Gym ▪ Hurst Road Community Centre, Smethwick ▪ Tipton Leisure Centre	Fax form to 0121 507 3026 Tel: 0121 507 2664, Option 4 swbh.respiratoryservice@nhs.net
Solihull Community Respiratory Team	Solihull CCG	▪ Chelmsley Wood Leisure Centre ▪ Dorridge Community Hall	Tel: 0121-424-4766

Table 3: Drug choices for new starters in stable COPD

Device	LAMA	LABA/LAMA	LABA/ICS
Ellipta	Incruse 1 puff od	Anoro 1 puff od	Relvar 92/22 1 puff od
Breezhaler	Glycopyrronium 1 puff od	Ultibro 1 puff od	-
Genuair	Aclidinium 1 puff bd	Duaklir 1 puff bd	
MDI	-	-	Fostair 100/6 2 puffs bd
Respimat	Tiotropium 2 puffs od	Spiolto 2 puffs od	-

We recommend prescribing by brand to ensure that device consistency is maintained. Ultibro = Indacaterol + Glycopyrronium, Duaklir = Aclidinium + Formoterol, Relvar = Vilanterol + Fluticasone, Fostair = Beclometasone + Formoterol

If your patient is already on, or requires Seretide Accuhaler or Spiriva Handihaler due to their inhaler technique we do not advocate switching. Please note that these devices are NOT included within the APC- approved formulary for new initiations. These compounds are of similar efficacy to others in the same class, albeit with slight differences in cost

If still breathless at this point

- Check oxygen saturations and refer to local HOS-AR if <92% on at least 2 occasions when clinically stable. Table 4 shows local providers and referral routes. Forms may be obtained from the provider.
- Trial of theophylline 200mg BD for 6 weeks; if beneficial continue.
  - Remember to check for drug interactions prior to prescribing, and to check levels if patient has side effects or fails to respond. The therapeutic window is fairly narrow and dose adjustments may be required.
  - Effects are reduced in smokers and increased in the elderly, those with liver disease and cardiac failure, amongst others.
  - Routine monitoring should include a check of level 5 days after starting the drug (4-6 hours post dose) and after any dose adjustment. Regular levels are not required if the patient is well and has not had any other drugs altered that could affect theophyllines. Dose adjustment will be required if given acute prescriptions of interacting drugs such as quinolones or macrolides.

Table 4: Home Oxygen Assessment and Review (HOS-AR) providers

Provider	Areas served	Location of clinics	How to refer
Heart of England NHS Foundation Trust	All local CCGs	Heartlands, Solihull and Good Hope Hospitals	Letter, as for normal OPD referral
Sandwell/West Bham NHS Trust	Sandwell CCG	Lyng Centre for Health and Social Care and Birmingham Treatment Centre	Letter or Fax form to: 0121 507 3026
Solihull Community Respiratory Team	Solihull CCG	Community & Solihull Hospital	Tel: 0121 424 4766
University Hospitals Birmingham	All local CCGs	Queen Elizabeth Hospital	Fax form to 0121 460 5822

If sputum is a problem

- Add carbocisteine 750mg tds for a trial (at least 6 weeks), and maintain at an appropriate maintenance dose if beneficial
- Consider whether bronchiectasis is a possibility. If yes, and you have direct access, please request high resolution CT thorax (HRCT)
- Send sputum MCS and AFB x 3

What if my patient is on ICS and these are not indicated?

It is quite common when reviewing COPD treatment, especially in the context of this guideline, to find changes you wish to make to a patient's management. We anticipate that there may be many patients in whom ICS is no longer indicated. Whilst evidence from COPD trials suggest that high dose ICS may be safely stopped, without weaning, without adverse consequences being observed, if you have concerns, a step down guide is available in Version 1 of this guideline which may be accessed via your organisation.

Managing exacerbations

Separate guidance is available for managing exacerbations. In general the treatment from a rescue pack should be prescribed, but when the sputum is not purulent antibiotics may not be required.

Rescue packs

These are unlikely to be appropriate when a diagnosis has just been made.

- Consider providing a rescue pack for patients who exacerbate frequently (at least twice/year), in the context of a self-management plan, if you are confident that the patient understands the principles of self-management.
- Prednisolone at 30mg OD for 5-7 days with Amoxycillin 500mg tds or Doxycycline 200mg on day 1 and 100mg for 6 further days (assuming no contraindications), are appropriate choices of treatment for the pack, however this should be guided by the individual (e.g. sputum culture results, frequency of infective v non-infective exacerbations). For all patients they should contact their respiratory nurse, case manager or GP on every occasion that they use a rescue pack, and no more than 3 should be issued without medical review.

Osteoprotection

If patients require 3 or more courses of steroids/year for exacerbations please prescribe a suitable bisphosphonate as prophylaxis against osteoporosis if they are aged 65 or over (+/- Calcium and Vitamin D supplementation). If aged less than 65 arrange a DEXA scan and prescribe similarly if osteoporosis is present.

If still having problems at this point consider referral to community respiratory service or respiratory physician. Many advanced treatments are available for COPD now, such as lung volume reduction interventions or domiciliary NIV which may be accessed from this setting. Use of prophylactic antibiotics for frequent exacerbations should only be initiated from secondary care, or after consultation with a respiratory physician via Advice & Guidance

Available community respiratory services include:

- BCHC - some parts of Cross City & Birmingham South Central CCG
- Sandwell and West Birmingham Community Respiratory Team – Sandwell CCG
- Solihull Community Respiratory Team - Solihull CCG
- Other community services:
    - Some COPD patients, particularly those regularly admitted to hospital, may benefit from referral to their local community matron. The services provided by community matrons may be a very useful complement or alternative to a community respiratory service.

Palliative care

There will be many patients in whom despite optimised therapy, decline occurs and palliative or end-of-life care is needed; there is a separate network guideline on palliative care for respiratory patients in preparation which can be used for detailed guidance. Treatments to consider at this stage are oral morphine for relief of breathlessness and benzodiazepines for relief of anxiety and breathlessness. Cognitive behavioural therapy, or classes in which this features heavily, are also available locally and may be suitable for patients in whom symptom palliation is needed but they have not yet reached the end of life. These classes include the Fatigue Anxiety Breathlessness (FAB) course, and are run at local hospices, such as Marie Curie in Solihull, John Taylor in Erdington and St Mary's in Selly Oak. Contact details of hospices in the Birmingham, Solihull and Black Country areas can be found in Appendix 4.

An extensive review of the evidence base behind recommendations is provided in the Appendix of <u>version 1</u> of this guideline.

4. Reason for Development of the Guideline

This guideline has been developed in part due to NICE guidance, and in part due to the national COPD quality standards released in 2011. It is also driven by the fact that there are an increasing number of COPD inhalers available and patients being diagnosed, hence there is a greater public health need for rational prescribing. National audits also show relatively low referral rates for pulmonary rehabilitation, which we wish to improve by highlighting within a guideline.

5. Methodology

This guideline was developed by the HEFT COPD lead (Dr Alice Turner) in conjunction with the pan-Birmingham Respiratory Clinical Network and refined after discussion with respiratory directorates at HEFT, UHB and Sandwell, local CCGs respiratory leads, the joint medicines management team and other interested parties linked to the network.

6. Implementation

This is intended for general use by all staff. Promotion in each CCG and secondary care Trust is to be agreed locally.

7. Monitoring

Each CCG and NHS Trust have different systems for monitoring their guidelines. Examples of the data to be collected and potential targets within a typical secondary care Trust are shown in table 9. In primary care QOF data and prescribing rates will be the more practical elements to collect. In secondary care continuous audit data collection began in February 2017 and may be augmented by local data collection where necessary for particular standards; those relevant to this guideline are as follows

Table 5: Possible audit standards in secondary care

Standard	Target	National achievement 2010	National achievement 2014
Disease confirmed by spirometry	90%	54%	46%
Smoking cessation advice if applicable	90%	27%	58%
Inhaler technique & medications reviewed	100%	55%	-
Pulmonary rehabilitation referral if eligible	70%	41%	40%
Inpatients: seen by respiratory specialist/CNS	90%	-	79%

8. Application of the Guideline

The guideline applies to all COPD patients, at all HEFT, Sandwell and UHB secondary care sites, and to Cross-City, Sandwell/West Birmingham, Solihull and South Central CCGs. Key beneficiaries will be patients, local CCGs and respiratory departments, as this is where cost savings and efficiency gains will be most apparent. Implementation should be by all staff seeing patients with the diagnosis; however we recognise that it relies heavily on the respiratory team, including the CNS for some aspects (e.g. oxygen, inhaler technique).

9. Launch and Implementation Plan for Clinical Guidelines

Action	*Who*	*When*	*How*
If previous document is in use: proposed action to retrieve out-of-date copies of the document (electronic and /or paper)	N/A		
Communicate new guideline/ changes to guideline	Alice Turner or designated support staff	Ongoing over next 12 months	Meetings with GPs and nurses in primary care, training sessions and talks to junior doctors and colleagues in secondary care locations
Offer awareness training / incorporate within existing training programmes	Individual Trust and CCG leads	Ongoing over next 12 months	Foundation programme training and CMT training, as well as Grand Rounds within Trusts are suitable secondary care routes. In primary care PLT and VTS trainee sessions may be most suitable
Circulation of document(electronic)	Carol Watson	By May 2017	Via email to directorate leads in respiratory at all sites and all GP practices

Appendix 1 : Inhaled Corticosteroids in Adults: Prescribing Guidance

1. Inhaled corticosteroids (ICS) are generally considered safe when used in low doses. However, when higher doses are used over long periods, there is a risk of systemic side effects. All clinical guidelines stress the importance of ensuring that the lowest effective dose of inhaled corticosteroids is used.

2. The systemic side effects of corticosteroids are well known. High doses of inhaled corticosteroids are associated with clinically detectable adrenal suppression (*Arch Intern Med* 1999;159:941-55), increased risk of non-fatal pneumonia in patients with COPD (*Arch Intern Med* 2009;169:219-29), increased risk of type II diabetes (*Am J Med* 2010;123:1001-6), and may increase the risk of fractures (*Thorax* 2011;66:699-708). It is strongly recommended that all patients on higher doses of ICS (>1000 micrograms Beclometasone dipropionate (BDP) equivalent per day) should be made aware of the potential risks and given an inhaled corticosteroid safety warning card about adrenal suppression.

3. Patients taking nasal corticosteroids in addition to inhaled corticosteroids should be assessed for their potential total daily dose of corticosteroid. *For those patients on doses of inhaled corticosteroids between 800-1000 micrograms of BDP equivalent per day, a corticosteroid safety card is recommended, especially if additional corticosteroids are taken.*

4. Clinical trials of combination therapy in COPD show that both Symbicort 400 1 inhalation twice a day (*Eur Respir J* 2003; 22:912-19, *Eur Respir J* 2003; 21:74-81) and Seretide 500 Accuhaler 1 inhalation twice a day (*N Engl J Med* 2007; 356:775-89, *Am J Respir Crit Care Med* 2008;177:19-26) are equally effective in reducing the frequency of exacerbations and statistical improvements in quality of life in those with severe or very severe COPD and who have 2 or more exacerbations a year. However, the recommended BDP equivalent dose of Seretide is more than twice that of Symbicort. This may have an effect on the long term risk of corticosteroid side effects. *Newer alternatives such as Fostair and Relvar contain lower steroid doses but have been equivalent in head to head trials so are preferred.*

5. At equipotent doses, there is no difference in the safety profile of different inhaled corticosteroids. Budesonide and ciclesonide are roughly equipotent to BDP. Fluticasone, mometasone and the newer ultrafine particle BDP HFA inhalers (QVAR and Fostair) are roughly twice as potent as standard BDP inhalers – see the BDP dose equivalence chart.

Before increasing the dose of inhaled corticosteroid:

6. **Check inhaler technique**. Poor inhaler technique, especially with aerosol inhalers is very common, and will contribute to treatment failure. Improving delivery of ICS to the lungs may be more effective than increasing the dose. Thus it is imperative that inhaler technique is checked at all times and appropriate changes made. All ICS MDIs (other than the newer ultrafine Beclometasone-HFA) should be used, and use taught, with a spacer (Volumatic or Aerochamber). The use of a large volume spacer may double drug delivery to the lungs (*Br J Clin Pharmacol* 1998; 46:45-8, *Clin Pharmacokinet* 2004; 43:349-60). It is important to prescribe a spacer that is compatible with the MDI device.

Appendix 2: Asthma-COPD overlap

It is likely that asthma and COPD are a spectrum of disease, rather than truly separate entities, however to ensure evidence based care for individual patients it is recommended to make a diagnosis that recognizes the predominant disease, such that guidance for managing this may be followed. If the diagnosis is not clear we would advocate use of the guideline for the condition most prominent in the patient (i.e. patients with COPD who exhibit reversibility to bronchodilators should be treated using the COPD guideline and those with lifelong asthma, with fixed airflow obstruction, should be treated using the asthma guideline). As yet there are few trials which have considered the concepts of 'asthma with fixed airflow obstruction', or 'COPD with reversibility', though these entities undoubtedly occur and reflect the spectrum of airways disease. The term asthma-COPD overlap syndrome (ACOS) is not advocated by our guidance as it implies a separate entity rather than the spectrum we believe exists.

There is growing recognition that even in COPD eosinophilic inflammation may occur and that these patients are more responsive to corticosteroids (1-3). Overlap patients are generally thought to exhibit phenotypes part way between COPD and asthma; for example Gibson *et al* reported prevalence of atopy that was highest in asthma (100%) intermediate in overlap (64%) and lowest in COPD (25%) (4). There are some differences which may depend on the predominant pathology - positive bronchodilator response observed in COPD is associated with increased eosinophilic inflammation (5) whilst irreversible COPD more frequently exhibits neutrophilia. Smoking asthmatics typically have inflammatory features that resemble COPD with increased neutrophilia and sometimes airway remodeling (6). Classical asthma drivers, such as occupation, associate with fixed airflow obstruction after chronic exposure (7) and ABPA has also been reported in patients in COPD(8). During exacerbations of apparent asthma-COPD overlap airway mucosal eosinophils rise more than neutrophils (9) explaining the improvement with systemic CS or ICS. FeNO may be helpful in determining eosinophilic inflammation in some patients, though is affected by smoking and nasal disease.

In general there should therefore be a lower threshold for use of ICS if there is past history of childhood asthma, or definite evidence of eosinophilic inflammation, such as elevated exhaled nitric oxide (FeNO) or persistently elevated blood eosinophils.

References

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6. Bumbacea D, et al. The European respiratory journal. 2004;24:122-8
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8. Mir E, Shah A. Primary care respiratory journal. 2012;21:111-4
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Appendix 3: Hospices in the Birmingham, Solihull & Black Country region

HOSPICES IN BIRMINGHAM:

- St Giles Hospice, Lindridge Road, Sutton Coldfield, B75 6JB
  - Telephone 0121 378 6290
  - enquiries@stgileshospice.com
  - http://www.stgileshospice.com/index2.html

- St Mary's Hospice, 176 Raddlebarn Road, Selly Park, Birmingham, B29 7DA
  - Telephone 0121 472 1191
  - Email info@birminghamhospice.org.uk
  - https://www.birminghamhospice.org.uk/

- John Taylor Hospice, 76 Grange Road, Erdington, Birmingham, B24 0DF
  - Telephone 0121 465 2000
  - Email enquiries@johntaylorhospice.org.uk
  - https://www.johntaylorhospice.org.uk/about-us

- Acorns Children's Hospice, 103 Oak Tree Lane, Birmingham, B29 6HZ
  - Telephone 0121 248 4850
  - Email referralbirmingham@acorns.org.uk
  - https://www.acorns.org.uk/our-care/where-to-find-us/acorns-in-birmingham/

HOSPICES IN SOLIHULL:

- Marie Curie Hospice, Marsh Lane, Solihull, B91 2PQ
  - Telephone 0121 703 3600
  - Email westmidlands.hospice@mariecurie.org.uk
  - https://www.mariecurie.org.uk/help/hospice-care/hospices/west-midlands

HOSPICES IN THE BLACK COUNTRY:

- St Giles Hospice, Goscote Lane, Walsall, WS3 1SJ
  - Telephone 01922 602 540
  - Email enquiries@stgileshospice.com
  - http://www.stgileshospice.com/index2.html

- Compton Hospice, 4 Compton Road West, Wolverhampton, WV9DH
  - Telephone 0845 225 5497
  - Email admin@compton-hospice.org.uk
  - https://www.compton-hospice.org.uk/

Please note that this list may not be exhaustive and is correct at the time of publication.