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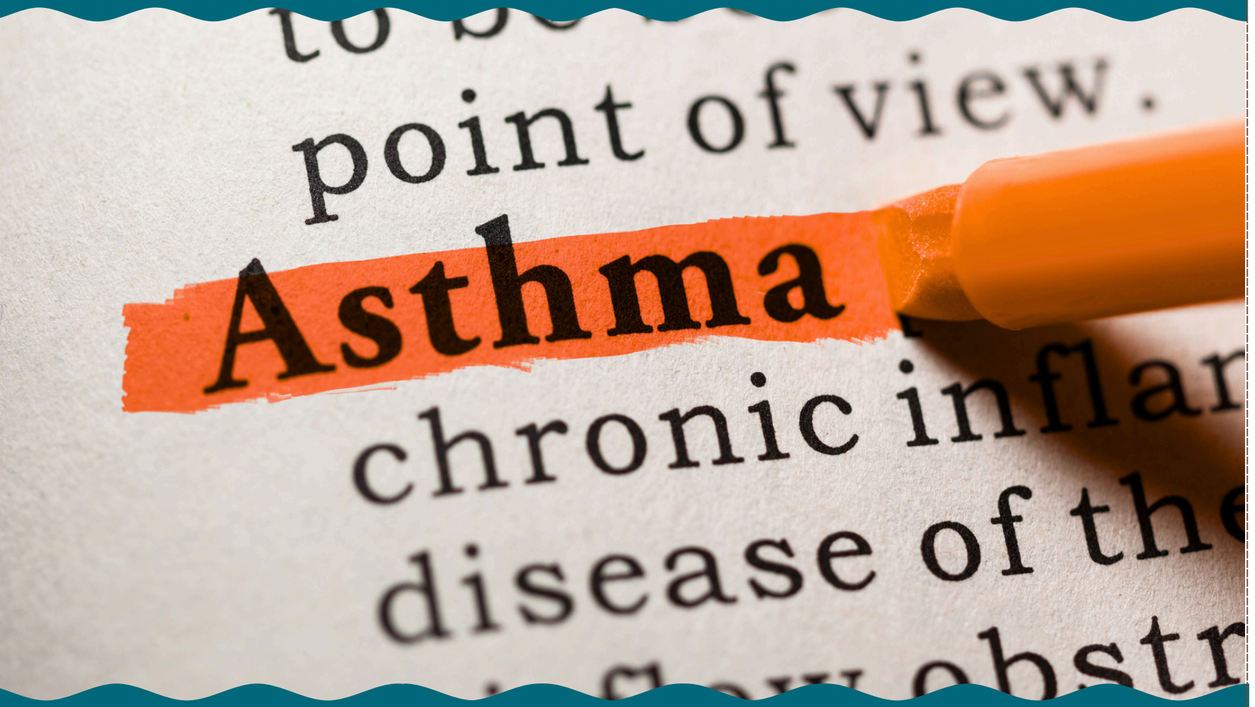
British Thoracic Society

ASTHMA+ LUNG UK

Asthma

A Comprehensive Guide to Long-Term Condition Management for Young Adults Information Booklet



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Section 1

Introduction to Asthma

1.1 What is Asthma?

Asthma is a persistent respiratory condition characterised by inflammation and narrowing of the airways, resulting in episodes of difficulty breathing, wheezing, chest tightness, and coughing (NICE, 2025). It is one of the most common long-term conditions affecting people of all ages worldwide, although it often starts in childhood.

1.2 Statistic

In the UK alone, approximately 5.4 million people are currently receiving asthma treatment, that's roughly 1 in every 12 adults and 1 in every 11 children (Asthma + Lung UK, 2025). Globally, an estimated 262 million people live with asthma, making it one of the most prevalent chronic conditions worldwide (World Health Organisation, 2025).

UNITED KINGDOM BREAKDOWN
Total Patients: 5.4 million
├── Adults: 1 in 12 (8.3%)
└── Children: 1 in 11 (9.1%)

AGE DISTRIBUTION COMPARISON

Children: (9.1% - 1 in 11)
Adults: (8.3% - 1 in 12)
General: (8.0% - 1 in 12.5)

UK Population Impact (based on 67 million)

5.4M with asthma (8%)
61.6M without (92%)

Data Source: Public Health England (2025)

Types and Classifications of Asthma

- Allergic (Extrinsic) Asthma – Triggered by allergens such as pollen, pet dander, or house dust mites; often associated with other allergic conditions like eczema or hay fever.
- Non-Allergic (Intrinsic) Asthma – Triggered by factors such as stress, cold air, exercise, or respiratory infections rather than allergens.
- Occupational Asthma – Caused or worsened by workplace exposures such as chemicals, dust, or fumes.
- Severe Asthma – Persistent symptoms despite high-dose treatment, affecting approximately 5-10% of people with asthma (Chung et al., 2024)

This Booklet is Designed for

This information booklet has been specifically designed for young adults aged 18-30 who live with asthma or have been recently diagnosed with the condition. Young adulthood represents a critical transition period when they are likely to take increasing responsibility for managing their own health, possibly away from home for the first time, and navigate university.

Section 2

The Scale of the Problem

2.1 Global Prevalence

Asthma represents a substantial global health challenge, affecting an estimated **262 million people** worldwide, with **455,000 deaths** attributed to the condition annually (World Health Organisation, 2025). The global burden of asthma has increased significantly over the past few decades, with prevalence rates rising particularly in low- and middle-income countries undergoing rapid urbanisation and lifestyle changes (Global Asthma Network, 2025).

2.2 The UK Context

In the United Kingdom, asthma affects approximately **5.4 million** people, including **1.1 million** children and **4.3 million** adults, making it one of the most prevalent long-term conditions managed by the NHS (Asthma + Lung UK, 2025). The burden on healthcare services is considerable. NHS England reports over **77,000** emergency hospital admissions for asthma annually, with the condition accounting for approximately **185,000 GP** consultations each week (NHS England, 2025).

PREVALENCE BY COUNTRY INCOME LEVEL
Data source: (Global Initiative for Asthma, 2025).

HIGH-INCOME COUNTRIES

10-15% of population
Australia, UK, New Zealand

LOW-MIDDLE INCOME COUNTRIES

5-8% of population
Many African/Asian nations

GEOGRAPHICAL DISTRIBUTION

Region Prevalence Range

10-15%: Western Europe, Oceania
8-12%: North America
5-9%: Latin America
5-8%: Africa, Asia

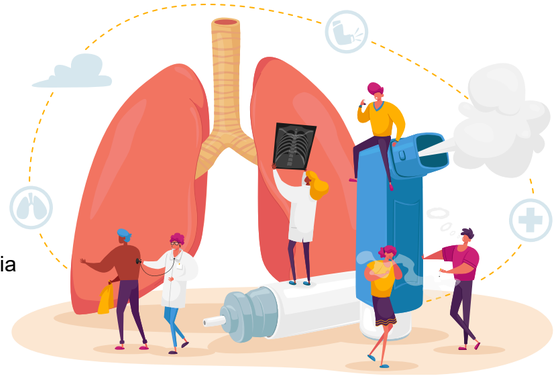

Image source: iStockPhoto.com

Demographic patterns revealimportant disparities

Age: Young adults aged 20-40 represent a particularly vulnerable group for poor adherence and preventable deaths (Levy et al., 2025).
Gender: Childhood asthma is more common in boys (ratio of 2:1), whilst adult asthma affects more women than men, possibly due to hormonal influences (British Thoracic Society, 2025).
Ethnicity: Black and minority ethnic groups experience disproportionately higher asthma prevalence and poorer outcomes. Black Caribbean and Pakistani children have significantly higher rates than White British children. (Asthma UK, 2025)
Socioeconomic status: People living in the most deprived areas are 1.5 times more likely to be admitted to hospital for asthma and twice as likely to die from an asthma attack compared to those in the least deprived areas (Public Health England, 2025).

REGIONAL PREVALENCE ACROSS THE UK
Data Source: Public Health England (2025)

GENDER

CHILDHOOD BOYS: GIRLS

2:1 ratio

ADULTHOOD WOMEN: MEN

More women affected

SOCIOECONOMIC STATUS

MOST DEPRIVED vs LEAST DEPRIVED

Image source: iStockPhoto.com

Section 2

Non-Modifiable Risk Factors

Certain risk factors cannot be changed:

Genetics: Having a parent with asthma increases your risk by 3-6 times. Specific genetic variations affect immune system responses and airway inflammation (Patel et al., 2025).

Age and timing: Early-life exposures are critical. Premature birth, low birth weight, and childhood respiratory infections increase lifetime asthma risk (NICE, 2025).

Biological sex: Sex influences asthma development differently across the lifespan due to hormonal factors.

Social Determinants of Health

Housing quality: Damp, mouldy, cold, or overcrowded housing worsens asthma through increased allergen and infection exposure (Healthy Homes Initiative, 2025).

Access to healthcare: Delayed diagnosis, inadequate follow-up, and inability to afford prescriptions contribute to worse outcomes in disadvantaged groups.

Stress and adverse childhood experiences: Chronic stress and trauma can increase asthma risk and severity through immune system dysregulation (Ritz & Trueba, 2025).

Modifiable Risk Factors

Several factors can be modified or avoided:

Smoking and second-hand smoke: Both active smoking and exposure to tobacco smoke increase asthma risk, worsen symptoms, and reduce treatment effectiveness. (Royal College of Physicians, 2025).

Allergen exposure: Early and ongoing exposure to house dust mites, pet dander, mould, and pollen can trigger asthma development in susceptible individuals.

Air pollution: Long-term exposure to traffic-related air pollution, particularly nitrogen dioxide and particulate matter, increases asthma development risk and exacerbation frequency (British Lung Foundation, 2025).

How Asthma Develops (Aetiology and Pathophysiology)

The Inflammatory Process

When triggers (allergens, irritants, infections, exercise) are encountered, the immune system in people with asthma overreacts. Activated immune cells release inflammatory chemicals including histamine, leukotrienes, and cytokines (Patel et al., 2025). These mediators trigger three key processes:

1. Airway inflammation: The bronchial lining becomes swollen and inflamed, narrowing the airway lumen
2. Bronchoconstriction: Smooth muscle surrounding airways contracts and tightens, restricting airflow
3. Mucus hypersecretion: Excessive thick, sticky mucus is produced, plugging already narrowed airways (British Thoracic Society, 2025)

Living with Asthma - The Impact

3.1 Physical Impact

Symptoms and Disease Progression

Symptoms and Disease Progression
Common symptoms include wheezing, breathlessness, chest tightness, and persistent coughing, particularly at night or early morning (NICE, 2025).

Comorbidities and Complications
Allergic rhinitis (hay fever) affects up to 80% of people with asthma, whilst gastro-oesophageal reflux disease (GORD) is three times more common in those with asthma than in the general population. (British Thoracic Society, 2025) Long-term complications include persistent airflow obstruction, recurrent respiratory infections, and side effects from prolonged corticosteroid use, such as weight gain, osteoporosis, and increased infection susceptibility.

Impact on Daily Functioning and Mobility
Simple tasks like climbing stairs, rushing for a bus, or carrying shopping may trigger breathlessness (Asthma + Lung UK, 2025). Exercise participation, crucial for physical and mental health, at many young adults.

3.2 Psychological Impact

Research indicates that young adults with asthma are twice as likely to experience anxiety disorders and 1.5 times more likely to develop depression compared to their peers without asthma (Hyland et al., 2025).

Impact on Self-Esteem and Identity
Many young adults describe feeling "different" or "defective" compared to peers, particularly if their asthma limits participation in valued activities (Shaw et al., 2025). The visible nature of inhaler use can cause embarrassment, with some young adults admitting to skipping preventative medication in social situations to avoid appearing "ill" or "weak" (Asthma UK, 2025).

Coping Mechanisms and Quality of Life

Young adults employ various coping strategies, some of which are helpful and others potentially harmful. Positive approaches include educating themselves about asthma, maintaining good medication adherence, using relaxation techniques, and seeking peer support (British Lung Foundation, 2025). Quality of life assessments consistently show that young adults with poorly controlled asthma report lower well-being across physical, emotional, and social domains (NICE, 2025).

3.3 Social Impact

Relationships and Social Participation
Young adults report missing social events, feeling unable to keep pace with friends during activities, and experiencing frustration from others who do not understand their limitations (Shaw et al., 2025). Dating and intimate relationships may be complicated by concerns about appearing unattractive when breathless, anxiety about asthma attacks during intimacy, or partners not understanding the condition's seriousness.

Employment and Financial Implications
Young adults may face discrimination during hiring, with some employers reluctant to employ people with chronic conditions despite this being illegal (Equality Act 2010). Workplace triggers such as cleaning products, dust, strong scents, or poor ventilation can make certain jobs unsuitable or require workplace adjustments (Health and Safety Executive, 2025).

Stigma and Social Isolation
Young adults describe being labelled "dramatic," having symptoms dismissed as "just hyperventilating," or being accused of using asthma as an excuse to avoid activities (Levy et al., 2025).

3.4 Impact on Families and Carers

Caregiver Burden and Family Dynamics
Young adults may feel frustrated by perceived parental overprotection or reluctant to admit struggling for fear of disappointing family expectations of independence. For young adults with severe asthma requiring more intensive support, family caregivers experience considerable burden. This includes practical demands of managing appointments and medications, emotional stress from witnessing attacks, sleep disruption from nighttime symptoms, and hypervigilance about potential triggers.

Financial and Practical Challenges
Families face substantial practical and financial challenges in supporting young adults with asthma. These include the costs of specialist equipment, potential home modifications to reduce triggers (such as allergen-proof bedding, air purifiers, and dehumidifiers), travel to appointments, and time off work to provide support during exacerbations (Citizens Advice, 2025).

Support Needs
Support groups, both online and in-person, can help families connect with others facing similar challenges and reduce feelings of isolation (Asthma + Lung UK, 2025). Healthcare professionals should recognise and address family dynamics and support needs as part of holistic, person-centred asthma care.

Section 4
Evidence-Based Treatment and Management

4.1 NHS Treatment Pathways

Primary Care Interventions
GPs and practice nurses provide initial diagnosis through spirometry, prescribe appropriate medications, deliver inhaler technique training, and conduct annual asthma reviews (NICE, 2025). These reviews assess symptom control, medication adherence, and trigger identification, representing crucial opportunities to prevent exacerbations.

Secondary and Tertiary Care Options
Secondary care offers advanced diagnostic testing including bronchial challenge tests, comprehensive allergy testing, and exhaled nitric oxide measurements (British Thoracic Society, 2025). For the 5-10% with severe asthma, tertiary specialist centres provide access to biological medications and comprehensive multidisciplinary assessment.

Multidisciplinary Team Approaches

Optimal asthma care involves collaborative working between GPs, respiratory specialists, asthma nurses, pharmacists, physiotherapists, clinical psychologists, and dietitians (NHS England, 2025). This holistic approach recognised that effective management extends beyond prescribing medication to address psycho**logical, social, and lifestyle factors.**

4.2 Medical Interventions

Pharmacological Treatments
Relievers: Short-acting beta-agonists (SABAs) like salbutamol provide rapid symptom relief. Needing relievers more than three times weekly indicates poor control requiring preventer escalation (Global Initiative for Asthma, 2024).

Preventers: Inhaled corticosteroids (ICS) form the cornerstone of management, reducing airway inflammation when taken regularly. Daily adherence is crucial despite the absence of immediate symptom relief (British Thoracic Society, 2025).

Biological therapies: For severe allergic or eosinophilic asthma, targeted injectable treatments like omalizumab, mepolizumab, and dupilumab significantly reduce exacerbations in carefully selected patients (Royal College of Physicians, 2025).

Image source: iStockPhoto.com

4.3 Non-Medical Interventions

Lifestyle Modifications Evidence-based

lifestyle changes include smoking cessation, weight management (5-10% loss significantly improves control), trigger avoidance through allergen reduction measures, and regular physical activity which improves lung function and overall health (Boulet & Franssen, 2025).
Psychological Therapies
Cognitive behavioural therapy (CBT) effectively addresses asthma-related anxiety and improves medication adherence. Mindfulness-based interventions show promise for stress management, though they complement rather than replace conventional treatment (Ritz & Trueba, 2023).

Evidence-Based Complementary Approaches

Breathing exercises and yoga may improve quality of life, though they do not replace medication. Most complementary therapies including acupuncture and herbal remedies lack convincing evidence.

4.4 Treatment Effectiveness

Evidence Base and NICE Guidelines

NICE guideline NG80 (2025) provides comprehensive evidence-based recommendations demonstrating that inhaled corticosteroids reduce exacerbations by 50% and hospitalisations by 90%, combination ICS/LABA therapy improves control more effectively than ICS alone, and personalized asthma action plans reduce hospitalizations by 40% and emergency visits by 35% (British Thoracic Society, 2025).

Success Rates and Limitations

Approximately 50% have poorly controlled symptoms, largely due to suboptimal adherence (only 50% of young adults take preventers as prescribed) and poor inhaler technique (70% use inhalers incorrectly), rather than treatment failure (Levy et al., 2025).
Approximately 5-10% have genuinely treatment-resistant severe asthma requiring specialist management. Long-term high-dose corticosteroids can cause side effects, including weight gain and reduced bone density, though risks are lower with inhaled formulations (NICE, 2025).

5.1 UK Model: The Comprehensive Model for Personalised Care

Description

The Comprehensive Model for Personalised Care, launched by NHS England in 2019 as part of the NHS Long Term Plan, represents a fundamental shift toward care tailored to individual needs, preferences, and circumstances (NHS England, 2019).

Key Components and Application to Asthma

1. Shared Decision Making

Young adults and clinicians jointly decide treatments, discussing medication options, side effects, and lifestyle fit. For asthma, this means collaborative conversations about inhaler types, preventer regimens, and treatment intensity balancing effectiveness with daily life realities (Elwyn et al., 2024).

2. Personalised Care and Support Planning

Co-produced plans addressing what matters to young adults, maintaining fitness, managing work, reducing anxiety about attacks. Plans specify clinical management plus psychological support, workplace adjustments, and lifestyle modifications (Coulter et al., 2025).

3. Enabling Choice

Young adults access care through preferred channels (face-to-face, telephone, video, digital apps), choose convenient appointment times, and select specialist providers where appropriate.

4. Social Prescribing

Link workers connect young adults to community resources, exercise programmes, stress management courses, housing advocacy, peer support, addressing factors beyond medical management (Polley et al., 2025).

5. Supported Self-Management

Structured education programmes, digital tools (smart inhalers, symptom tracking apps), peer mentoring, and health coaching build knowledge, skills, and confidence for effective self-management (Gibson et al., 2025).

6. Personal Health Budgets

For severe complex asthma, personalised budgets enable flexible support purchasing, though this applies to relatively few young adults.

Critical Evaluation

Strengths

Evidence demonstrates personalised care improves clinical outcomes, patient experience, and self-management capability (Coulter & Oldham, 2024). The model's emphasis on autonomy, choice, and flexibility aligns with young adult developmental needs (Sawyer et al., 2024). Its comprehensiveness addresses multiple barriers simultaneously.

Limitations

The approach requires substantial culture change, workforce training, and resources that overstretched services struggle to provide. The model assumes patients want active involvement, potentially overlooking diverse preferences and health literacy barriers (Peek et al., 2025).

5.2 UK Model: Social Prescribing

Description and Theoretical Underpinnings

Social prescribing connects people to non-clinical community support, recognising that health is profoundly determined by social factors including relationships, meaningful activity, housing, and employment (Polley et al., 2025).

Key Components and Application to Asthma

Identification and Referral: GPs identify young adults who might benefit – those experiencing anxiety about asthma, social isolation, obesity complicating management, stress-triggered exacerbations, or poor housing worsening symptoms (Asthma + Lung UK, 2025).

Link Worker Support: Non-clinical link workers conduct extended holistic conversations exploring how asthma affects daily life, work, relationships, and wellbeing. They collaboratively identify priorities and co-produce plans connecting to community resources (Dayson et al., 2025).

Community Connections: Link workers connect young adults to diverse assets including respiratory exercise programmes building fitness confidence, weight management programmes, anxiety management courses, housing advocacy for damp accommodation, employment support for workplace issues, smoking cessation services, and social groups addressing isolation (Dogra et al., 2025).

Critical Evaluation

Strengths: Social prescribing recognises that medical interventions alone cannot optimise health when outcomes are influenced by social circumstances, stress, isolation, and environmental factors. Evidence indicates improved well-being, reduced anxiety, and increased patient activation (Dayson et al., 2025). Qualitative research shows high satisfaction, with participants feeling heard and supported in ways that clinical consultations rarely achieve.

Limitations: Evidence base remains limited with methodological weaknesses and mixed cost-effectiveness results (Bickerdike et al., 2025). Implementation quality varies, with inadequate link worker capacity, insufficient training, and uneven community asset availability particularly in deprived areas. The approach risks shifting costs from NHS to underfunded voluntary sector and potentially medicalises social issues whilst failing to address root structural causes of health inequalities (Morse et al., 2025).

5.3 Comparative Analysis

Similarities: Both models emphasize person-centeredness, holistic perspectives, moving beyond medical solutions, asset-based approaches, empowerment, and collaborative working across sectors (NHS England, 2019).
Differences: The Comprehensive Model provides overarching framework spanning clinical and non-clinical domains with system-level infrastructure. Social prescribing represents one specific component focused on community connections through dedicated link workers. The Comprehensive Model addresses both clinical decisions and wider factors; social prescribing specifically targets non-medical needs (Dayson et al., 2025).

Integration: For young adults with asthma, integration means: practice systems identifying poorly controlled asthma; personalised assessments combining clinical evaluation with holistic exploration; shared decision-making about treatments; social prescribing referrals addressing wider determinants; supported self-management through education and digital tools; and coordinated follow-up between clinical teams and link workers. This integrated approach acknowledges asthma exists within complex lives where medical management, mental health, relationships, work, and housing interconnect, requiring holistic support spanning healthcare and community (Sawyer et al., 2025).

Section 6
Policy and Political Context

6.1 National Policy Framework

NHS Long Term Plan
The NHS Long Term Plan (2019) positions respiratory disease, including asthma, as a clinical priority, committing to expand personalised care approaches, deploy over 1,000 social prescribing link workers, and implement integrated care models coordinating services across primary, secondary, and community settings (NHS England, 2019).

NICE Guidelines
NICE guideline NG80 (2025) provides comprehensive evidence-based recommendations including diagnostic criteria using objective testing, stepwise pharmacological management starting with inhaled corticosteroids, regular structured reviews using validated control assessments, personalised asthma action plan provision, and inhaler technique checking at every opportunity (NICE, 2025)

Public Health and DHSC Initiatives
The Office for Health Improvement and Disparities lead prevention strategies addressing air quality, tobacco control, healthy weight programmes, and housing quality standards tackling triggers like damp and Mold (OHID, 2024). The National Review of Asthma Deaths (2024) identified systemic failures including inadequate monitoring and poor patient education, driving quality improvement initiatives (Royal College of Physicians, 2024).

6.2 Local Implementation

Integrated Care Systems (ICS)
Since 2022, 42 Integrated Care Systems coordinate health and care services across England, developing respiratory strategies including asthma care pathway coordination, commissioning community respiratory services, implementing standardised primary care reviews, and targeting resources toward populations with poorest outcomes (NHS England, 2022).

Local Authority and Community Initiatives
Community innovations include respiratory hubs providing accessible specialist support, pharmacy-led reviews increasing access for working young adults, peer support programmes, and digital health pilots testing remote monitoring (Asthma + Lung UK, 2025).

Health Inequalities Programmes
Targeted initiatives address documented disparities through culturally appropriate education for minority ethnic communities, outreach services engaging deprived populations, interpreting services, and financial support for prescriptions. The Core20PLUS5 framework identifies the most deprived 20% plus locally identified groups requiring focused intervention (NHS England, 2022).

6.3 Impact on Service Delivery

How Policies Inform Practice

National policies translate into practice through NICE guidelines informing local protocols and electronic health record systems, Quality and Outcomes Framework indicators incentivising GP practices to achieve care standards, commissioning frameworks ensuring evidence-based service specifications, and NHS Long Term Plan commitments driving investment in personalised care infrastructure (NHS England, 2019)

Barriers to Implementation
Significant barriers exist including workforce pressures limiting comprehensive reviews, young adults missing appointments due to work/study commitments or perceiving themselves healthy between exacerbations, health literacy variations affecting self-management engagement, digital exclusion preventing access to remote services, fragmented IT systems hindering information sharing, and postcode lottery in service availability and quality (Levy et al., 2025).

Successful Initiatives
Effective implementations include East London's integrated pathway reducing admissions by 30% through systematic case-finding and enhanced support (Karu et al., 2024), Manchester's community respiratory hub improving outcomes whilst reducing secondary care demand, Leicester's culturally tailored education for South Asian communities demonstrating improved self-management (Neuville et al., 2024), and digital pilots using smart inhalers showing promising young adult engagement (Blakey et al., 2024).

Gaps and Areas for Development
Significant gaps remain: only 50% of individuals possess written asthma action plans, despite evidence of their effectiveness (Asthma + Lung UK, 2025); young adult-specific services are scarce; mental health integration is inadequate, given the high prevalence of anxiety; occupational health linkages are weak; and air quality improvement requires acceleration.

Section 7
Person-Centred Care and Recommendations

7.1 Person-Centred Care Approaches

Shared Decision-Making
Effective asthma management requires collaborative partnerships where clinicians and young adults jointly make treatment decisions based on clinical evidence and personal preferences (Elwyn et al., 2025). Conversations should address medication options, side effects, lifestyle implications, and respect choices about treatment intensity.

Personalised Care Planning
Personalised care planning starts with "what matters to you?" Co-produced plans address clinical control alongside maintaining fitness, managing work demands, reducing anxiety, and supporting life goals (Coulter et al., 2025). Plans incorporate personalised asthma action plans, specify shared responsibilities, and include regular reviews adjusting approaches as circumstances evolve (NHS England, 2025).

Patient Activation and Empowerment
Building young adults' knowledge, skills, confidence, and motivation involve structured education about asthma mechanisms and medications, skills training in inhaler technique and symptom recognition, confidence-building through supported self-management, and motivation enhancement through goal setting (Hibbard & Gilburt, 2025).

7.2 Self-Management Support

Education and Health Literacy
Comprehensive asthma education through structured group programmes, one-to-one consultations, online modules, and "teach-back" methods significantly improves outcomes. Clear language, visual aids, and repeated reinforcement ensure accessibility for all literacy levels (NICE, 2025).

Technology and Digital Health Solutions

Digital innovations particularly suit young adults including smart inhalers tracking usage with adherence reminders, symptom tracking apps enabling pattern recognition, telemedicine platforms offering convenient consultations, online peer communities, and AI algorithms predicting exacerbations (Blakey et al., 2025).

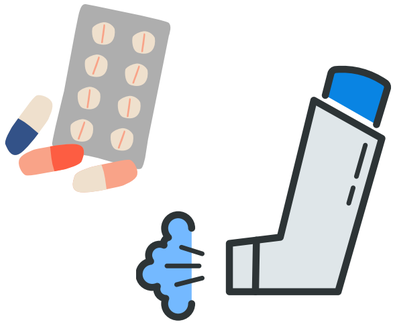

Image source: iStockPhoto.com

7.3 End of Life Care Considerations

Rare cases of progressive unresponsive asthma may require palliative approaches focusing on breathlessness management through opioids and anxiolytics, psychological support, and quality of life optimisation (British Thoracic Society, 2025).

7.4 Key Recommendations for Improvement

For Healthcare Professionals

- Prioritise inhaler technique assessment at every encounter, the commonest remediable cause of poor control (NICE, 2025)
- Ensure all young adults possess written personalised asthma action plans.
- Screen routinely for anxiety and depression given high prevalence.

For Policymakers

- Sustain NHS Long Term Plan commitments with adequate resourcing (NHS England, 2019)
- Accelerate air quality improvement given profound respiratory health impact.
- Invest in prevention including smoking cessation, healthy weight programmes, and housing quality improvement.

For Service Commissioners

- Commission integrated respiratory pathways coordinating primary, secondary, and mental health services (Ham & Murray, 2025)
- Ensure adequate specialist severe asthma capacity including biological therapy access.
- Fund social prescribing link workers connecting young adults to community resources.

For Research and Development

- Investigate strategies improving young adult engagement and medication adherence.
- Research digital health solution effectiveness including smart inhalers and AI prediction.
- Conduct economic analyses demonstrating prevention initiative return on investment (Asthma + Lung UK, 2025)

Conclusion

Asthma is a highly manageable long-term condition, yet it continues to result in significant preventable morbidity and mortality across the UK. While evidence confirms that optimal management can prevent the majority of asthma-related suffering and deaths (Asthma + Lung UK, 2025), systemic failures persist.
These are evidenced by three daily deaths, high emergency admission rates, and the fact that only half of patients receive care that meets national standards (NICE, 2025). Closing this implementation gap requires healthcare systems to prioritise the elimination of inequalities and the adoption of person-centred approaches.
Empowering patients, particularly young adults, to engage in and advocate for their own care is a critical component of transforming these outcomes and enabling individuals to live without restriction.

References

Safety and Effectiveness of Switching Biologics in Managing
Severe Asthma Patients [Corrigendum]. Journal of asthma and allergy, 18(1), pp. 1253-1254.

Álvarez-Gutiérrez, F. J. et al., 2025. Consensus document for Severe Asthma. 2025 Update. Open respiratory archives, 7(4), p. 100486.

Anon., 2024. Asthma. [Online]

Available at: https://www.who.int

[Accessed 10 November 2025].

Anon., 2024. Asthma: diagnosis, monitoring and chronic asthma management (BTS, NICE, SIGN). [Online]

Available at: https://www.nice.org.uk

[Accessed 7 November 2025].

Anon., 2024. Understanding and addressing the health risks of damp and mould in the home. [Online]

Available at: https://www.gov.uk/government

[Accessed 10 November 2025].

Anon., 2024. WHO publishes new tobacco and asthma knowledge summary. [Online]

Available at: https://www.who.int

[Accessed 10 November 2025].

Anon., 2025. Asthma. [Online]

Available at: https://www.nhs.uk

[Accessed 6 Novembet 2025].

Anon., 2025. Asthma and you. [Online]

Available at: https://www.who.int

[Accessed 10 November 2025].

Anon., 2025. Asthma in the UK: 2025 Statistics and Treatment Trends. [Online]

Available at: https://www.htworld.co.uk

[Accessed 6 November 2025].

Anon., 2025. Asthma: How common is it?. [Online]

Available at: https://cks.nice.org.uk

[Accessed 6 November 2025].

Anon., 2025. BTS/NICE/SIGN - Joint Asthma Guideline Webinars. [Online]

Available at: https://www.brit-thoracic.org.uk

[Accessed 7 November 2025].

Anon., 2025. Chronic respiratory diseases programme. [Online]

Available at: https://www.who.int

[Accessed 10 November 2025].

Anon., 2025. Diagnosing asthma. [Online]

Available at: https://www.asthmaandlung.org.uk

[Accessed 6 November 2025].

Anon., 2025. Estimating the morbidity from air pollution and its economic costs. [Online]

Available at: https://www.who.int

[Accessed 10 November 2025].

Anon., 2025. Global Alliance against Chronic Respiratory Diseases (GARD). [Online]

Available at: https://www.who.int

[Accessed 10 November 2025].

Anon., 2025. Managing asthma. [Online]

Available at: https://www.asthmaandlung.org.uk

[Accessed 6 November 2025].

Anon., 2025. Mometasone inhalers. [Online]

Available at: https://www.nhs.uk

[Accessed 6 November 2025].

Anon., 2025. Our asthma reports. [Online]

Available at: https://www.asthmaandlung.org.uk

[Accessed 6 November 2025].

Anon., 2025. RightCare asthma scenario. [Online]

Available at: https://www.england.nhs.uk

[Accessed 6 November 2025].

Anon., 2025. Short-term exposure to relative humidity and lung health in early adolescents. [Online]
Available at: https://journals.lww.com

[Accessed 10 November 2025].

Anon., 2025. Transforming air pollution and health research into action in low- and middle-income countries. [Online]
Available at: https://journals.lww.com

[Accessed 10 November 2025].

Anon., 2025. Transitioning from climate ambitions to climate actions through public health policy initiatives. [Online]
Available at: https://journals.lww.com

[Accessed 10 November 2025].

Anon., 2025. What is Asthma?. [Online]

Available at: https://www.asthmaandlung.org.uk

[Accessed 6 November 2025].

Anon., 2025. Working together to make asthma a global health priority. [Online]

Available at: https://www.who.int

[Accessed 10 November 2025].

Anon., 2025. World Asthma Day: WHO calls for better education to empower people living with asthma. [Online]
Available at: https://www.who.int

[Accessed 10 November 2025].

Cathy E Lloyd, T. H., 2012. Long-term conditions [electronic resource] : challenges in health and social care, Los Angeles, [Calif.] ;; London :: SAGE.

Chiauzzi, E., Rodarte, C. & DasMahapatra, P., 2015-04-09. BMC medicine. Patient-centered activity monitoring in the self-management of chronic health conditions, 13(1), pp. 77-77,.

Coulter, A. et al., 2015-03-03. Cochrane database of systematic reviews. Personalised care planning for adults with chronic or long-term health conditions, 2015(3), pp. CD010523-CD010523,.

Gately, C., Rogers, A. & Sanders, C., 2007. Social science & medicine (1982). Re-thinking the relationship between long-term condition self-management education and the utilisation of health services, 65(5), pp. 934-945,.

Jessica Tay, R. M. T. L. C. S. T. B. C. C. A. D. L. M.-A. T.-A. C. B. B. F. R. M. B. F. R. A., 2025. British Society for Allergy and Immunology Abstracts From the 2025 Annual Conference. Clinical and Experimental Allergy, 55(10), pp. Pages 976-1048. Kwok, C. et al., 2025. Impact of a standardized emergency department asthma care pathway on
health services utilization. Allergy, asthma, and clinical immunology, 21(1), pp. 27-9.

Kwon, S. Y. et al., 2025. Impact of lifestyle factors on adult-onset asthma in genetically high-risk individuals. Journal of global health, 15(1), p. 04147.

Lokaj-Berisha, V. & Gacaferri Lumezi, B., 2025. Increased thyroxine levels of patients with allergic rhinitis. Scientific reports, 15(1), pp. 2667-10.

Lyu, Y. et al., 2025. Non-invasive acoustic classification of adult asthma using an XGBoost model with vocal biomarkers. Scientific reports, 15(1), pp. 28682-28.

Maryam Hassani, J. B. S. D. Y., 2025. Systematic Review of Electronic Monitoring to Increase Medication Adherence in Children With Asthma. Pediatric Pulmology, 60(10), p. e71355.

O'Keefe, A., Kim, H., Connors, L. & Ling, L., 2025. Asthma. Allergy, asthma, and clinical immunology, 20(1), p. 1.

Pierluigi Paggiaro, C. C. G. P. E. N. M. D. G. E. H. F. B. G. W. C. F. P., 2025. Digital Innovation in Asthma Management in Italy: Results From the “Confronting Asthma Survey”. Clinical and Translational Allergy, 15(10), p. e70109. Pistocchini, E. et al., 2025. Corrigendum to “Clinical efficacy of inhaled corticosteroids in
equine asthma: A meta-analysis and number needed to treat” [Pulm. Pharmacol. Therapeut. (88), March 2025, 102342]. Pulmonary pharmacology & therapeutics, 88(1), p. 102343. Rabe, K. F. et al., 2004-07. Journal of allergy and clinical immunology. Worldwide severity and
control of asthma in children and adults: the global asthma insights and reality surveys, 14(1), pp. 40-47,. Wang, T. et al., 2025. Glucagon-like Peptide-1 Receptor Agonists in Asthma Exacerbations: An
Application of High-Dimensional Iterative Causal Forest to Identify Subgroups. Pharmacoepidemiology and drug safety, 34(8), pp. e70192-n/a.

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