

Asthma: Management and care in the United Kingdom-a primary care perspective

Programme: MSc Public Health and Social Care in Practice

Module: Community Care and Management of Longer-term Conditions

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Lecturer: Muhammed Khan

Assignment Title: Component 2 (Individual Presentation)

Target audience: Practice nurses working in primary care settings involved in Asthma monitoring, patient education, and inhaler technique support

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Overview of Asthma

Asthma is a chronic inflammation of the airways (Olsthoorn, et al., 2025).

It causes bronchial tubes to become narrow, which makes breathing difficult.

The disorder is characterised by fluctuating airflow constriction which is reversible (Savin, et al., 2023).

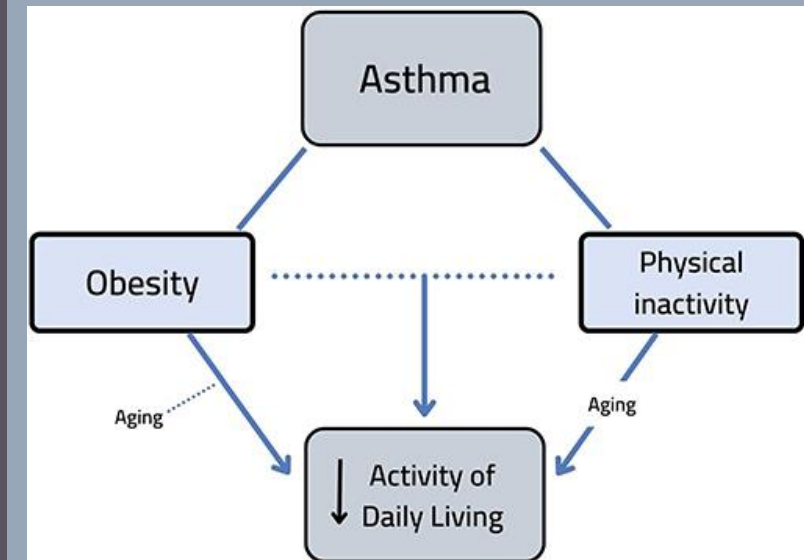
The symptoms may vary with time and intensity.

Asthma is a widespread chronic condition which has a considerable number of people in the UK (NHS, 2026).



Symptoms of Asthma

- Pain during breathing in and out or during rest (Pelgröm, et al., 2025).
- Breathing with a wheezing nose (NHS, 2026).
- Tightness or pain in the chest.
- Coughing, which is chronic and usually becomes more severe at night.
- The symptoms are different in frequency and intensity.
- May worsen with triggers such as allergens or cold air (Gohal, et al., 2024).
- Can have an impact on sleep and functioning.



(Alhammad and Alwadeai, 2022)

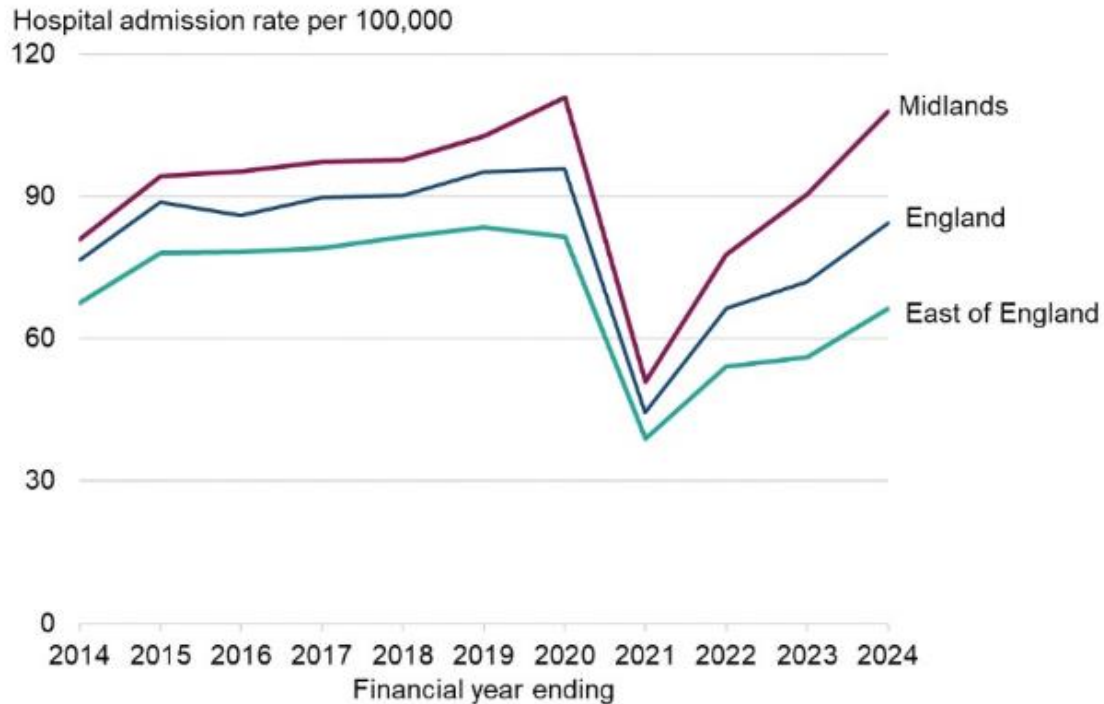
Aetiology and Causes

- **Persistent airway inflammation and sensitivity (Al-Shaikhly, et al., 2022).**
- **Airways are responsive to external and internal provocations.**
- **Typical triggers are allergens, pollution and infections.**
- **Susceptibility is enhanced by genetic factors.**
- **Lifestyle choices: Physical inactivity and smoking (Alhammad and Alwadeai, 2022).**
- **Exposure in the environment is important.**
- **The development of diseases is a result of the interaction of various factors.**

Types of Asthma

- Allergic asthma is caused by allergens such as pollen or dust (Schwab and Poole, 2023).
- Non-specific asthma without evident allergy.
- Occupational asthma due to exposure in the workplace (Tsui, et al., 2022).
- During or following physical exercise: Exercise-induced asthma (Ora, et al., 2024).
- Types of symptoms and triggers vary.
- The degree of severity is different in individuals.
- Needs special management strategies.

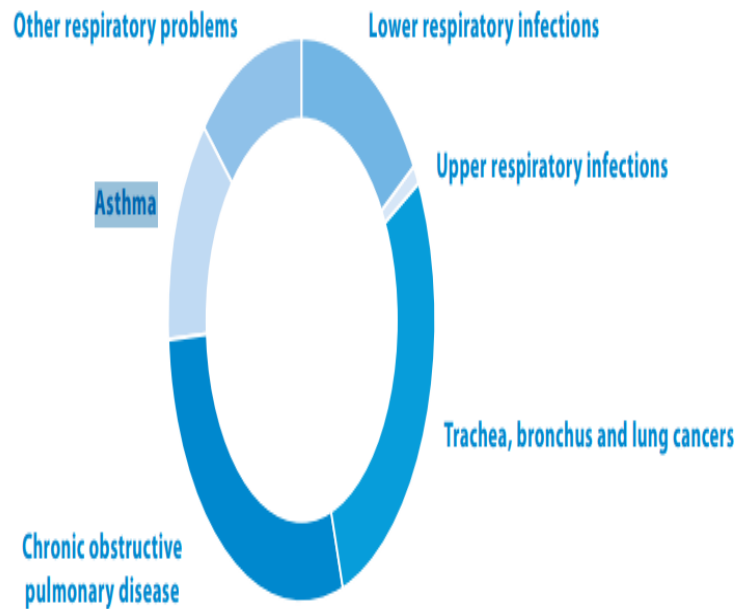
Prevalence (UK and Global)



(Gov.UK, 2025)

- Approximately 262 million individuals were affected by asthma, and 455,000 deaths were caused by the disease in 2019 worldwide (WHO, 2024).
- In the UK, adult emergency hospitalisation is still an important issue in the regions because the asthma hospitalisation of adults is 120-140 per 100,000 (2014-2024) (Gov.UK, 2025).
- Surging global load through environmental and lifestyle alterations.
- Increased child and young adult prevalence.
- Known to be a major global health issue, and in the UK as well (Rabe, et al., 2023).

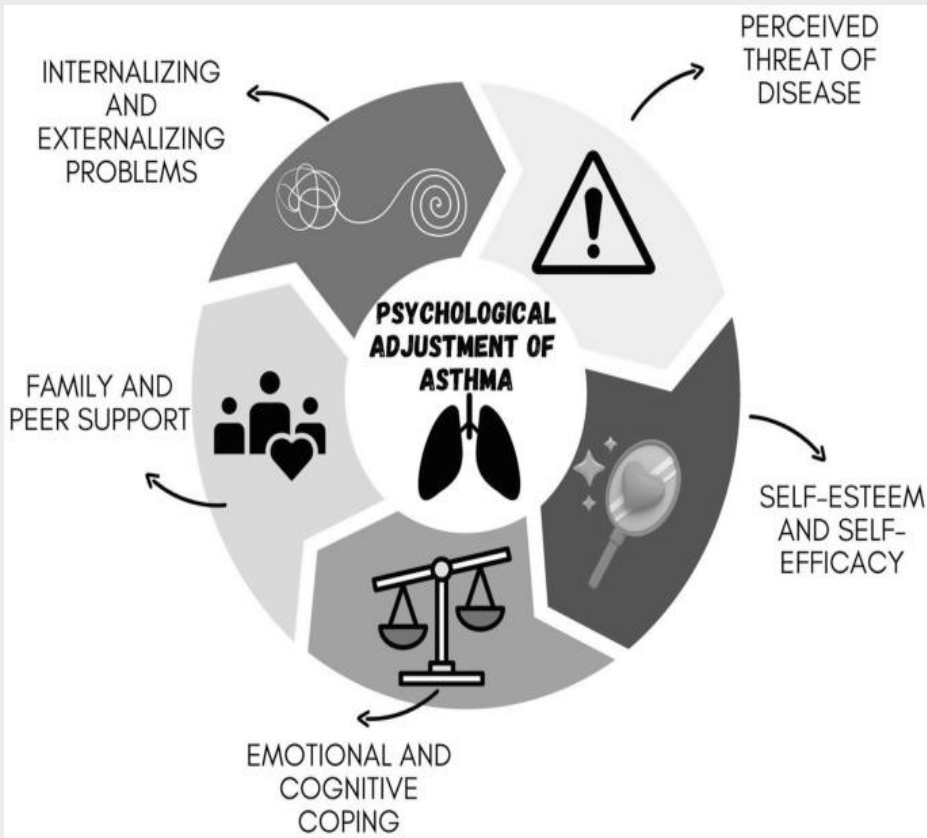
Economic Cost of Asthma



(Trueman, et al., 2026)

- **Asthma is a significant economic drain on the UK, especially for the NHS, as it costs £3 billion every year (Trueman, et al., 2026).**
- **Expenses involve medication, general care, and monitoring.**
- **7.2 million People in UK are suffering from Asthma (Gov.UK, 2025).**
- **Admissions and emergency care in hospitals raise costs (NHS, 2026).**
- **The productivity loss and the work absence are indirect costs.**
- **Increasing prevalence further strains the economy**

Social Impact of Asthma



(Pérez-Marín, et al., 2024)

- Asthma decreases the quality of life (Plaza-González, et al., 2022).
- Restricts mobility and day-to-day activities.
- Causes absence from school and work (Pérez-Marín, et al., 2024) .
- Affects social participation and independence.
- May cause emotional stress and anxiety (Licari, et al., 2022).
- Impacts both patients and family members.
- A persisting condition that needs continuous modification.

Diagnosis and First Assessment

- The diagnosis starts with the patient's history (Armeftis, et al., 2023).
- Symptom and trigger pattern assessment.
- Spirometry to test lung function (Oppenheimer, et al., 2023).
- Peak flow measurement aids in monitoring.
- Triggers are identified through testing of allergies.
- Severity is used to determine the treatment (Rabe, et al., 2023).
- Early detection enhances the prognosis.

❖ NICE, BTS, and SIGN provide the guidelines for the management of asthma in the UK (Gruffydd-Jones, 2025).

❖ Progressive course depending on the severity of symptoms.

❖ Emphasis on control and prevention.

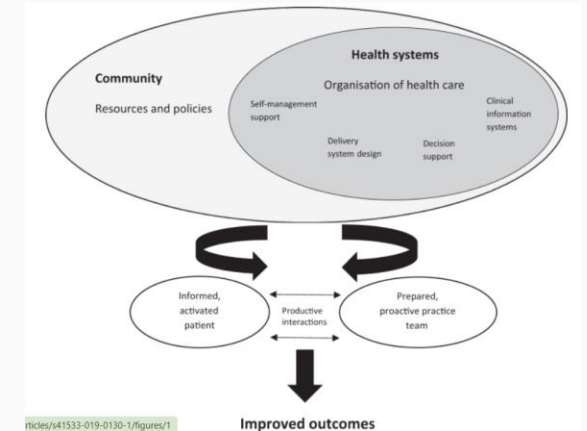
❖ Frequent checkups and medication evaluation (NHS, 2022).

❖ Engagement of patients in decision-making.

❖ Evidence-based practice enhances results (NHS, 2026).

UK Guidelines on Management

- **Chronic Care Model facilitates long-term disease management (Zheng, et al., 2019).**
- **Emphasis on pro-active and well-planned health care delivery (Pinnock, et al., 2023).**
- **Patient education helps comprehend the disease.**
- **Clinical Information Systems facilitate disease monitoring.**
- **Community resources help develop social support systems.**
- **Encourages collaborative and evidence-based treatment strategies.**



Zheng, et al., 2019

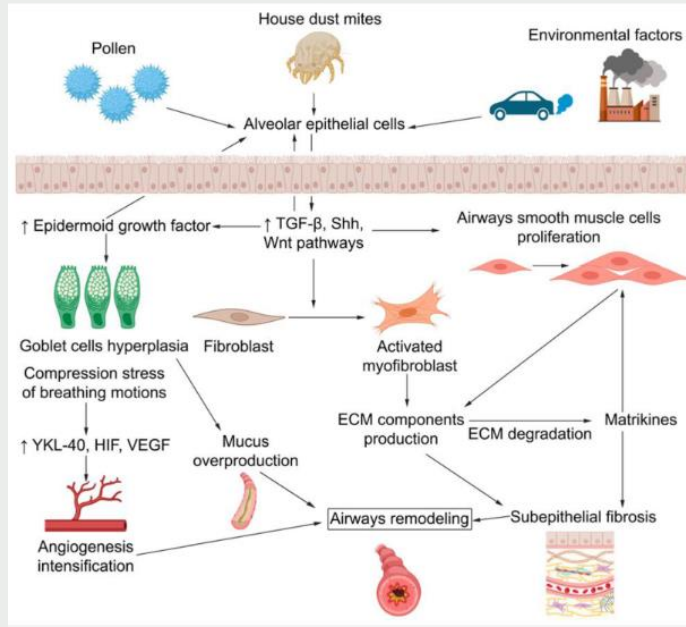
Models and Frameworks of Care

Treatment of Asthma

- **Inhalers: Reliever inhalers give rapid relief of symptoms (Byrne, et al., 2023).**
- **Preventer inhalers decrease inflammation of the airways.**
- **Combination inhaler therapy on the basis of the needs (Gibson, et al., 2023).**
- **Triggers prevention contributes to control.**
- **Respiratory health is enhanced with lifestyle changes.**
- **Individually designed treatment plans.**

Long-Term Management

- Follow-up control is maintained by regular follow-up (Lu, et al., 2025).
- Following up on symptoms and lung performance.
- Inhaler education (Byrne, et al., 2023).
- Adherence is enhanced by self-management plans.
- Practice nurses aid in ongoing care.
- Complications can be avoided by early intervention (Creese, et al., 2022).

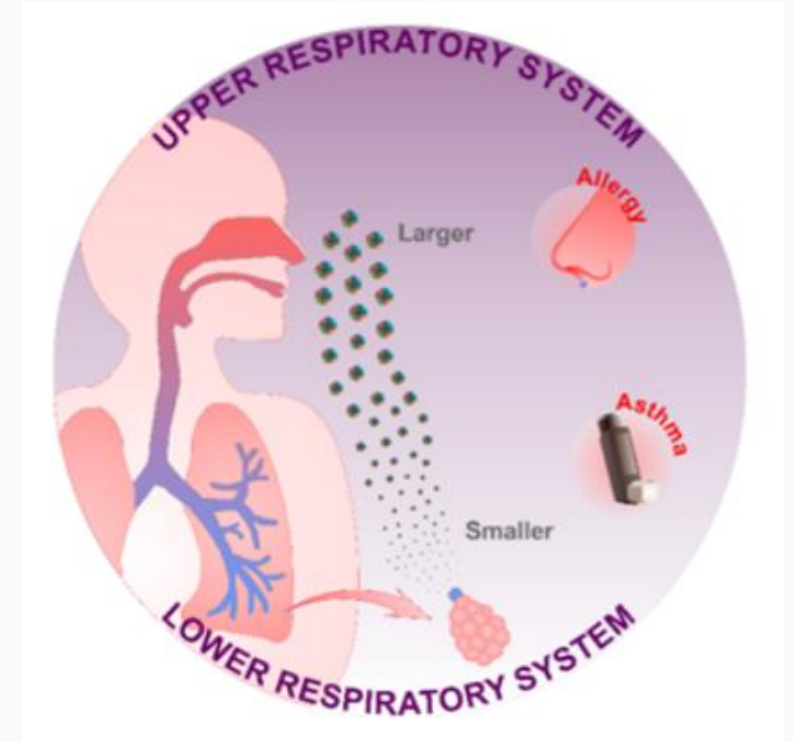


(Savin, et al., 2023)

Comorbidities

- **Asthma is usually associated with allergic rhinitis (Schwab and Poole, 2023).**
- **Obesity enhances complications and severity.**
- **Symptom control is influenced by anxiety and depression.**
- **Aggravations are caused by respiratory infections (Sharma, et al., 2022).**
- **Holistic care is needed to achieve improved results.**

- ❑ Do not get in contact with allergens and pollutants (Agache, et al., 2024).
- ❑ Quitting smoking lessens the danger.
- ❑ Early diagnosis aids in early intervention.
- ❑ Awareness is encouraged through health education (Sadek Attalla, et al., 2022).
- ❑ Vaccination is used to prevent infections.
- ❑ Prevention is enhanced by the use of public health strategies.



Gov.UK. (2025)

Prevention of Asthma

Competencies, Values and Behaviours

- ❖ Communication enhances comprehension (Guzenda, et al., 2025).
- ❖ Empathy helps to promote emotional well-being.
- ❖ Cultural competence brings about inclusive care (Piątkowska, et al., 2025).
- ❖ Education promotes self-management.
- ❖ Ethics among professionals establishes trust in the patient.
- ❖ Inadequate communication minimises compliance and results (Canny, et al., 2023).

Individualised Care Model (Recommendations)

- Patient empowerment in shared decision making requires patients to play an active role in deciding about their treatments (Piątkowska, et al., 2025).
- Personalised care planning takes into account individual needs and preferences.
- Self-management support enables patients to monitor and control their condition (McClatchey, et al., 2026)
- Social prescribing links patients to relevant local services for enhanced wellbeing
- Peer support helps patients feel confident and understand more about asthma
- Personal health budget provides more options for choosing appropriate care services
- Enhances patient autonomy and responsibility regarding their conditions
- Increases patient satisfaction and leads to better health results

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