Improving patient outcomes in severe asthma

THE NEED FOR NATIONAL REFERRAL CRITERIA

AstraZeneca commissioned the production of this non-promotional disease awareness article and had full editorial control of the final content

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Asthma: by the numbers

- **5.4 million**: Number of people living with asthma in the UK¹

- **1,320**: Number of deaths attributed to asthma in 2017 in England and Wales²

- **200,000**: Nearly 4 per cent of UK asthma patients have severe asthma¹

- **67%**: Percentage of deaths due to asthma that have been identified as preventable³

- **<1,000**: Patients with severe asthma are included on the UK Severe Asthma Registry (as of 01 May 2018)¹

- **3**: Asthma-related deaths on average each day, two of which may be potentially preventable*²,³

*The National Review of Asthma Deaths (NRAD) investigated the deaths of 195 asthma patients
What does it mean to live with severe asthma?

Improvements in the ways of managing and treating severe asthma are needed urgently

There are 5.4 million people in the UK with asthma and approximately 3.6 per cent – about 200,000 individuals – have severe asthma. People with severe asthma live with daily symptoms and frequent asthma attacks, often requiring hospitalisation, more so than people with a milder form of the disease.

Severe asthma is unpredictable and difficult to diagnose. Because of this, patients can experience significant delays, sometimes years, before they are given a formal diagnosis and receive the expert care they need. In 2014, The National Review of Asthma Deaths revealed that delays in patient referral to specialist severe asthma services are a potentially avoidable cause of asthma death. Five years on, these delays still exist and remain a reason for poor patient outcomes.

Some of the current challenges people with severe asthma face in accessing the care they deserve, along with recommendations to address the unmet need of an efficient severe asthma patient referral pathway, are addressed in this article. Voices of people with severe asthma are quoted throughout. One patient said: “It’s like someone coming up behind you and putting a bag over your head and tightening it. It is that sudden – shocking and panic-inducing.”

Severe asthma is a distinct condition
Asthma UK describes severe asthma as “a type of asthma that does not respond to the current treatment that is readily available” and is “characterised by uncontrolled symptoms of wheezing, shortness of breath, and cough, which result in a high burden of symptoms and attacks, often leading to admission to hospital and even death.”

A survey of 869 adult patients carried out across five European countries in 2015 found that “severe asthma affected a quarter of the respondents daily, with 71 per cent feeling the negative effects weekly.”

Aspects of people’s lives most affected by severe asthma, as identified in the Uncovering Asthma survey in 2015, include: sport and physical activity (50 per cent), working life (46 per cent), social life (27 per cent), family life (27 per cent) and sex life (18-29 per cent).

Patients with severe asthma respond poorly to standard treatments and their asthma may not be controlled despite good adherence and regular systemic corticosteroids. Asthma attacks can place a substantial amount of strain on healthcare resources and can result in death. As another patient explained: “I was going through three ambulance call-outs a week… the advice was always the same: take these steroids, and you’ll be fine.”
The reality of severe asthma care

Patient referrals and specialist treatments may hold the key to better outcomes

The 2017 NHS England Service Specification for Severe Asthma defined the expected standard of care that people with severe asthma should receive.\textsuperscript{9,12} The specification includes brief guidance for referral whereby people suspected of having severe asthma are referred by their GP or local hospital, to a specialist severe asthma centre.\textsuperscript{10,12}

Within the severe asthma centre, it is recommended that patients are assessed by an expert healthcare team (which could include consultant respiratory physicians, clinical nurse specialists, radiologists, physiotherapists, voice therapists, dieticians, pharmacists and clinical health psychologists) to confirm if they have severe asthma.\textsuperscript{9,12}

Once patients receive a formal severe asthma diagnosis appropriate care and treatment can be initiated.

Two roundtable meetings, organised by AstraZeneca, and attended by healthcare professionals and organisations representing the needs of people living with severe asthma, as well as interviews with clinicians conducted by Asthma UK in 2018\textsuperscript{4} have indicated that the quality of care for some people living with severe asthma still falls short of the service specification expectations.\textsuperscript{1,3}

Echoing the findings identified by The National Review of Asthma Deaths, the delayed referral of patients to specialist severe asthma services results in patients waiting longer before they can access care and treatment; putting them at greater risk of poor health-related outcomes.\textsuperscript{1,3}

What are the causes of delayed referral to specialist care?

There is a lack of clear and consistent national criteria, that can support the referral of people with suspected severe asthma into specialist care, for assessment and diagnosis across the UK.\textsuperscript{1}

Without clear and consistent referral criteria, healthcare professionals that are not experienced in treating people living with severe asthma may not be aware that they can refer their patients to a severe asthma centre for specialist care and the treatments that are available.\textsuperscript{1}

What impact does delayed referral to a specialist centre have on patients and the NHS?

NHS England recognises that the costs of caring for a person with severe asthma are estimated to be 50 times more expensive than caring for those with the mildest form of controlled asthma.\textsuperscript{1,3,12} This means that the relatively small patient population of severe asthma patients makes up a large amount of the healthcare costs for asthma.\textsuperscript{1,12}

Patients who experience frequent asthma attacks treated in primary care or at A&E presentation are commonly prescribed short courses of oral corticosteroids (OCS).\textsuperscript{14} This may happen repeatedly. In addition many severe asthma patients will be receiving:

- \textbf{27\%} Social life
- \textbf{46\%} Working life
- \textbf{27\%} Family life
- \textbf{18-29\%} Sex life
- \textbf{50\%} Sport

\textbf{Figure 1: Aspects of people’s lives most affected by severe asthma, as identified in the Uncovering Asthma survey in 2015.\textsuperscript{9}}

\textbf{Figure 2: Differences in patient referral practices following admission to Accident and Emergency (A&E), as identified by Asthma UK.\textsuperscript{1}}

- \textbf{39\%} Of healthcare professionals* surveyed indicated two A&E visits in the last 12 months would prompt them to refer their patients to a specialist severe asthma centre
- \textbf{46\%} Suggested their patients could attend A&E three or four times in the last 12 months before they made a referral

*This survey included 17 difficult/severe asthma clinicians and nurses, and 12 primary and secondary care healthcare professionals.

\textbf{Patient’s voice}

“I was passed from pillar to post. I had no proper consultant until five years after the time I first went into respiratory failure and was in hospital for two weeks.”\textsuperscript{5}

\textbf{Patient’s voice}

“My consultant kept telling me it was in my head. That I had some kind of mental illness. That I only had mild asthma.”\textsuperscript{6}
long-term OCS.16,18 Due to the treatment-associated side-effects patients experience, OCS have been described as debilitating.12 These side-effects can include: diabetes, hypertension, cataracts, osteoporosis, glaucoma, skin disease, reflux oesophagitis, non-alcoholic fatty liver disease and obesity.12 Figure 3, (above) illustrates further reported impacts of OCS treatment.

Asthma UK describes treatment of severe asthma with OCS as ‘extremely toxic’ in the long term and ‘toasted’ by some patients.12 They also note that treating the side effects can become more expensive than treating the asthma symptoms.12 One study found that patients with severe asthma treated with maintenance OCS cost 43 per cent more than those not receiving maintenance OCS.13 Reflecting these concerns, the National Institute for Health and Care Excellence (NICE) updated its Asthma Quality Standard (QS25) in 2018, rationalising that access to ‘specialist care can help improve asthma control, prevent asthma attacks and reduce harmful long-term dependence on oral corticosteroids’.10

Putting it right: optimising patient referral for severe asthma

Responding to the need to improve patient care and patient outcomes, severe asthma patients, their families, and their healthcare teams, are united in raising awareness of the impact of living with severe asthma.13,14 There are national initiatives that aim to improve the experience and outcomes of people with severe asthma. These include the implementation of NICE Guidance (NG50) and NICE Quality Standard (QS25) – NG50 recommends that those diagnosing adults aged 17 or over should consider referring for a second opinion those with symptoms suggestive of asthma as well as one of a list of suggested criteria.15,16 Recent updates to QS25 reinforces this guidance, stating that “people with suspected severe asthma are referred to a specialist multidisciplinary severe asthma service”.14 The rationale for which includes the statement that “specialist care can help to improve asthma control, prevent asthma attacks and reduce harmful long-term dependence on oral corticosteroids.”10

The Royal College of Physicians’ National Asthma and COPD Audit Programme provides an important opportunity to understand how improvements to asthma care, including services and patient outcomes, can be implemented to raise the national standard of care. Where local variations in care are identified, action can be taken to implement systems that have demonstrated success in other areas.21 The British Lung Foundation Taskforce for Lung Health brings together specialists from 30 organisations representing patients, healthcare professionals, the voluntary sector and professional associations, to develop a five-year plan for improving the nation’s lung health whilst raising the public’s awareness and understanding of lung health.22,23,24

At AstraZeneca we are committed to the scientific discovery and development of new treatments that can improve the lives of people living with asthma. We understand that treatment is only part one of that story, and have therefore established PRECISION, an initiative where AstraZeneca works with healthcare teams across community and hospital settings. Where local healthcare teams demonstrate success in other areas.

To support the implementation of “best practice” severe asthma care across the UK the PRECISION initiative works in partnership with the NHS, at regional and national level, to:

1. Understand the impact of severe asthma on patients and healthcare systems including patient waiting times for referral and diagnosis, and co-ordination of care between community and hospital settings.

References


“I had been hospitalised at least six or seven more times before I was referred… it wasn’t until then that I was in high dependency that I was referred to a consultant.” 

Patien’s voice

“IMPROVING OUTCOMES”

Figure 3: Reported impact of OCS treatment on self-reported asthma patients, as identified by a UK survey17

Results from a survey conducted by Asthma UK of 1,210 people with self-reported asthma, 92.5 per cent of whom had at least two asthma attacks requiring OCS treatment in the last year or were on a daily dose of OCS.17

Figure 4: Recommendations to improve the lives of people living with asthma and severe asthma.19

Recommendation one:
A set of identifiable referral criteria for severe asthma investigations should be established to improve the efficiency and, ultimately, the quality of patient care13

Recommendation two:
A named asthma lead should be identified within every hospital to act as a lead in driving improvements across care setting13
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