Asthma UK Briefing: The UK National Review of Asthma Deaths
May 2014

Every 10 seconds someone in the UK is having a potentially life threatening asthma attack. Shockingly asthma attacks kill 3 people each day and the UK has amongst the highest death rates from asthma in Europe. Most tragically many of these deaths could be prevented.

Asthma UK's mission is to prevent asthma attacks, especially those that result in death or emergency hospitalisation. We want asthma mortality to reduce below the European average and no child to die of asthma in the UK. The equivalent of a classroom of children die every year across the UK and this cannot continue. That is why Asthma UK has worked hard in the last few years to ensure that the UK conducted a comprehensive National Review of Asthma Deaths. We wanted to learn why asthma still kills people, but most importantly, we wanted to ensure that those lessons would be acted upon swiftly and decisively. We believe it is time to end the complacency about asthma and ensure the 5.4 million people with asthma get the high quality care and support they need.

This briefing is Asthma UK's analysis of the National Review of Asthma Deaths, what we believe are the critical findings and what we think needs to be done. The full report is available for download from www.asthma.org.uk

Methodology

The National Review of Asthma Deaths (the National Review) is the first UK wide investigation into asthma deaths. It looked at deaths from asthma between 1 February 2012 and 31 January 2013. A panel of experts, including paediatricians, adult physicians, GPs, nurses, and pharmacists looked at medical records and other information relating to these deaths from doctors’ surgeries, hospitals, emergency services and coroners’ offices.

Sufficient data was made available for the panel to investigate the deaths of 195 people that died of asthma during this time. The majority of these people (61%) were between 20 and 74. Just 14% were 19 or under, and around a quarter (24%) were 75 or over. The National Review was able to estimate the severity of people’s asthma in 155 cases. Thirty nine per cent had severe asthma - that is they had been recently hospitalised by their asthma or prescribed high levels of asthma medicines - 9% had mild asthma, and nearly half (49%) had moderate asthma.

Summary of Findings

The National Review has found wide-ranging and widespread issues with the quality of asthma care amongst those who died. In particular people did not receive key elements of routine care, prescribing errors were widespread, their asthma attacks were poorly managed and people with severe asthma were not always referred to a specialist when they should have been. It identified a number of avoidable factors in relation to both the care people received, and patients and their families and environments, including recommendations about support for self-management. There were often avoidable factors in a higher percentage of people being treated in primary care compared to secondary care. Children fared worse than adults in several respects, and care fell well below expected standards in almost half of child deaths.
Detailed Findings

Overall quality of care

- The National Review found that 46% of deaths could have been avoided if patients had been better managed in the year before they died.
- The overall quality of the asthma care received by those that died was judged to reflect good practice for just 16% of people of all ages, and just 4% of children and young people (19 years old and under). Several aspects of care were well below the expected standard for 26% of people of all ages, and 46% of children and young people.
- Care was consistently poor, with only around a third of people receiving adequate routine asthma care (29%), adequate management of past asthma attacks (35%) and adequate management of their final attack (34%).
- There was room for improvement in the care received by 83% of those who died.

Prescribing

- When people’s asthma is well controlled, they should have little or no need for their reliever inhaler. The National Review says that anyone who has been given more than 12 reliever inhalers in a year should be urgently called in for review and may need a preventer inhaler. The National Review had prescribing data on reliever inhalers for 165 people. Thirty nine percent had been prescribed more than 12 reliever inhalers in the year before they died. Four per cent had been prescribed more than 50 inhalers.
- Preventer inhalers should be taken daily - in order to follow their doctor’s advice, people who have been prescribed preventer inhalers would normally need at least 12 of them a year. Of the 128 people for whom the National Review had full prescribing data on preventer inhalers, 80% were issued with fewer than 12 preventer inhalers. In addition, 5 patients were being prescribed long acting beta agonists (LABAs) without inhaled steroids. This is unlicensed and has been associated in trials with increased mortality.

Management of attacks

- Ten per cent of those that died did so within 28 days of being treated in hospital. A fifth (21%) of those that died had gone to the A&E with an asthma attack in the previous year, and more than half of these had gone had gone on at least two occasions.
- Past attacks are a clear risk factor for future attacks but more than two thirds (68%) of the people hospitalised in the month before they died didn’t get properly checked up afterwards. This suggests that hospital discharge arrangements, which should include a review by a specialist and follow up appointments, were inadequate.
- The National Review looked at a number of factors in relation to people’s final asthma attack. It identified there was one or more avoidable factors relating to the quality of the assessment made, or a delay in the patient accessing appropriate care in around a third (34%) of all patients that were treated for this attack in both primary and secondary care. It also identified one or more avoidable factors relating to delays or inappropriate management of the attack in around a third of all patients treated in both primary (32%) and secondary care (34%).
Specialist referral

- Advice from a specialist is important for people whose asthma is not responding to treatment. The National Review found that nearly a fifth (19%) of people had not been referred to a specialist when they should have been, or there had been a delay in referral.

Support for self-management

- People with asthma look after themselves for the overwhelming majority of the time so need to be supported to recognise when their symptoms are getting worse and understand what to do about it, with a check-up every year to make sure their asthma is under control. The last asthma review recorded for 135 people happened in primary care. However, many of these reviews did not include key components: only 27% had their asthma control assessed, 42% had an assessment of their medication use and 71% had an assessment of their inhaler technique. Only 111 people had a review in primary care in the year before they died.

- Less than a quarter (23%) of those that died had ever been given a written asthma action plan even though evidence shows that people who have an action plan are four times less likely to be hospitalised by asthma attacks. Nearly half (45%) died without seeking medical assistance or before emergency medical care could be provided. An action plan may have prevented this by ensuring they took appropriate action and knew when to seek help.

Avoidable factors that could have contributed to deaths

- Avoidable factors associated with routine medical care and monitoring - for example relating to the medicines people were prescribed and whether guidelines were followed - were identified by the National Review in 70% of patients of all ages and 86% of children being treated in primary care; and 29% of patients of all ages and 50% of children being treated in secondary care.

- The National Review identified avoidable factors related to the recognition of risk - for example incorrect diagnosis or a delay in recognising risk - in around half (51%) of patients of all ages and 79% children being treated in primary care; and 28% of patients of all ages and 31% of children being treated in secondary care.

- In nearly two thirds (65%) of cases the National Review identified one or more avoidable factors relating to patients, their families and their environment: for example they were exposed to smoke or smoked, they had an allergy or they didn’t take their doctors medical advice. In children and young people this rose to 93%. Poor recognition of risk of adverse outcome from asthma was a particular issue with children and young people.
What needs to be done

There can now be no doubt in anyone’s minds of the poor state of asthma care in the UK on the basis of these findings. We know from previous Asthma UK research that only 14% of people with asthma around the UK get care that’s up to standard.

We agree with the recommendations from the review. Asthma UK believes:

- We need much stronger leadership at every tier of the health system across the UK to challenge the complacency about asthma and prevent life threatening asthma attacks.

- Prescribing errors must be reduced rapidly. Regulators should increase efforts to ensure prescribers are making appropriate use of medicines and specific improvement projects on asthma medicines use should be introduced urgently. Everyone with asthma should have their medicines checked regularly, including their inhaler technique.

- Access to good quality, accessible specialist services for asthma needs to be improved dramatically for those with severe asthma and at highest risk of a fatal attack.

- Plans must be put in place to offer and implement self-management support to everyone with asthma, including a risk assessment and standardised regular asthma reviews, supported by technology to ensure best practice care for all.

- Research into treatments and care for asthma and other lung conditions is chronically underfunded versus other conditions. More investment is needed to accelerate promising developments so breakthroughs can benefit people with asthma sooner.

- The disparity in quality of care received by children and young people versus adults must asthma must be actively addressed. Efforts should be made to ensure all parents of children with asthma recognise the risks of the condition. Leadership on asthma improvement should not be completely separate between adults and children; this is especially important for those in transition between the two.

How this happens within the different systems within the UK will vary:

- In England NHS England needs to provide the strategic leadership, data and meaningful targets for asthma that have helped improve so many other aspects of healthcare. Establishing an asthma audit and infrastructure to implement the asthma chapter of the COPD and Asthma Outcomes Strategy would be important steps, alongside improvement projects for children’s asthma care and asthma prescribing for all ages.

- In Scotland the Scottish Government must endorse the Asthma Priorities document to Health Boards as a national approach to improving asthma care in Scotland and assign resources to its effective implementation.

- In Wales the Welsh Government must ensure the full and rapid implementation of all asthma elements included within the Respiratory Delivery Plan.

- In Northern Ireland the Public Health Agency needs to urgently progress the revised Respiratory Service Framework ensuring that standards and key performance Indicators are included to reflect the learning and evidence from the National Review of Asthma Deaths.
Further information

This report reinforces the need for vigilance in managing asthma. To assess risk and get tips on how to manage asthma people with asthma can take the Triple A Test: Avoid Asthma Attacks visit [http://www.asthma.org.uk/advice-the-triple-a-test](http://www.asthma.org.uk/advice-the-triple-a-test)

Asthma UK has a toolkit for healthcare professionals containing a range of tools to help improve asthma care in your practice including a checklist, action plans, inhaler technique videos and asthma guidelines at [www.asthma.org.uk/hcptoolkit](http://www.asthma.org.uk/hcptoolkit)

For more information about asthma and the National Review of Asthma Deaths please go to Asthma UK’s website at [www.asthma.org.uk](http://www.asthma.org.uk)