



Royal College  
of Physicians

# Why asthma still kills

## The National Review of Asthma Deaths (NRAD)

Confidential Enquiry report  
**May 2014**

Commissioned by:

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**HQIP**

Healthcare Quality  
Improvement Partnership

## Key findings and recommendations for primary care by PCRS-UK

These key findings and recommendations were developed by the Primary Care Respiratory Society UK for inclusion in the report.

Key findings	Recommendations
<p>1 For 43 % of patients, there was no evidence that the patient had had an asthma review in general practice in the last year before death. Twenty-two per cent had missed a routine GP asthma appointment in the previous 12 months.</p>	<p>Practices should have proactive methods of identifying and contacting patients who fail to attend for routine asthma appointments. A range of methods of engagement should be explored (eg telephone consultations – by clinicians not support staff, telephone follow-up if patients do not attend, personalised letters explaining possible risks of not attending, alerts on prescription screen limiting inhaler issue in future, opportunistic review of patients attending for other conditions, major alert on screen for all to see lack of asthma review).</p>
<p>2 Avoidable factors relating to the adequacy of asthma reviews were identified in 42 % of cases – in areas such as the provision of written self-management plans, and checking medication adherence and inhaler technique.</p>	<p>Reviews should be conducted by clinicians trained in asthma care and aware of the factors that place patients at higher risk of exacerbation and death. Practices should devise/acquire a standard template to raise the quality of the regular review, until a standard national template is available. QOF guidance states that an asthma review should include:</p> <ul style="list-style-type: none"> <li>• assessment of symptoms using RCP three questions</li> <li>• measurement of peak flow</li> <li>• assessment of inhaler technique</li> <li>• a PAAP.</li> </ul>
<p>3 Only 44 (23 %) of the 195 who died had been provided with a PAAP in primary or secondary care.</p>	<p>The BTS/SIGN asthma guideline has recommended personal asthma action plans for all patients for many years. The evidence for the benefits of such plans is grade A, and all patients with asthma should have a written plan and know how to respond in the event of deteriorating control.</p>
<p>4 Forty-five per cent of patients died without seeking medical assistance or before emergency medical care could be provided. Of cases where the final attack was treated in primary care, 16 % had a delay in accessing appropriate care in the final attack. The panels concluded that delay/failure in seeking medical help was a potentially avoidable factor in the deaths of 36 (18 %) of those who died.</p>	<p>Clinicians should take responsibility for supporting patients in self-management so that they can identify when their asthma is worsening and when they need to seek medical help, and capture this in a PAAP.</p> <p>Practices should ensure that their systems encourage and allow swift access to advice and assessment in the event of an asthma exacerbation.</p>

Key findings	Recommendations
<p>5 The quality of routine care was assessed as inadequate in 62 % of cases, and the panels concluded that there may have been a lack of specific asthma expertise in 17 % . Potentially avoidable factors identified by panels: in 59 % of deaths, clinicians in primary care failed to adhere to the BTS/SIGN asthma guideline (including 42 % not performing adequate review and 46 % not giving a PAAP (key finding 3)).</p>	<p>The training needs of clinicians responsible for managing people with asthma need to be assessed and monitored to ensure that the clinicians are competent for the task. Each primary care practice should have a named health professional responsible for the maintenance and improvement of standards of asthma care in the practice and these professionals should engage in additional training and updating in respect of this role.</p>
<p>6 Avoidable factors relating to assessment and recognition of risk by primary care professionals were identified by the panels in 51 % of cases.</p>	<p>Practices need to adopt a system of establishing the risk profile of a patient and put a treatment plan in place that is appropriate to their risk profile.</p>
<p>7 Avoidable factors were identified by the panels in the management of the final attack by primary care professionals in 32 % of those who accessed medical treatment during their final attack. This included delays in initiating appropriate treatment, and failure to give appropriate treatment. Fifty per cent (77/153) of the deaths took place between 8am and 6pm.</p>	<p>Practice staff and clinicians in primary care need to have systems in place and the appropriate expertise to recognise serious asthma attacks, and initiate immediate treatment. As half of deaths are taking place during surgery hours, it is even more important that practices have such systems in place. Reception staff need to be trained to recognise when an individual with asthma needs to be seen urgently.</p>
<p>8 Avoidable factors relating to prescribing were identified by the panels in 47 % of the cases managed in primary care. Among patients that were on short-acting relievers at the time of death, 39 % had been prescribed more than 12 salbutamol inhalers in the previous year and six individuals had had more than 50. Overuse of short-acting bronchodilators is a key indicator of poor asthma control and of higher risk of exacerbation and death. At least five patients had been on LABAs with no concomitant inhaled steroids, which the Medicines and Healthcare Products Regulatory Agency (MHRA) has explicitly warned against on grounds of safety. Many patients on ICS alone or in combination were undertreated owing to an inadequate number of prescriptions issued in the last year. Eighty per cent were issued fewer than 12 prescriptions a year and 38 % (of 128) had fewer than four prescriptions.</p>	<p>Practice systems should be put in place – in every consultation with a person with asthma – to identify patients using one SABA inhaler a month or more and to offer advice proactively on how to improve asthma control. Practices should receive and record notification from pharmacies of SABA inhalers supplied without a prescription under patient group directions. Continuing use of single-agent LABA inhalers should be avoided so as to avoid the risk of non-use of inhaled corticosteroids in patients with persistent or severe symptoms. Concordance with inhaled steroids and combination ICS/LABAs needs to be monitored closely to ensure that adequate medication is being taken.</p>
<p>9 Poor treatment adherence, psychosocial/learning disability problems and a BMI of 25 or more were identified in 48 % (94/195), 44 % (84/190) and 56 % (68/121), respectively, of those who died. For 26 % of patients, psychosocial factors were considered a risk factor.</p>	<p>This reinforces the need for better patient education, and the importance of assessing risk in the course of routine asthma care.</p>

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<p>10 Ten per cent of the deaths occurred in patients who had received hospital treatment within the previous 28 days. At least 21 % had been seen for asthma in accident and emergency departments in the previous 12 months.</p>	<p>Practices should press for prompt communication from hospitals and other urgent care providers about patients seen with asthma exacerbations, and should ensure primary care follow-up within two working days of receiving such notification, so as to allow optimisation of treatment and to identify those patients whose asthma remains out of control despite their hospital attendance.</p>
<p>11 Of the 900 cases selected for data collection for the study, 272 were not included because clinicians involved in their care provided either no or inadequate information to enable the panels to make a decision about the quality of their care.</p>	<p>Doctors should regard it as a professional obligation to cooperate with confidential enquiries of this kind, and to supply the information requested.</p>
<p>12 Reports based on critical event analysis were submitted for only 12 % of the people who died from asthma – 43 % of the children and teenagers, 10 % of those aged 20–74 years, and none aged over 75 years. Only 38 % of these were deemed by the panels to be of sufficient quality for reflective learning.</p>	<p>There is a strong case for any death thought to be primarily due to asthma to be the subject of a local confidential enquiry process or critical event analysis to ensure that lessons are learned to reduce the likelihood of future asthma deaths. Practices should ensure that any asthma death is systematically investigated locally.</p>
<p>13 The study has revealed significant issues in the accuracy of death certification and in the practices of the Office for National Statistics (ONS) for England and Wales, the Northern Ireland Statistics and Research Agency (NISRA) or the National Records of Scotland (NRS) in assigning asthma as an underlying cause of death.</p>	<p>Doctors may need better training in death certification, and standards of diagnosis, in particular between asthma and COPD, are in need of improvement.</p>