London Respiratory Network and Children’s Strategic Clinical Network
Asthma Group’s response to ‘Why asthma still kills: The national review of asthma deaths (NRAD)’

Promoting best asthma care throughout London

In May 2014, the Royal College of Physicians published the National Review of Asthma Deaths.¹ This review was undertaken to identify and thereafter highlight avoidable factors leading to asthma deaths in the UK, between February 2012 and January 2013. The overriding aim was to identify ways to reduce asthma mortality and deliver appropriate asthma care.

Of the 195 asthma deaths during this period, the review identified several important potentially avoidable factors. It is unacceptable that the potentially avoidable factors are identical to those identified in previous studies of asthma mortality over the last 40 years. Indeed, inadequate implementation of national guidelines was apparent in almost half of cases. This highlights the fact that simply publishing guidelines is unlikely to improve outcomes without an implementation strategy.

The overall message from the review was that the delivery of high quality care – and hence, reduction in mortality and morbidity – is dependent on consistently applying guideline-standards of care. “In particular, it emphasises that despite having good current asthma control, patients may still be at risk of having future life-threatening asthma attacks.”²

Deficiencies in care revealed from the review were subdivided into four categories, with focused recommendations targeting: (i) organisation of services; (ii) clinical care; (iii) prescribing and medicines use and (iv) patient factors and perception of risk.

**Key findings and recommendations from the review:**

- **There was a deficiency in leadership of asthma care.** Evidence of this include: poor follow-up provision from hospital; a lack of established annual review processes and inadequate utilisation of accepted measures of control with infrequent use of personal asthma action plans (PAAPs). Only 23 per cent of those who died had a PAAP. Indeed, as was indicated by the success of a programme conducted in Finland [Thorax 2006; 61: 663-70]³, the identification of key individuals to lead asthma care appears vital.

It is therefore recommended that every NHS hospital and general practice should have a designated, named clinical lead for asthma services responsible for formal training in the management of acute asthma. We would add (implied in the recommendation) that this comprises not merely the management of the acute attack, but provision for high quality follow-up.

¹ National Review of Asthma Deaths. Royal College of Physicians
² Mark Levy Editorial in the NPJ PCRM http://www.nature.com/articles/npjpcrm201429
³ Thorax 2006; 61: [663-70].
Prescribing inadequacies were common, with incorrect prescribing present in up to 50 per cent of patients who died. More specifically there was evidence of over-prescribing of reliever medication (short acting beta-2 agonists) and under-prescribing of preventer medication (inhaled corticosteroid). N.B. It is important to emphasise that over-reliance on reliever therapy is indicative of poor control and mandates review of the controlling treatment. Patients should not be denied reliever treatment but there must be a fail-safe warning system to highlight excessive reliance so that interventions will address the needs for prophylaxis.

It was recommended that electronic surveillance of prescribing in primary care should be introduced as a matter of urgency - to alert clinicians to patients being prescribed excessive quantities of short-acting reliever inhalers, or too few preventer inhalers. Community pharmacist time should be used to reinforce inhaler technique, wheeze plans and PAAPs, including in medicine use reviews (MUR).

One-third of patients had exposure to tobacco smoke (as either smokers or second-hand exposure). It was recommended that a history of tobacco smoking and/or exposure to second-hand tobacco smoke should be documented in the medical records of all people (including children and young people) with asthma. Current tobacco smokers should be offered referral to a smoking cessation service.

Mental health issues were prevalent and often appeared to be inadequately addressed or reviewed by healthcare professionals. Socioeconomic circumstances need considering as well as ensuring equitable access to services for all, including minority populations. It was advised that more should be done to engage mental health professionals, and health professionals must be aware of the factors that increase the risk of asthma attacks and death, including the significance of concurrent psychological and mental health issues.

The London Respiratory Clinical Leadership Group (London Respiratory Network) and the Asthma Group within the London Children’s Strategic Clinical Network are committed to the delivery of high quality and high value asthma care in general practice, community and hospital settings, consistently and throughout all areas of London. The Children’s Asthma Group has compiled a strategy and set of standards which outline the specific issues in London, along with the desired outcomes, providing best practice examples. Many of the actions below are captured in more detail within this strategy document.

Consistent themes and priorities already promoted by the London Respiratory Network include ‘stop smoking as a treatment’, “right care” that optimises responsible respiratory prescribing and prioritising and empowering self-management. This response to NRAD aims to build specifically on these themes and prior work. Our role is not to overlap and re-emphasize national policy / recommendations but to enable care of Londoners living with respiratory disease to be optimised.

To this end, the London Respiratory Network and London Children’s Strategic Clinical Network Asthma Group have focused on seven key priorities from the review in order to act to improve both adult and children’s asthma care in London:
<table>
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<tr>
<th>Areas of concern for London identified from NRAD review</th>
<th>NRAD Recommendation</th>
<th>Action from London Respiratory Network &amp; Children’s Strategic Clinical Network Asthma Group</th>
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<tr>
<td>Often no lead with responsibility for asthma care</td>
<td>Each service (whether general practice, community or hospital setting) should have a nominated lead for asthma care</td>
<td>Contact all London CCGs and hospital providers to complete a record of ‘asthma leads’ for services in London and promote respiratory leaders in each GP practice. Use the above record to liaise with leads to understand use of tools employed in London to assess asthma and improve control, follow-up provision after hospital admission and implementation of personal asthma action plans (PAAPs). We recommend there is an education and CPD programme to support asthma leads. There should also be closer working between primary and secondary care and network meetings where secondary care consultants can discuss challenges in care with tertiary referral centres.</td>
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<td>Poor prescribing with overuse of beta-2 agonists / underuse of anti-inflammatory treatment</td>
<td>Record reviews / improve integration of prescribing records with urgency to develop electronic prescribing</td>
<td>Continue to promote and share good practice examples that increase safe prescribing (eg using electronic prescribing systems, prescribing incentive schemes). Continue to promote multi-disciplinary responsible respiratory prescribing (RRP) messages and networks. Links for prescriptions between GPs and hospitals need to be strengthened to get an accurate picture of the number of inhalers used, and then develop and validate an intervention for those in whom problems are identified.</td>
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<td>Inappropriate inhaler device or poor technique</td>
<td>Regular assessment of age appropriate inhaler technique to ensure effectiveness in all children and adults</td>
<td>Work to ensure that prescribed medications are taken in an appropriate way to maximise efficacy and reduce side effects. This requires training of practice, school and ED nurses. Kite marking standards for schools are needed.</td>
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<td>Inadequate use of personal action asthma plans (PAAPs)</td>
<td>Written PAAPs should be provided to all individuals with asthma and include information about management of acute symptoms and specific triggers</td>
<td>Work with named asthma leads and responsible respiratory prescribing (RRP) networks to understand current blocks to PAAP provision in London and identify and promote system enablers. Sign-post and promote PAAP tools for use in London (eg those from Asthma UK, Imperial College London). PAAPs should contain information about trigger factors for acute asthma attacks.</td>
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| Significant prevalence of smoking / smoke exposure | History of smoking or exposure to second-hand smoke should be documented in medical records and current smokers should be offered referral to a smoking -cessation service | Build on London Respiratory Network work on ‘stop smoking as treatment’ and London Clinical Senate’s Helping Smokers Quit work. Specifically, encourage designation of stop smoking champions in every trust, liaise with asthma leads to facilitate systematic access to, and provision of, evidence-based smoking cessation interventions for all Londoners with asthma who smoke (including children and young people) and measure proportion of people on London asthma registers who are current smokers and offered interventions. All paediatric wards should have an active quit smoking policy and be able to offer nicotine replacement therapy (NRT) to parents and children. “In London, on average 67 children (aged 11-15) start smoking every day”.

| High prevalence of psychosocial issues / co-morbidities | Need to consider and address | Promote use of validated psychological tools (eg PHQ4) to assess mental health. Share good practice examples of better integration of psychological support for people with long-term conditions. Improve respiratory care in mental health services by increased respiratory collaboration with mental health colleagues and the London Mental Health Strategic Clinical Network. |

| Missed opportunities to identify individuals at risk of a fatal asthma attack following attendance at ED or other out of hours service. | Follow up arrangements to be made after every attendance at ED / out of hours service with an asthma attack. Specialist follow-up for all patients who have attended ED two or more times in previous 12 months. | Look at capacity for additional referrals. Develop systems to signpost attendees to ensure appropriate follow up plan is actioned within 48 hours. Londoners with a previous acute admission, particularly those admitted to ICU, should be referred to a specialist. |


Alternatively if you would like to get in touch, please email: england.london-scn@nhs.net

Written by Dr James Hull & Dr David Finch, on behalf of the London Respiratory Network and Children’s Strategic Clinical Network Asthma Group, December 2014

[^1]: [http://thorax.bmj.com/content/69/9/873.long](http://thorax.bmj.com/content/69/9/873.long)