NRAD and standards

The data were used to assess the extent to which the care of those cases reviewed by the panels had met the standards set by the NRAD steering group (see Table 3.1 in main report). This table lists the evidence against the NRAD indicators. These data are drawn from the information provided by the clinicians (see Appendices 2–5).

Evidence provided by clinicians, or extracted from the copies of medical records against the NRAD indicators of quality of care (for some quality indicators, data were not available)

No	NRAD quality indicator	Those who the panels concluded had died from asthma N=195 (unless otherwise stated) n (%)	All cases considered by the panels to have asthma, comprising 195 who died from their asthma and 36 who did not N=231 (unless otherwise stated) N (%)
1	Patients diagnosed with asthma should have at least one annual review by a health professional competent to do so Figures for those who had a review – not possible to tell who saw the patients or what qualifications they had	98 (50)	118 (51)
2	An asthma review should include an assessment of control, medication review and adjustment if necessary, education, and issue, review or modification of a written asthma action plan, inhaler technique checking, discussion around adherence, and prescription filling and allergies (actions should be recorded)	Insufficient data to assess this criterion	Insufficient data to assess this criterion
3	Patients with diagnosed asthma should have an entry in the medical record that the patient has been given a written personal asthma action plan (PAAP)	44 (23)	52 (23)
4	Patients with severe asthma should be under the care of a specialist	50/61 (82)	57/70 (81)
5	Patients should attend their planned review consultations for their asthma Patients who missed appointments	42 (22)	49 (21)
6	Patients with acute or deteriorating asthma should have access to medical attention within 24 hours	Data not available	Data not available

7	In patients with severe asthma, there should be evidence in the records of a review of the patient's adherence to medication	20/61 (33)	23/70 (33)
8	Patients prescribed more than six reliever inhalers in the previous 12 months should be on preventer treatment as well (these patients had at least one prescription for a preventer, however; see Figure 5)	90/94 (96)	104/108 (96)
9	Patients with severe or life-threatening asthma attacks should have evidence of initial, and ongoing and repeated observations of recorded vital signs pre and post treatment including SpO_2/atrial blood gases and lung function (with reasons stated if not measured) Where data were available, numbers (%) of those who had an initial measurement (any one) plus at least one reassessment during the final attack	39/60 (65)	41/64 (64)
10	The initial assessment of a patient presenting with an asthma exacerbation should include information on previous attacks (including past life-threatening attacks and ITU admissions)		
11	When a patient with asthma presents with new or worsening respiratory symptoms The medical records should include a note of the presenting symptoms, response to medication given or taken, and the current medication		
12	Assessment of patients presenting acutely with new or worsening respiratory symptoms should include: pulse, respiratory rate, pulse oximetry, lung function (PEF or spirometry), auscultation of the chest and BP measurement Numbers shown of people with asthma for whom data were available on previous and final asthma attacks; N=347 attacks in 231/276 (84%) cases considered by the panels	Pulse rate	134/347 (39)
		Respiratory rate	117/347 (34)
		PEF	36/347 (10)
		SpO_2 (pulse oximetry)	118/347 (34)
		Blood pressure	99/347 (29)
		Spirometry	4/347 (1)

		Wheezing	167/347 (48)
		Any of these tests/examinations	178/347 (51)
13	Patients attending a GP surgery, out-of-hours centre or hospital department with an asthma attack should be seen and initially treated with bronchodilators within half an hour	The numbers of cases where these data were available was very small	The numbers of cases where these data were available was very small
14	Patients with life-threatening asthma attacks should be treated with oxygen-driven nebulised bronchodilators	Insufficient data to assess this criterion	
15	Patients treated in hospital for life-threatening asthma attacks should be treated with systemic steroids within 1 hour of arrival (if not administered before reaching hospital) (Data shown for patients who had asthma, who did not die before reaching hospital, were not administered steroids in primary care and had had near-fatal, life-threatening or acute severe asthma)		15/24 (63)
16	Patients treated for severe or life-threatening asthma attacks should be prescribed systemic steroids		31/47 (66)
17	Patients should be treated according to guidelines		106/111 (95)
18	There should be evidence of a structured discharge plan (to include medication, education and follow-up) following hospital admission for an asthma attack Available data shown for previous attacks among patients who had died from asthma (panel conclusion) where there was evidence of a structured management plan	29/103 (28)	
19	Patients should be provided with a new or updated written asthma action plan immediately following treatment/within 48 hours after an asthma attack Data from previous attacks among patients who had died from asthma (panel conclusion)	11/103 (11)	
20	Inhaler technique – there should be a record of assessment of inhaler technique when patients are evaluated following an asthma attack Data from previous attacks among patients who had died from asthma (panel conclusion)	22/103 (21)	
21	Hospital staff should inform GP of follow-up plan and management	26/103 (25)	

	within 48 hours of discharge of patients following an asthma attack		
22	Hospital discharge letters following an asthma attack should detail presenting history, treatment, post-discharge treatment and follow-up plans	Insufficient data to assess this criterion	
23	There should be evidence that a structured management plan (to include medication, education and follow-up) has been given to the patient following treatment in primary care or A&E for acute asthma	Insufficient data to assess this criterion	
24	Patients who have been treated for an asthma attack should be prescribed regular inhaled corticosteroids	64/103 (62) <3 days =8 <5 days =28 Until review =6 Until better =5	
25	Adult patients admitted with acute asthma should not be discharged until PEF >70% best or predicted (if no previous record of PEF)	Insufficient data to assess this criterion	