NICE National Institute for Health and Care Excellence

NICE support for commissioning for atopic eczema in children

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1 Introduction

Implementing the recommendations from NICE guidance and other NICE-accredited guidance is the best way to support improvements in the quality of care or services, in line with the statements and measures that comprise the NICE quality standards. This report:

- highlights the areas of care in the quality standard that have potential implications for commissioners
- considers the cost of implementing the changes needed to achieve the quality standard at a local level
- identifies where potential cost savings can be made
- directs commissioners and service providers to a package of support tools that can help them implement NICE guidance and redesign services.

NICE quality standards describe high-priority areas for quality improvement in a defined care or service area. Each standard consists of a prioritised set of specific, concise and measurable statements. The statements draw on existing guidance, which provides an underpinning, comprehensive set of recommendations, and are designed to support the measurement of improvement. For more information see NICE quality standards.

NHS England's Clinical Commissioning Group (CCG) outcomes indicator set is part of a systematic approach to promoting quality improvement. The outcomes indicator set provides CCGs and health and wellbeing boards with comparative information on the quality of health services commissioned by CCGs and the associated health outcomes. The set includes indicators

derived from NICE quality standards. By commissioning services in line with the quality standard, commissioners can contribute to improvements in health outcomes, including the CCG outcome indicator set improvement area for children and young people's experience of healthcare.

Commissioners can use the quality standards to improve services by including quality statements and measures in the service specification of the standard contract and establishing key performance indicators as part of tendering. They can also encourage improvements in provider performance by using quality standard measures in association with incentive payments such as Using the commissioning for quality and innovation (CQUIN) payment framework. NICE quality standards provide a baseline against which improvements can be measured and rewarded, enabling commissioners to address gaps in service provision, support best practice and encourage evidence-based care.

This report on the atopic eczema in children quality standard should be read alongside:

- Atopic eczema in children. NICE clinical guideline 57 (2007).

2 Overview of atopic eczema in children

This quality standard covers the management of atopic eczema in children from birth up to the age of 12 years.

Atopic eczema (atopic dermatitis) is a chronic, inflammatory, itchy skin condition that usually develops in early childhood. It is typically an episodic disease of exacerbation consisting of flares, which may occur 2 or 3 times per month, and remissions, but in some children it is continuous. Some children who have atopic eczema will go on to develop asthma and/or allergic rhinitis; this sequence of events is sometimes referred to as the ‘atopic march’.

Although atopic eczema is not always recognised as a serious medical condition by healthcare professionals, it can have a significant negative impact on quality of life for children and their parents or carers. Atopic eczema

can adversely influence a child's emotional and social development and predispose the child to psychological difficulties[1]. The impact on a child's wellbeing does not necessarily correlate with the severity of the atopic eczema.

NICE guidance recommends a stepped approach for managing atopic eczema in children. This means tailoring the treatment step to the severity of the atopic eczema. Emollients should form the basis of atopic eczema management and should always be used, even when the atopic eczema is in remission. Management can then be stepped up or down, according to the severity of symptoms, with the addition of the other treatments listed in table 1.

Table 1 Treatment options

Mild atopic eczema	Moderate atopic eczema	Severe atopic eczema
Emollients	Emollients	Emollients
Mild potency topical corticosteroids	Moderate potency topical corticosteroids	Potent topical corticosteroids
	Topical calcineurin inhibitors	Topical calcineurin inhibitors
	Bandages	Bandages
		Phototherapy
		Systemic therapy

The majority of children with atopic eczema have their condition managed in primary care. Children with suspected eczema herpeticum[2] should be referred immediately for emergency same-day specialist dermatological advice. Children with uncontrolled or unresponsive atopic eczema, frequent infections, psychosocial problems or other comorbidities may be referred to paediatric dermatology specialists.

[1] Absolon CM, Cottrell D, Eldridge SM et al. (1997) Psychological disturbance in atopic eczema: the extent of the problem in school-aged children. British Journal of Dermatology 137: 241–5

[2] Eczema herpeticum is caused by widespread herpes simplex virus and is a serious life-threatening infection.

2.1 Epidemiology of atopic eczema in children

Atopic eczema is estimated to affect around 16.5% of children aged 0 to 12 years; this is around 1.3 million children in England[3] or approximately 15,000 per 100,000 population.

In children aged over 5 years with atopic eczema, the severity distribution is 80% have mild cases atopic eczema, 18% have moderate atopic eczema and in 2% the atopic eczema is severe[4].

Expert opinion suggests that eczema is poorly controlled in approximately 20% of children, while 5%-10% of children with poorly controlled asthma are currently referred for specialist dermatological advice.

3 Commissioning and resource implications

The cost of meeting the quality standard for atopic eczema in children depends on current local practice and the progress organisations have made in implementing NICE and NICE-accredited guidance.

CCGs are responsible for commissioning services for children with atopic eczema in the community and in hospitals. Commissioners may wish to consider commissioning services for children with atopic eczema alongside other non-cancerous skin conditions and as part of their broader dermatology and children's commissioning plans. Commissioners could nominate a lead dermatology commissioner to raise awareness and monitor improvements to children's dermatology pathways.

Table 2 summarises the commissioning and resource implications for commissioners working towards achieving this quality standard. See section 4 for more detail on commissioning and resource implications.

[3] National Institute for Health and Clinical Excellence (2008) National costing report: atopic eczema in children. London: NICE

[4] Ben-Gashir MA, Seed PT and Hay RJ (2004) Predictors of atopic dermatitis over time. Journal of the American Academy of Dermatology 50:349–56

Table 2 Potential commissioning and resource implications of achieving the quality standard for atopic eczema in children

Quality improvement area	Commissioning implications	Estimated resource impact
Assessment and management in primary and community settings (quality statements 1–4)	Ask dermatology specialists to promote education programmes to help optimise the management of children with atopic eczema. Commission services for children with atopic eczema in the most appropriate setting. Nominate a dermatology clinical commissioning lead within the CCG. Develop a local formulary for atopic eczema prescribing for children.	The following costs are anticipated : • Increase in costs because of increased prescribing of emollients • Increase in specialist health visitor/nurse visits for education on eczema management Potential savings are :- • A reduction in the use of topical corticosteroids and topical antibiotics • Reduction in the number of GP visits (not cash releasing)
Referral for specialist advice (quality statement 5–7	Have a pathway for children with atopic eczema who need referral for specialist dermatological, psychological and/or allergy advice.	Costs at a local level will be determined by • referral rates for suspected allergens and whether GPs are resistant to referring children with atopic eczema for assessment • access to specialist allergy advice.

4 Commissioning implications and cost impact

This section considers the commissioning implications and potential resource impact of implementing the recommendations to achieve the NICE quality standard for atopic eczema in children.

4.1 Assessment and management in primary and community settings

Quality statement 1: Assessment at diagnosis

Children with atopic eczema are offered, at diagnosis, an assessment that includes recording of their detailed clinical and treatment histories and identification of potential trigger factors.

Quality statement 2: Stepped approach to management

Children with atopic eczema are offered treatment based on recorded eczema severity using a stepped-care plan, supported by education.

Quality statement 3: The psychological wellbeing and quality of life of children with atopic eczema and their families

Children with atopic eczema have their (and their families') psychological wellbeing and quality of life discussed and recorded at each eczema consultation.

Quality statement 4: Provision of emollients

Children with atopic eczema are prescribed sufficient quantities (250-500 g weekly) from a choice of unperfumed emollients for daily use.

According to expert opinion, most children with atopic eczema will first present to a GP, or be identified opportunistically by a practice nurse or health visitor, and have their condition successfully treated in primary care. To help optimise children's care, commissioners may ask dermatology specialists to work with GPs and other relevant healthcare professionals. This should promote evidence-based care and include:

- assessment at diagnosis
- assessing and recording the impact on the wellbeing of children and families, including use of tools such as the Children's Dermatology Life Quality Index (CDLQI)

- educating children and families about atopic eczema to support self-management
- effective management using a stepped approach, including effective prescribing and application of sufficient quantities of emollients.

Some children with atopic eczema that is having a negative impact on their psychological wellbeing or quality of life may benefit from additional advice and emotional support from healthcare professionals with dermatology training. Expert opinion suggests that approximately 20% of children may require additional advice and emotional support. Commissioners could consider commissioning additional support from healthcare professionals in secondary care, or from primary or community-based healthcare providers. Examples include:

- nurse specialists
- GPs with a special interest (GPSI) in dermatology
- school nurses or health visitors
- pharmacists.

These services can help with managing more severe or complex atopic eczema in children, provide additional time for educating families, offer advice and support to primary care on stepped-care treatment, and help triage referrals to secondary care. Commissioners should:

- Consider that consultations with children and families typically take longer than for adults, when determining service capacity.
- Note that this service could also deliver care for children and adults with a range of common skin conditions.
- Specify that their providers have child and family-centred environments.

Commissioners could consider commissioning education programmes for parents of children with eczema. An example is the St. John's Institute of Dermatology, eczema education programme, which offers group education led by dermatology specialist nurses. Groups of 10–20 parents can learn about the condition and its triggers over 2 short sessions in community

venues. Data suggest a decrease in GP attendances from parents who have been on the programme, while the education and peer support is shown to improve confidence in using treatments and improved quality of life.

Indicative costs of the various treatments for atopic eczema in children are shown in table 3 below.

Table 3: Indicative cost of treatments for atopic eczema in children

Product	Unit Price (£) [1]	Average Dose [3]
Emollients		
500g Diprobase cream	6.32	Apply as required
500g E45 cream	5.62	Apply 2-3 times daily
500g Doublebase gel	5.83	Apply as required –may also be applied before washing
500g Cetraben cream	5.99	Apply as required
Topical corticosteroids		
30g Hydrocortisone cream 1%	2.38	Apply a thin layer 2-3 times daily. Infants 5-7 days maximum use.
30g Daktacort cream	2.49	Apply 2-3 times daily
30g Canesten HC cream [2]	2.10	Apply thinly twice a day, for a maximum of 7 days.
30g Hydrocortisone ointment 1%	2.72	Apply a thin layer 2-3 times daily. Infants 5-7 days maximum use.
30g Timodine cream	2.80	Apply thinly 3 times daily
Topical antibiotics		
30g Fucibet cream	5.32	Apply a small quantity twice daily, for a maximum of 2 weeks
30g Fucidin H cream	3.59	

1 The unit price is taken from the dictionary of medicines and devices, available from http://dmd.medicines.org.uk/DesktopDefault.aspx?tabid=1

2 Price per dictionary of medicines and devices given for either 20g (£2.14) or 50g (£3.50). Calculated cost of 30g based on 50g price (3/5) =£2.10

3 Dose details taken from SPC (Summary of Product Characteristics)

NB The list above is not intended to be a complete list of all possible treatments for atopic eczema in children.

The effective use of emollients and a stepped-care approach to treatment are anticipated to lead to an increase in the use of emollients but a potential reduction in the use of topical corticosteroids and topical antibiotics as the

condition is managed more effectively. Expert opinion suggests that the education of children and their families in the correct use of emollients is a key factor in the effective management of atopic eczema. This would usually involve 1 or 2 visits to a specialist health visitor or nurse to educate the family on eczema management. The cost of a visit to specialist health visitor or nurse is estimated at £53 for a practice nurse or £59 for a health visitor[5]. There is also a potential saving from a reduction in visits to the GP as a result of more effective condition management. This saving is not anticipated to be cash releasing but will increase GP capacity.

Commissioners should work with pharmacy and their medicines management service to ensure that their local formulary for primary care includes an appropriate range of emollients and other treatments in the stepped-care approach. This should include advice on the quantity to prescribe, recommended first-choice treatments and exclusions. Expert opinion suggests a local formulary for primary care may help GPs prescribe the large quantities needed and the importance of patient choice in helping to find the correct emollient for each child. Commissioners are advised to assess prescribing practice in their local area and review their local formulary to assess the potential resource impact.

Commissioners may wish to signpost GPs and other providers to the following British Medical Journal education and learning tools:

- Eczema – a guide to management
- Management of difficult and severe eczema in childhood

[5] Based on the cost per hour of face-to-face contact for a Nurse (GP practice) and health visitor per PSSRU (Curtis 2011)

4.2 Referral for specialist advice

Quality statement 5: Referral for specialist dermatological advice

Children with uncontrolled or unresponsive atopic eczema, including recurring infections, or psychosocial problems related to the atopic eczema are referred for specialist dermatological advice.

Quality statement 6: Specialist allergy investigation

Infants and young children with moderate or severe atopic eczema that has not been controlled by optimal treatment are referred for specialist investigation to identify possible food and other allergies.

Quality statement 7: Treatment of eczema herpeticum

Children with atopic eczema who have suspected eczema herpeticum receive immediate treatment with systemic aciclovir and are referred for same-day specialist dermatological advice.

CCGs should ensure that they have pathways for children with atopic eczema who need referral for specialist dermatological, psychological and/or allergy advice. Specialist dermatological advice may be provided by a multidisciplinary team of paediatric and/or dermatology experts in secondary care (see section 4.1). According to expert opinion, specialist paediatric dermatology is not widely available and commissioners should review local practice.

The pathway should specify maximum waiting times and indicate same-day specialist advice if eczema herpeticum is suspected. In 2011/12 there were 527 hospital episodes for eczema herpeticum in children aged up to 14 years[6]. The cost of an outpatient appointment for same-day referral is £91, based on the cost of a follow-up outpatient appointment for paediatric

[6] HES Online admitted patient care by primary diagnosis code 2011-12.The details of children aged 0-12 years was not available.

dermatology.[7] Immediate treatment and same-day referral for suspected cases of eczema herpeticum is likely to reduce complications and prolonged care , however, due to the small number of children who develop eczema herpeticum any cost savings are not anticipated to be significant. Commissioners are advised to check practice in their local area to assess the potential resource impact of achieving quality statement 7.

Specialist allergy advice for infants and young children with moderate or severe atopic eczema may be provided by qualified providers such as a dietetic services, paediatric allergy specialists or paediatric dermatology. The Topic Expert Group noted that paediatric food allergy specialists are not available in most areas. Commissioners should check local practice and ensure their pathway has a named healthcare professional who can offer specialist allergy advice.

It was the opinion of the Topic Expert Group that current referral rates for suspected allergens are low, because many GPs are resistant to referring children with atopic eczema for assessment. Expert opinion suggests that this is because atopic eczema is not perceived as an important chronic disease with much attendant morbidity and a lack of knowledge of effective treatments. In addition, access to specialist allergy advice is limited because of a shortage of clinicians. It is anticipated that there will be an increase in the number of referrals for specialist advice. Table 4 shows the potential cost impact of an increase in referrals for suspected food allergy advice of 5% to 25%. The cost impact ranges from £2 million to £10 million. This equates to between £3600 and £17,900 per 100,000 population. Commissioners are advised to check practice in their local area to assess the resource impact.

[7] Based on the cost of a single professional follow-up outpatient appointment for paediatric dermatology (specialty code 257) from the PbR National Tariff 2013-14.

Table 4 : Cost impact of increase in referral rates for specialist food allergy advice

		Number of children	£
Children aged 0-5 years, England only [1]		4,000,000	
Estimated proportion with moderate atopic eczema [2]	18%	720,000	
Estimated proportion with severe atopic eczema [2]	2%	80,000	
Total estimated number of children with moderate or severe atopic eczema		**800,000**	
Estimated proportion with a suspected food allergy [2]	37%	296,000	
Cost of outpatient referral [3]	£135		
Increase in referrals for suspected food allergy	5%	15,000	2,025,000
Increase in referrals for suspected food allergy [2]	7.5%	22,000	2,970,000
Increase in referrals for suspected food allergy	10%	29,000	3,915,000
Increase in referrals for suspected food allergy	15%	44,000	5,940,000
Increase in referrals for suspected food allergy	25%	74000	9,990,000

1 GP Registered population 2012: Public Health England - patients registered with GP Practices, by age and sex: http://www.apho.org.uk/PracProf/Profile.aspx

2 National Institute for Health and Clinical Excellence (2008) National costing report: atopic eczema in children. London: NICE

3 Outpatient referral cost based on the cost of a single professional new outpatient appointment for paediatric dermatology (speciality code 257) from the PbR National Tariff 2013-14.

5 Other useful resources

5.1 Useful resources

- Primary Care Commissioning (2011) Quality standards for dermatology: providing the right care for people with skin conditions
- Royal College of Paediatrics and Child Health (2012) Allergy care pathways for children: food allergy
- Royal College of Paediatrics and Child Health (2012) Allergy care pathways for children: eczema
- British Association of Dermatologists (2012) Guidance for commissioning dermatology services
- British Society for Paediatric Dermatology and British Association of Dermatologists (2012) Working party report on minimum standards for paediatric services 2012

5.2 NICE implementation support

- Atopic eczema in children: costing report.
- Atopic eczema in children: costing template.
- Atopic eczema in children: audit support.
- Atopic eczema in children: slide set. NICE slide set
- Atopic eczema in children: implementation advice. NICE implementation advice

5.3 NICE pathways

- Atopic eczema in children

Contact NICE

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