National Institute for Health and Care Excellence

Surveillance programme

Surveillance review consultation document

8-year surveillance review of CG57: Atopic eczema in under 12s: diagnosis and management

Background information

Guideline issue date: December 2007

Previous review dates:

- August 2011 (no update)
- March 2014 (no update)

Surveillance proposal for consultation

- We will not update the guideline at this time.
- We will place CG57 on the static list because it fulfils the following criteria:
    - No evidence was identified that would impact on the current guidance and no major ongoing studies or research have been identified as due to be published in the near future (that is, within the next 3-5 years)

Reason for the proposal

We found a total of 47 new studies through surveillance of this guideline: 24 in a search of systematic reviews and randomised controlled trials (between October 2013 and November 2015) and 23 identified by topic experts. These included new evidence on:

- Assessment of severity
- Epidemiology
- Management of trigger factors
- Treatment (emollients, topical corticosteroids, topical calcineurin inhibitors, antihistamines, phototherapy, systemic immune suppressants, and complementary therapies)
- Education and adherence to therapy

None of the new evidence considered in surveillance of this guideline was thought to have an effect on current recommendations.

We did not find any new evidence on:

- Diagnosis
- Psychological and psychosocial wellbeing and quality of life
- Identification of trigger factors
- Treatment (stepped approach to management, dry bandages and medicated dressings including wet wrap therapy, and treatment for infections)
- Indications for referral

We found new evidence related to the research recommendations on methods to measure severity of atopic eczema, house dust mite avoidance strategies, optimal feeding regimen in the first year of life, effects of improving the control of atopic eczema in the first year of life, treatment, and education and adherence to therapy. This new evidence was not considered to fully address these research recommendations or affect current recommendations. We did not find new evidence that would affect other research recommendations.

The majority of topic experts considered the guideline still relevant to clinical practice. One topic expert felt that there is a comprehensive body of further work to

inform a new guideline. Topic experts highlighted that referral for allergy tests could have a cost impact and that a topical corticosteroid (elocon: mometasone furoate) is generic now and therefore cheaper. However, the cost of allergy tests is unlikely to impact on the guideline as the current guideline does not recommend having allergy tests for most children (recommendation 1.4.1.5: 'Healthcare professionals should reassure children with mild atopic eczema and their parents or carers that most children with mild atopic eczema do not need to have tests for allergies'). For topical corticosteroids, the current guideline already recommends the drug with the lowest acquisition cost taking into account potency tailoring to the severity of the child's atopic eczema, pack size and frequency of application. Therefore, it was felt that an update of the guideline related to allergy tests and topical corticosteroids is not necessary at this time. Topic experts also mentioned the need to review the food allergy section of the guideline, particularly around allergy testing. They also felt there would be value in giving greater clarity about safety of pimecrolimus and tacrolimus in children. However, all these areas are already covered in other NICE guidance (NICE guideline CG116: Food allergy in under 19s: assessment and diagnosis (February 2011) and technology appraisal TA82: Tacrolimus and pimecrolimus for atopic eczema (August 2004)). Other areas for consideration highlighted by topic experts included prevention of eczema and the inclusion of adults. However, prevention of eczema and diagnosis and management for adults are out of scope of this guideline and outside the original remit from the Department of Health.

Finally, topic experts also highlighted some inequalities in access to specialist allergy services around the UK and that children from South Asian communities get less good care and more severe disease. However, no evidence was identified in relation to this issue from our searches and our recommendations do not exclude these groups.

Overall decision

After considering all the new evidence and views of topic experts, we decided not to update this guideline, and place CG57 on the static list.

Further information

See Appendix 1 for further information.

For details of the process and update decisions that are available, see ensuring that published guidelines are current and accurate in 'Developing NICE guidelines: the manual'

For details of the static list see Static clinical guidelines.

Appendix 1: summary of new evidence

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
Diagnosis			
CG57 – 01 What criteria should be used to diagnose atopic eczema in children and how do they vary between ethnic groups? (1.1.1.1-1.1.1.2)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
Assessment of severity, psychological and psychosocial wellbeing and quality of life			
CG57 – 02 What measures should be used to classify the severity of atopic eczema in children in the setting of clinical management? (1.2.1.1, 1.2.1.3, 1.2.1.6)			
Surveillance decision This review question should not be updated.			
4-year review (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	Topic expert feedback noted an initiative for standardising outcomes in eczema which found systematic reviews indicating the Eczema Area and Severity Index (EASI) and the objective Scoring Atopic Dermatitis (SCORAD) index as extensively validated and that EASI is the preferred core instrument to measure clinical signs in AE trials [1].	No new evidence was identified that would affect recommendations. New evidence was identified reporting that EASI and SCORAD are extensively validated and EASI was recommended to use in clinical trials. The current guideline looked at the available evidence for EASI and SCORAD but both tools were ruled out because the Guideline Committee considered the Patient-Oriented Eczema Measure (POEM) to be the best tool as it was short, easy for parents or caregivers to complete and easily accessible via the

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
			internet. Therefore, the new evidence does not have an impact in the guideline recommendations.
CG57 – 03 How can psychological and psychosocial effects in children with atopic eczema and their families/carers be identified in everyday clinical settings? (1.2.1.1, 1.2.1.4-1.2.1.6)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
CG57 – 04 How should the impact of atopic eczema on families'/carers' quality of life be assessed, and how effective is it to use quality of life and other health-related scales in routine clinical management? (1.2.1.4, 1.2.1.6)			
Surveillance decision This review question should not be updated.			
4-year review (2011) A study looked at Italian versions of the Infants' Dermatitis Quality of Life Index (IDQoL) and Dermatitis Family Impact (DFI) finding both had satisfactory psychometric properties and can be used to evaluate quality of life of infants with atopic dermatitis and their families [2]. A study found that the Childhood Atopic Dermatitis Impact Scale (CADIS) measure had adequate test-retest reliability, concurrent validity, and discriminative validity. A responsiveness	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. At the 4-year surveillance review the evidence showed that the CADIS measure had adequate reliability, validity and responsiveness but the current guideline recommendation suggests other tools to measure quality of life which are validated, shorter, and less complicated to use in routine clinical practice (Children's Dermatology Life Quality Index (CDLQI), IDQoL and DFI). There was also evidence about satisfactory psychometric properties of the IDQOL

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
evaluation demonstrated that the CADIS also accurately measures change in patients whose disease improves [3]. New evidence was considered unlikely to impact on guideline recommendations. **6-year surveillance (2014)** A systematic review of the quality of life literature in children with atopic dermatitis was identified [4]. Most studies utilised an atopic dermatitis specific tool with the majority of studies indicating an inverse correlation between quality of life (QOL) and severity as well as correlation between various instruments. The review concluded that most atopic dermatitis-specific tools do not provide a standard, quantitative measurement in relation to perfect health as would do preference based studies required for cost-utility analyses. It was concluded at the 6 year surveillance review that this new evidence was unlikely to impact on guideline recommendations.			and FDI which is in line with the current guideline recommendation. At the 6-year surveillance review the evidence showed that inverse correlation between QOL and severity as well as correlation between various instruments which is in line with the current guideline recommendation. No new evidence was identified in the 8 year surveillance review to change these conclusions.
CG57 – 05 How effective are behavioural therapy techniques for children with atopic eczema and what other effective psychological interventions are available? (1.7.1.4)			
Surveillance decision This review question should not be updated.			
4-year review (2011) One meta-analysis revealed that psychological interventions had a significant ameliorating effect on eczema severity, itching intensity and scratching	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. At the 4-year surveillance review the evidence showed that psychological interventions had a significant

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
in atopic dermatitis patients, but definite conclusions about their effectiveness seem premature [5]. This new evidence was considered unlikely to impact on guideline recommendations. **6-year surveillance (2014)** No relevant evidence identified.			ameliorating effect on eczema severity, itching intensity and scratching in atopic dermatitis patients. This evidence was considered unlikely to impact on guideline recommendations because the guideline recommends referring for psychological advice when the impact of the atopic eczema on quality of life and psychosocial wellbeing has not improved. No new evidence was identified in the 8 year surveillance review to change this conclusion.
Epidemiology			
CG57 – 06 What are the epidemiological characteristics of atopic eczema in children (including prevalence, age of onset and resolution, frequency, location and extent of flare-ups, associations with asthma, hay fever and food allergies, and variations in different ethnic groups)? (1.1.1.2, 1.3.1.1-1.3.1.2)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	One meta-analysis of epidemiological data reported that the prevalence of having asthma, allergic rhinitis and eczema is higher than could be expected by chance and supports a close relationship of these disorders in children [6]. One RCT reported that infants with eczema under 6 months of age are at high risk of allergic reactions with their first introduction of egg, including severe symptoms of Food Protein-Induced Enterocolitis Syndrome (FPIES) and anaphylaxis [7].	Topic experts mentioned four recent studies about food sensitisation and food allergy: • A meta-analysis demonstrated that early life food sensitisation is related to an increased risk of eczema [8]. • A cohort study reported that eczema in the first 2 years of life was the strongest risk factor for egg, peanut, tree nut and fish allergy [9]. • A population-based cohort study	New evidence is consistent with guideline recommendations. New evidence was identified about the association between eczema and asthma / allergic rhinitis / food allergy which is in line with the current guideline recommendation which states that children with atopic eczema can often develop asthma and / or allergic rhinitis and that sometimes food allergy is associated with atopic eczema.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
		reported that infants with eczema were six times more likely to have egg allergy and 11 times more likely to have peanut allergy by 12 months than infants without eczema [10]. • An RCT on early peanut introduction in infants with eczema leading to 86% reduction in peanut allergy at 5 years [11]. • One topic expert referred to a review of epidemiologic studies and meta-analysis reporting that indoor dampness or mould is associated consistently with current and ever diagnosis of eczema but it is unclear from the abstract if studies in children were included in the review [12]. • One topic expert referred to an observational study concluding that atopic dermatitis is the main skin-related risk factor for food sensitisation in young infants [13].	
Identification and management of trigger factors			
CG57 – 07 What are the potential triggering factors for atopic eczema in children (including environmental irritants and allergens, dietary and psychological factors)? (1.4.1.1)			
Surveillance decision			

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
CG57 – 08 How should triggering factors for atopic eczema in children be identified and managed? (1.4.1.1-1.4.1.11)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	A systematic review of RCTs assessed the effects of all house dust mite reduction and avoidance measures for the treatment of eczema including participants of any age [14]. Two of the seven trials included only children, four included children and adults, and one included only adults. Overall, the included studies had a high risk of bias. Most studies reported no differences between the interventions. The abstract does not include specific results in children.	None identified relevant to this question.	New evidence is unlikely to impact on guideline recommendations. New evidence was identified during the 8 year surveillance review about house dust mite reduction. However, the Guideline Committee concluded during guideline development that house dust mite elimination strategies may not be practical in many cases and no new evidence was identified through surveillance to counter this view.
CG57 – 09 What clinical tests should be used to identify relevant allergens and which children with atopic eczema would benefit from their use? (1.4.1.2-1.4.1.6)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** This area was highlighted by the Guideline Committee as an area with new	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. This area was highlighted by the Guideline Committee as an area with new evidence during the 6 year surveillance

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
evidence. However the guideline cross refers to CG116 which would include this population. New evidence/feedback is unlikely to impact on guideline recommendations.			review. However the guideline cross refers to CG116: Food allergy in under 19s: assessment and diagnosis (February 2011) which would include this population.
CG57 – 10 How should food allergies in children with atopic eczema be identified and managed? (1.4.1.2, 1.4.1.5-1.4.1.10, 1.7.1.5)			
Surveillance decision This review question should not be updated.			
4-year review (2011) Results from 2 small poorly reported studies indicated that there may be some benefit in using an egg-free diet in infants with suspected egg allergy who have positive specific IgE to eggs. However, there was little evidence to support the use of various exclusion diets in unselected people with atopic eczema, but this may be because they were not allergic to those substances in the first place [15,16]. At the 4 year surveillance review, this evidence was considered unlikely to impact on guideline recommendations. **6-year surveillance (2014)** No relevant evidence identified.	One RCT evaluated the effects of a new thickened amino acid-based formula (TAAF, Novalac), containing a pectin-based thickener, and a reference amino acid-based formula (RAAF, Neocate) on allergy symptoms and safety, through blood biochemistry analysis and growth in infants <18 months with cow's-milk allergy symptoms [17]. The intervention group (TAAF) showed more improvements on the dominant allergic symptom, the Scoring Atopic Dermatitis Index, the quality of night time, and the frequency of irritability signs. The TAAF group also had normal stools compared to the RAAF group. All of the biochemical parameters were within normal ranges with both formulas. There were no differences between the 2 groups in any of the anthropometric z scores.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. The evidence identified at the 4 year surveillance review was considered unlikely to impact on guideline recommendations because there was no high quality evidence and the guideline already includes a recommendation to refer children with suspected food allergy for a specialist investigation and management of the atopic eczema and allergy. New evidence identified at the 8 year surveillance review showed improvements in infants who took an amino acid-based formula in place of cow's milk which is in line with the current guideline recommendation which states that 'Healthcare professionals should offer a 6–8 week trial of an extensively hydrolysed protein formula or amino acid formula in place of cow's milk formula for bottle-fed infants aged under 6 months with moderate or severe atopic eczema

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
			that has not been controlled by optimal treatment with emollients and mild topical corticosteroids.'
Treatment - Stepped approach to management			
CG57 – 11 What management strategies are appropriate for different ages and cultural groups? (1.4.1.3, 1.4.1.7, 1.4.1.9, 1.5.2.4, 1.5.3.6-1.5.3.7, 1.5.4.2-1.5.4.4, 1.5.6.3, 1.6.1.2)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No new evidence was identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
CG57 – 12 What is the most effective and safe way of combining different forms of therapy (for example, emollients, topical corticosteroids, bandaging techniques and calcineurin inhibitors)? (1.5.2.1-1.5.2.2, 1.5.2.8, 1.5.5.2-1.5.5.3, 1.5.5.5, 1.5.7.6-1.5.7.7)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
CG57 – 13 How should atopic eczema in children be managed and monitored between flare-ups (maintenance therapy)? (1.5.1.1-1.5.1.3, 1.5.3.9)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011)	No relevant evidence identified.	A topic expert referred to a systematic	The new evidence is unlikely to impact of

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.		review of RCTs of proactive treatment for atopic eczema with topical corticosteroids and calcineurin inhibitors [18]. This systematic review concluded that topical tacrolimus, fluticasone propionate and methylprednisolone aceponate were more efficacious to prevent flares than topical corticosteroids and calcineurin inhibitors vehicle alone. This indirect evidence from vehicle-controlled trials suggested that twice weekly application of the potent topical corticosteroid fluticasone propionate may be more efficacious to prevent AE flares than tacrolimus ointment. It was noted that the included trials did not allow firm conclusions about long-term safety. From the information in the abstract, it is unclear if children were included.	current guideline recommendations. The guideline already recommends the use of topical corticosteroids to prevent flares.
CG57 – 14 How should flare-ups of atopic eczema in children be identified and managed? (1.4.1.3, 1.4.1.11, 1.5.1.1-1.5.1.3, 1.5.3.2, 1.5.3.9, 1.5.5.3, 1.5.6.3, 1.7.1.3)			
Surveillance decision This review question should not be updated.			
4-year review (2011) One study evaluated the use of an evidence based treatment algorithm, finding it to be effective and applicable for the management of atopic eczema. However it did not show clear advantages compared to individualised treatment in a dermatological setting [19]. At the 4 year surveillance review this evidence was considered unlikely to	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. The evidence identified at the 4 year surveillance review was considered unlikely to impact on guideline recommendations. No new evidence was identified in the 8-year surveillance review to change this conclusion.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
impact on guideline recommendations. **6-year surveillance (2014)** No relevant evidence identified.			
Treatment - Emollients			
CG57 – 15 What types of emollients are available for atopic eczema in children, how effective are they, what quantities should be used, and how often should they be used? (1.5.1.1, 1.5.2.1-1.5.2.8, 1.5.5.2-1.5.5.3, 1.5.5.5, 1.5.9.4-1.5.9.5)			
Surveillance decision This review question should not be updated.			
4-year review (2011) Three studies addressed the effectiveness of emollients. One study indicated emollient use during corticosteroid treatment improves xerosis and puritus, and maintains clinical improvements after therapy discontinuation [20]. Triclosan-containing leave-on emollient was safe and highly acceptable to patients. However, the overall benefit on day 27 was not significant [21]. A study looking at a ceramide-dominant, physiological-lipid based formulation found it was an effective stand-alone or ancillary therapy for many paediatric patients with atopic dermatitis (AD) [22]. In addition, two studies were highlighted through stakeholder consultation undertaken at the 4 year surveillance. One study found that both an emollient or an emollient enriched with furfuryl palmitate were efficacious in treating	Three RCTs investigated the effect of a range of emollients in the treatment of atopic dermatitis in children. One RCT compared 3% glycerine against a basic emollient[26]. The second RCT compared four emollients: emulsifying ointment, glycerine/petroleum (proportion 1:2), cetomacrogol, white petroleum jelly [27]. The third RCT compared a pro-AMP cream (containing rhamnosoft, ceramides, and L-isoleucine) against an emollient cream [28]. The studies reported significant improvements on SCORAD score [26,27], Patient Oriented-SCORAD score [26], Facial Eczema Severity Score [28], the number of relapses and their intensity, skin moisturising, itching sensations, and quality of life of children and of the whole family [26]. One study included children aged from 6 months to 15 years but it is unclear, from an assessment of the abstract, how many children under 12	One topic expert referred to an intervention study which concluded that emollient aqueous cream BP used as a leave-on emollient caused severe damage to the skin barrier in volunteers with a previous history of atopic dermatitis. However, the abstract did not report the age of participants [29]. One topic expert referred to a safety issue from the MHRA which warns healthcare professionals about adverse effects from aqueous cream containing sodium lauryl sulfate: https://www.gov.uk/drug-safety-update/aqueous-cream-may-cause-skin-irritation. This MHRA includes different evidence to the evidence reported during the 4-year surveillance review. One topic expert provided further evidence about adverse effects of chronic use of aqueous cream which was associated with increased desquamatory and inflammatory protease activity [30].	New evidence is unlikely to impact on guideline recommendations. The 4 year surveillance review concluded that it would be pertinent to await further evidence, particularly on the harms associated with emollients, before an update is commissioned. New evidence was identified at the 8 year surveillance about the beneficial effects of a range of emollients on atopic eczema. This evidence is in line with the current guideline recommendation which states that 'emollients should form the basis of atopic eczema management and should always be used, even when the atopic eczema is clear'. An MHRA safety alert was identified through this surveillance which warns about adverse effects from aqueous cream containing sodium lauryl sulfate. It would be useful to include a link from the guideline recommendations on emollients

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
atopic dermatitis in children, but the emollient cream not containing furfuryl palmitate showed better clinical efficacy [23]. Topic expert feedback suggested that furfuryl palmitate is not available to prescribe in the UK. A further study indicated that pale sulfonated shale oil cream is capable to treat mild to moderate atopic eczema in children more efficaciously than vehicle and is well tolerated [24]. A study found that MPA twice weekly plus an emollient provides an effective maintenance treatment regimen to control AD [25]. It was concluded at the 4 year surveillance review that it would be pertinent to await further evidence, particularly on the harms associated with emollients, before an update is commissioned. **6-year surveillance (2014)** No relevant evidence identified.	years old were included [26].		to the MHRA safety alert: Aqueous cream: may cause skin irritation in Drug Safety Update March 2013
Treatment - Topical corticosteroids			
CG57 – 16 How effective and safe are topical corticosteroids for atopic eczema in children, and when and how often should they be used? (1.5.1.1, 1.5.3.1-1.5.3.10, 1.5.4.2-1.5.4.4, 1.5.4.8, 1.5.5.3, 1.5.5.5, 1.5.7.6, 1.5.7.8)			
Surveillance decision This review question should not be updated.			
4-year review (2011) Results from 1 study demonstrated the safety and efficacy of Hydrocortisone butyrate (HCB) 0.1% lotion in four weeks	An RCT compared pimecrolimus 1% cream (including short-term topical corticosteroids for disease flares) with topical corticosteroids in infants with	There was a comment from one topic expert related to the study by Sigurgeirsson et al. (2015)[34] stating that the main rationale for introducing topical	New evidence is unlikely to impact on guideline recommendations. The evidence identified at the 4 year and 8 year surveillance reviews were in line

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
of treatment for the treatment of mild to moderate AD in children 3 months to 18 years of age [31]. A second study found that HCB 0.1% in a lipocream (LCr) vehicle is more effective than LCr vehicle alone in paediatric populations down to 3 months of age without significant adverse events when used twice a day for up to 1 month [32]. A study of fluticasone propionate ointment showed that the addition of twice weekly FP to standard maintenance therapy significantly reduces the risk of relapse in children with moderate severe AD [33]. At the 4 year surveillance review this evidence was considered unlikely to impact on guideline recommendations. **6-year surveillance (2014)** No relevant evidence identified.	atopic dermatitis [34]. After 5 years, more infants with topical corticosteroids achieved overall and facial treatment success. The pimecrolimus group required substantially fewer steroid days than the topical corticosteroids group. The profile and frequency of adverse events was similar in the 2 groups. This RCT concluded that pimecrolimus was safe and effective as a first-line treatment of mild-to-moderate atopic eczema in infants and children 3 months and older. Long-term management of mild-to-moderate AD in infants with PIM or TCSs was safe without any effect on the immune system.	pimecrolimus was that it is does not cause skin thinning (on the premise that normal use of mild to moderate topical corticosteroids do) but only one patient (out of 1205) had clinical skin thinning i.e. there does not appear to be a problem with skin thinning of topical corticosteroids use for mild to moderate eczema. One topic expert referred to an RCT comparing betamethasone valerate (0.1%) cream (BMVc) against tacrolimus (0.1%) ointment (TACo) [35]. It was concluded that the results supported the proactive use of TACo to promote reparation of the subclinical barrier defect in atopic dermatitis. However, the abstract did not report the age of participants.	with current recommendations. The current guideline recommends to use topical corticosteroids and to discuss benefits and harms with children with atopic eczema and their parents or carers. Guidance on topical corticosteroids can be found in the technology appraisal TA81: Frequency of application of topical corticosteroids for atopic eczema (August 2004) which was incorporated into the guideline.
Treatment - Topical calcineurin inhibitors			
CG57 – 17 What are the indications and precautions for using topical calcineurin inhibitors (pimecrolimus and tacrolimus) for atopic eczema in children and how effective and safe are they? (1.5.1.1, 1.5.4.1-1.5.4.8)			
Surveillance decision This review question should not be updated.			
4-year review (2011) Six studies reported topical calcineurin inhibitors (TCIs) were effective at preventing flares and their use was at no additional cost for moderate eczema, and increased cost effectiveness for severe eczema [36-41]. Four studies reported that	An RCT reported that 0.03% tacrolimus ointment was effective at reducing the eczema area and severity index (EASI) score and well tolerated [65]. An RCT compared pimecrolimus 1% cream (including short-term topical corticosteroids for disease flares) with	One topic expert referred to a study with new data on safety and efficacy of TCIs in children. This longitudinal cohort study reported that it seems unlikely that topical pimecrolimus is associated with an increased risk of malignancy [66]. There was a comment from one topic	New evidence is unlikely to impact on guideline recommendations. The evidence identified at the 4 year surveillance review was not considered to contradict current recommendations on the use of TCIs to treat moderate to

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
TCIs were safe and effective for long term use up to 4 years [38,42-44]. Ten studies found that TCI's were safe and effective, relieving itch and improving QoL [45-54]. Eight additional studies found no increase in adverse effects such as, lymphoma, systemic absorption, malignancy, skin infections, and growth in children who had or were using TCIs [42,55-61]. One study reported that maintenance therapy with tacrolimus ointment (0.03% or 0.1%) was associated with significantly more flare-free days compared with tacrolimus vehicle [62]. A commentary on this study found that similar results were seen with topical fluticasone propionate which is a topical corticosteroid [63]. However, it was noted that the study on maintenance therapy with tacrolimus only included participants who responded to topical tacrolimus in the stabilisation phase of the trial [62,63]. One study found tacrolimus to be more effective than topical corticosteroid in 72 of the 93 children (77%) who completed the study [64]. Overall, the identified new evidence was not considered to contradict current recommendations on the use of TCIs to treat moderate to severe atopic eczema. However, the new evidence also suggested that TCIs may be effective in preventing flares, is safe for long-term use, and could be more effective than corticosteroids. This evidence was	topical corticosteroids in infants with atopic dermatitis [34]. After 5 years, more infants with topical corticosteroids achieved overall and facial treatment success. The pimecrolimus group required substantially fewer steroid days than the topical corticosteroids group. The profile and frequency of adverse events was similar in the 2 groups. This RCT concluded that pimecrolimus was safe and effective as a first-line treatment of mild-to-moderate atopic eczema in infants and children 3 months and older.	expert related to the study by Sigurgeirsson et al. (2015)[34] stating that the main rationale for introducing topical pimecrolimus was that it is does not cause skin thinning (on the premise that normal use of mild to moderate topical corticosteroids do) but only one patient (out of 1205) had clinical skin thinning i.e. there does not appear to be a problem with skin thinning of topical corticosteroids use for mild to moderate eczema. One topic expert referred to an RCT comparing betamethasone valerate (0.1%) cream (BMVc) against tacrolimus (0.1%) ointment (TACo) [35]. It was concluded that the results supported the proactive use of TACo to promote reparation of the subclinical barrier defect in atopic dermatitis. However, the abstract did not report the age of participants.	severe atopic eczema. During the 8 year surveillance topic expert feedback plus two RCTs were identified evaluating the use of tacrolimus and pimecrolimus in children and adults moderate to severe atopic eczema. However, current guidance on tacrolimus and pimecrolimus is included in the technology appraisal TA82: Tacrolimus and pimecrolimus for atopic eczema (August 2004) which is mentioned in the guideline. This information will be passed onto the Technology Appraisals team for consideration when the topic undergoes the review proposal process.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
considered to suggest there are developments in this area of the guideline. The 4 year surveillance noted that the licensing of this intervention has changed since the current guideline was published However, it was concluded that this is a small area of the guideline, and may not be significant enough to warrant an update of the guideline. The guideline incorporates the recommendations from the technology appraisal TA82: Tacrolimus and pimecrolimus for atopic eczema (August 2004) which states that pimecrolimus and tacrolimus should be used within their licensed indications as second line treatments when conventional therapies have failed. Long term safety data was noted to be lacking at the 4 year surveillance. Therefore the existing guideline recommendations were considered to still stand. **6-year surveillance (2014)** A meta-analysis comparing tacrolimus with pimecrolimus in the treatment of AD was identified at the 6 year surveillance but we have subsequently found out that it has been retracted.			
Treatment - Dry bandages and medicated dressings including wet wrap therapy			
CG57 – 18 What types of dry bandages and medicated dressings (including wet wrap therapies) are available for atopic eczema in children, how effective and safe are they (particularly when combined with topical corticosteroids), and when and how often should they be used? (1.5.1.1, 1.5.5.1-1.5.5.5)			
Surveillance decision			

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
Treatment - Antihistamines			
CG57 – 19 How effective and safe are antihistamines in the management of atopic eczema in children of different ages? (1.5.6.1-1.5.6.3)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	Two RCTs reported contradictory results on 4% sodium cromoglicate cutaneous emulsion compared to its vehicle [67,68]. One RCT reported significant reduction in SCORAD and Six Area, Six Sign Atopic Dermatitis (SASSAD) and treatment success with sodium cromoglicate and that application site discomfort was reported similarly between the 2 groups [67]. The other RCT reported that there were no differences in the reduction of SCORAD scores, symptom severity, quality of life, concomitant treatment usage, and global assessments between the 2 groups [68]. Thirty-two children reported treatment related events (abstract does not mention what these are) and eleven children reported application site discomfort [68].	Topic expert feedback suggested that there is no licensed UK preparation of 4% sodium cromoglicate cutaneous emulsion.	New evidence is unlikely to impact on guideline recommendations. New evidence was identified on treatment with 4% sodium cromoglicate cutaneous emulsion reporting contradictory results. Sodium cromoglicate was considered in the guideline but no recommendations were made as the Guideline Committee did not feel there was good evidence to support its use. New evidence on sodium cromoglicate was identified through the 8 year surveillance but the results were inconsistent. Therefore, there is a lack of consistent evidence to impact on the guideline at this time.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
CG57 – 20 How effective and safe are other antipruritic (anti-itching) agents for atopic eczema in children and when should they be used? (No recommendation made in the guideline)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
Treatment - Treatments for infections			
CG57 – 21 What types of clinically significant secondary infections occur in atopic eczema in children and how should they be identified? (1.5.3.6, 1.5.7.1-1.5.7.3, 1.5.7.8, 1.5.7.12)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
CG57 – 22 Which antimicrobial agents (including antiseptics) are effective and appropriate for treating infected atopic eczema in children? (1.5.7.4-1.5.7.7, 1.5.7.9-1.5.7.11)			
Surveillance decision This review question should not be updated.			
4-year review (2011) Seven studies addressing the question were identified. Two studies found a beneficial effect of silk garments treated	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. The evidence identified at the 4 year surveillance review was considered

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
with an antibacterial agent [69,70]. Overall evidence for the effectiveness of topical and systemic antibiotics/ antimicrobials was mixed [19,71-73]. Overall, the identified new evidence was considered to support current guideline recommendations that systemic antibiotics should be used to treat widespread infections and topical antibiotics should be reserved for cases of localised infection. There was felt to be a lack of robust evidence on the effectiveness of silk fabrics treated with an antibacterial agent. **6-year surveillance (2014)** No relevant evidence identified.			unlikely to impact on guideline recommendations because this evidence supports current guideline recommendations that systemic antibiotics should be used to treat widespread infections and topical antibiotics should be reserved for cases of localised infection. No new evidence was identified in the 8-year surveillance review to change this conclusion.
CG57 – 23 How should antiseptic and antimicrobial resistance be managed in children with infected atopic eczema and what measures can be taken to reduce the risk of resistance developing? (1.5.7.3, 1.5.7.5-1.5.7.6)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
Treatment - Phototherapy and systemic treatments			
CG57 – 24 What are the indications and precautions for using phototherapy for atopic eczema in children, how effective and safe is it and what form of phototherapy and length of treatment should be offered? (1.5.1.1, 1.5.8.1-1.5.8.2)			
Surveillance decision			

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
This review question should not be updated.			
4-year review (2011) One study indicated that phototherapy is an effective and well-tolerated treatment modality in children and it should be considered a possible treatment option for children with diseases including atopic dermatitis [74]. Overall, the new evidence identified does not contradict current recommendations on the use of phototherapy only for the treatment of severe atopic eczema in children when other management options have failed or are inappropriate. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. During the 4 year surveillance review, new evidence was identified about the effectiveness and tolerance of phototherapy. This evidence was considered unlikely to impact on guideline recommendations because this evidence is in line with current recommendations on the use of phototherapy for the treatment of severe atopic eczema in children when other management options have failed or are inappropriate. No new evidence was identified in the 8 year surveillance review to change these conclusions.
CG57 – 25 What are the indications and precautions for using systemic immune suppressants (such as ciclosporin, azathioprine, and mycophenolate mofetil) for atopic eczema in children, how effective and safe are they, and how should their use be monitored? (1.5.1.1, 1.5.8.1-1.5.8.2)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	One RCT estimated the effectiveness of basic therapy + immune modulator compared to basis therapy in children with exacerbation of moderate atopic dermatitis and to investigate the serum level-time profiles of antiinflammatory cytokines and neutrophil phagocytic rate [75]. The study included children from 5-17 years old but it is unclear from an assessment of the abstract how many	One topic expert referred to a critical appraisal[77] of an RCT. This RCT concluded that both methotrexate and ciclosporin in low doses are clinically effective, relatively safe, and well tolerated as treatments for severe atopic eczema in children [78]. However, methotrexate oral solution 2mg.ml is not licensed for use in children and not licensed for eczema either. See	New evidence is unlikely to impact on guideline recommendations. New evidence was identified during the 8 year surveillance review showing that methotrexate and ciclosporin in low doses are clinically effective, relatively safe, and well tolerated as treatments for severe atopic eczema in children. However, this new evidence comes from a small study (n=40 children with atopic eczema)

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
	children were under 12. There was a significant reduction of inflammation, no skin lesions, decreased severity of atopic eczema, normalisation of phagocytic index and phagocytic number, and IFN elevation in the intervention group. The addition of basic therapy + immune modulator in children with exacerbation of moderate atopic dermatitis lead to significant clinic immunological improvement. One RCT compared the clinical effect of sublingual allergen immunotherapy with placebo in the severity of atopic dermatitis in children sensitised to D. pteronnyssinus (the dust mite species with the highest prevalence) [76]. The SCORAD score decreased significantly more in the sublingual allergen immunotherapy group compared to the placebo group.	license here. Methotrexate is listed in the BNFC but only for severe resistant psoriasis. Mycophenolate mofetil is also listed in the BNFC for severe refractory eczema.	conducted in Egypt. There was also new evidence about the addition of basic therapy + immune modulator in children with exacerbation of moderate atopic dermatitis which lead to significant clinic immunological improvement. However, this evidence comes from one RCT and it is unclear how many children under 12 years old were included. The current guideline already recommends considering systemic treatments for the treatment of severe atopic eczema in children when other management options have failed or are inappropriate and where there is a significant negative impact on quality of life.
Treatment - Complementary therapies			
CG57 – 26 How effective and safe is homeopathy for managing atopic eczema in children? (1.5.9.1-1.5.9.3-1.5.9.4)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
CG57 – 27 How effective and safe are Chinese, Western and other herbal medicines for managing atopic eczema in children? (1.5.9.1-1.5.9.4)			
Surveillance decision This review question should not be updated.			
4-year review (2011) One study was identified which concluded that a traditional Chinese herbal medicine (TCHM) concoction is efficacious in improving quality of life and reducing topical corticosteroid use in children with moderate-to-severe AD [50] . This evidence was considered unlikely to impact on guideline recommendations. **6-year surveillance (2014)** No relevant evidence identified.	One RCT compared three treatments: 1) oral administration of the Chinese herbal formula Pei Tu Qing Xin Tang (PTQXT); 2) oral administration of PTQXT combined with an external application of Chinese herbs; 3) oral administration of antihistamine and a placebo of PTQXT pills added to topical 1% mometasone furoate for treating patients aged 5-25 years with moderate-to-severe atopic dermatitis [79]. The abstract did not report the number of children under 12 years old. The mean SCORAD decreased significantly and gradually in all three groups at short term but at long term there was a significantly greater decrease in the mean SCORAD for the Chinese herbal medicine-treated groups compared to the control group. The difference in quality of life scores showed a significantly greater improvement in both Chinese herbal medicine-treated groups compared to the control group.	One topic expert mentioned that it is difficult to find a document on the MHRA website which was linked to footnote 4 [4] See 'Using herbal medicines: advice to consumers'. July 2006, MHRA within the CG57 online. This document may have been removed and this may need to link to something else. The MHRA published information about the safety of herbal medicines in 2008: Herbal medicines: new help available when advising patients about safe use. This new publication relates to the previous publication in 2006. One topic expert mentioned a systematic review of RCTs of Chinese herbal medicines (oral and topical) for the management of eczema in children and adults [80]. It was concluded that there was no conclusive evidence that Chinese herbal medicines taken by mouth or applied topically to the skin could reduce the severity of eczema in children or adults.	New evidence is unlikely to impact on guideline recommendations. New evidence was identified about a Chinese herbal medicines showing inconclusive evidence about improvements in atopic eczema. The current guideline states that the effectiveness and safety of complementary therapies have not yet been adequately assessed in clinical studies and warns about the use of herbal medicines in children and to be wary of any herbal product that is not labelled in English or does not come with information about safe usage. On that basis, it would be premature to consider for inclusion in the guideline at this time.
CG57 – 28 How effective and safe are other complementary therapies (for example, hypnotherapy) for managing atopic eczema in children? (1.5.9.1)			
Surveillance decision This review question should not be updated.			

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
4-year review (2011) Ten studies addressed the use of probiotics for managing and treating eczema in children. Four studies showed a beneficial effect [81-84]. Five studies showed no beneficial effect [85-89]. Overall, the review concluded that there is still insufficient conclusive evidence on the effectiveness of probiotics. **6-year surveillance (2014)** No relevant evidence identified.	**Probiotics** Three RCTs reported that probiotics improved SCORAD [90,91], FDLQI, CDLQI [91], EASI and visual analogue scale for pruritus (VASP) scores [92] compared to placebo in children with atopic dermatitis. **Vitamin supplements** Two RCTs reported that vitamin supplements improved SCORAD [93] and EASI scores as well as Investigator's Global Assessment [94] in children with atopic dermatitis compared to placebo. Camargo (2014) reported a mean age of 9 years (standard deviation 5)[94]. **Other topical therapies** Three RCTs investigated the effect of a range of topical therapies in the treatment of atopic dermatitis in children. One RCT compared topical virgin coconut oil against a mineral oil [95]. The second RCT compared a moisturiser containing licochalcone A (Lic A) against 1% hydrocortisone [96]. The third RCT compared a moisturiser containing spent grain wax, Butyrospermum parkii extract and Argania spinosa kernel oil (S cream) against 1% hydrocortisone cream (HC cream) [97]. The studies reported significant improvements on SCORAD score [95-97], transepidermal water loss [95,96], and skin capacitance [95]. Wananukul (2013) included children between 3 months and 14 years but is unclear, from an	One topic expert mentioned an RCT reporting that water softeners for the treatment of eczema in children provide no benefit [99]. One topic expert referred to a systematic review which concluded that there was no convincing evidence of the benefit of dietary supplements on eczema but it is unclear, from an assessment of the abstract, if studies in children were included [100]. One topic expert mentioned a systematic review of the effects of oral primrose oil and borage oil for treating the symptoms of atopic eczema [101]. The systematic review included randomised controlled, parallel, and cross-over trials. It was concluded that both oral borage oil and evening primrose oil lack effect on eczema; improvement was similar to respective placebos used in trials. The included studies did not examine possible adverse effects of long-term use of both oral borage oil and evening primrose oil. From the information in the abstract, it is unclear if children were included. One topic expert mentioned a study which included adult volunteers and the abstract includes a sentence about infants suggesting that 'the use of olive oil for the treatment of dry skin and infant massage should therefore be discouraged' [102]. One topic expert referred to a United States (US) population-based study concluding that complementary and	New evidence is unlikely to impact on guideline recommendations. **Probiotics** During the 4 year surveillance, new evidence was identified about the use of probiotics for managing and treating eczema in children but it was concluded that there was insufficient conclusive evidence on the effectiveness of probiotics. New evidence was identified during the 8 year surveillance showing improvements in severity of eczema and quality of life. **Vitamin supplements** New evidence was identified during the 8 year surveillance about the beneficial effects of vitamin supplements on atopic eczema. **Other topical therapies** New evidence was identified during the 8 year surveillance about the beneficial effects of a range of topical therapies on atopic eczema, discourage of using olive oil for infant massage, and the harmful effect of complementary therapies to the skin. **Clothing** New evidence was identified during the 8 year surveillance about the beneficial effects of clothing made of cellulose fibres with seaweed enriched with silver ions on atopic eczema. **Water softeners** New evidence was identified during the 8

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
	assessment of the abstract, how many children were under 12 years old [96]. Jirabundansuk (2014) included participants aged between 2 and 15 years old but the abstract did not report the number of children under 12 years old [97]. **Clothing** One RCT evaluated the efficacy and safety of clothing made of cellulose fibres with seaweed enriched with silver ions in the treatment of children with atopic dermatitis [98]. The SCORAD index significantly improved in the group with the fibre under study and there was also a significantly relevant reduction of the intensity of pruritus and an improvement in the sleep quality compared with the control group wearing placebo clothing.	alternative medicine may be harmful to the skin and be associated with higher eczema prevalence in children 0 to 17 years in the US [103]. One topic expert mentioned that an unlicensed topical preparation of Vaseline contaminated with faecal bacteria and corticosteroid has been purchased in the UK by some parents of children with atopic eczema. We discussed this further with the NICE Medicines and Prescribing Programme. However, the guideline recommendations already advise that children with atopic eczema and their parents and carers should be informed that the effectiveness and safety of complementary therapies have not yet been adequately assessed in clinical studies.	year surveillance showing no benefit of water softeners on atopic eczema. **Dietary supplements** New evidence was identified during the 8 year surveillance showing no convincing evidence of the benefit of dietary supplements on atopic eczema. The 8 year surveillance noticed that the clinical guideline warns against the use of complementary therapies because the effectiveness and safety of these therapies have not yet been adequately assessed in clinical studies. On that basis, it would be premature to consider this evidence for inclusion in the guideline at this time.
Education and adherence to therapy			
CG57 – 29 What factors contribute to non-adherence to therapy and how can adherence be improved? (1.6.1.1-1.6.1.2)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	One topic expert suggested 2 studies on treatment adherence. A qualitative study found that barriers to treatment adherence included carer beliefs around eczema treatment, the time consuming nature of applying topical treatments, and child resistance to treatment. The family strategies reported were focused on working around children's resistance to	New evidence is unlikely to impact on guideline recommendations. New evidence was identified relating to treatment adherence which is in line with the current guideline recommendation which states that healthcare professionals should address factors that affect adherence.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
		treatment [104]. A literature search identified factors leading to poor treatment adherence and effective strategies to increase treatment adherence but it is unclear from the abstract whether this is a systematic review [105].	
CG57 – 30 How effective are education programmes for children with atopic eczema and their families/carers? (1.6.1.1-1.6.1.3)			
Surveillance decision This review question should not be updated.			
4-year review (2011) Four studies were identified which found a beneficial effect of educational programmes however none compared different types of interventions [106-109]. The studies found that training/education programmes had effects on all explored psychological variables and long term disease management. Nurse practitioners delivered care that improved eczema severity and quality of life to that provided by dermatologists and attendance at support groups improved pruritus and QoL. Overall the evidence identified at the 4 year surveillance was considered unlikely to impact on guideline recommendations. **6-year surveillance (2014)** No relevant evidence identified.	A systematic review of educational interventions to improve quality of life in people with skin conditions included 2 studies in children with atopic eczema (the other included studies (n=5) were in adults). This systematic review reported that carers of children in one RCT of eczema showed improvement in HRQoL but another RCT evaluating a website intervention did not find effects on HRQoL [110].	One expert topic suggested 2 studies (an RCT and a systematic review) related to patient and family education. Both studies reported that educational interventions lead to improvements in disease severity and quality of life [111,112].	New evidence is consistent with guideline recommendations. Taken together, the evidence identified through the 4 year and 8 year surveillance reviews indicated that educational interventions lead to improvements in disease severity and quality of life. This is supportive of the guideline which recommends that healthcare professionals should spend time educating children with atopic eczema and their parents or carers about atopic eczema and its treatment.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
CG57 – 31 What information and support should be offered to children with atopic eczema and their families/carers? (1.2.1.2, 1.2.1.4, 1.5.1.2, 1.5.7.1, 1.5.7.12, 1.5.9.2, 1.6.1.1-1.6.1.3)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
Indications for referral			
CG57 – 32 What are the indications for referral for specialist paediatric dermatological advice? (1.5.3.6, 1.5.7.10, 1.5.7.11, 1.7.1.1-1.7.1.3)			
Surveillance decision This review question should not be updated.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations.
CG57 – 33 What factors are involved in growth disturbance in children with atopic eczema and how should they be managed? (1.7.1.6)			
Surveillance decision This review question should not be updated.			
4-year review (2011) One study was identified which found that short-term growth was not affected in children with mild to moderate atopic eczema [58]. This evidence was considered unlikely to impact on guideline	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect recommendations. The evidence identified at the 4 year surveillance review was considered unlikely to impact on guideline recommendations because the guideline

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
recommendations. **6-year surveillance (2014)** No relevant evidence identified.			recommends referring children with atopic eczema for specialist advice relating to growth when they fail to grow at the expected growth trajectory, as reflected by UK growth charts. No new evidence was identified in the 8-year surveillance review to change this conclusion.
Research recommendations			
Diagnosis			
RR – 01 What is the validity of currently used diagnostic criteria for atopic eczema when used in different ethnic groups?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.
Assessment of severity, psychological and psychosocial wellbeing and quality of life			
RR – 02 Does the use of severity tools in the assessment of atopic eczema in children in routine practice improve clinical management and outcome (aiding decisions on treatment strategies, increasing clinical response) and is this a cost-effective use of clinical time?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
RR – 03 What is the optimal method (in terms of ease of use, accuracy and sensitivity) of measuring the severity of atopic eczema in children in routine clinical practice?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	See CG57–02 for new evidence.	See CG57-02 for assessment of the impact of the new evidence.
RR – 04 Which psychological and quality of life scales are the most appropriate for use in clinical practice in children with atopic eczema in terms of guiding management or for outcomes of treatment and is their use effective and cost-effective?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) See CG57–04 for new evidence. **6-year surveillance (2014)** See CG57–04 for new evidence.	No relevant evidence identified.	None identified relevant to this question.	See CG57-04 for assessment of the impact of the new evidence.
Identification and management of trigger factors			
RR – 05 How effective and cost-effective is the use of house dust mite avoidance strategies in the treatment of childhood atopic eczema and which strategies, if any, are the most effective?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–08 for new evidence.	None identified relevant to this question.	See CG57-08 for assessment of the impact of the new evidence.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
RR – 06 When and how should children with atopic eczema be tested for allergies (skin prick tests, allergen-specific immunoglobulin E), and how can the diagnostic accuracy and effect on clinical outcomes of the tests be improved?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) No relevant evidence identified. **6-year surveillance (2014)** See CG57–09 for new evidence.	No relevant evidence identified.	None identified relevant to this question.	See CG57-09 for assessment of the impact of the new evidence.
RR – 07 How should exposure to pets be managed in children with atopic eczema; at what age does allergy occur and does tolerance develop?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.
RR – 08 What is the optimal feeding regimen in the first year of life for children with established atopic eczema?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) See CG57-10 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57-10 for new evidence.	None identified relevant to this question.	See CG57-10 for assessment of the impact of the new evidence.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
Treatment			
Stepped approach to management			
RR – 09 How should flares of atopic eczema be defined/recognised, what pattern do they take and how useful is this to clinical practice?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.
RR – 10 Which are the best, most cost-effective treatment strategies for managing and preventing flares in children with atopic eczema?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	See CG57-13 for new evidence.	See CG57-13 for assessment of the impact of the new evidence.
RR – 11 What effect does improving the control of atopic eczema in the first year of life have on the long-term control and severity of atopic eczema and the subsequent development and severity of food allergy, asthma and allergic rhinitis?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) See CG57–10 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–10 for new evidence.	None identified relevant to this question.	See CG57-10 for assessment of the impact of the new evidence.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
Treatment			
Emollients			
RR – 12 Which are the most effective and cost-effective combinations of emollient products to use for the treatment of childhood atopic eczema?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) See CG57–15 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–15 for new evidence.	See CG57–15 for new evidence.	See CG57-15 for assessment of the impact of the new evidence.
RR – 13 Does the regular use of emollients reduce the severity and frequency of flares and the need for other topical agents in the treatment of atopic eczema in children?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.
Treatment			
Topical corticosteroids			
RR – 14 What are the long-term effects (when used for between 1 and 3 years) of typical use of topical corticosteroids in children with atopic eczema?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)**	See CG57–16 for new evidence.	See CG57–16 for new evidence.	See CG57-16 for assessment of the impact of the new evidence.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
No relevant evidence identified.			
RR – 15 What are the optimal treatment regimens for using topical corticosteroids in the treatment of atopic eczema in children?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) See CG57–16 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–16 for new evidence.	See CG57–16 for new evidence.	See CG57-16 for assessment of the impact of the new evidence.
Treatment			
Topical calcineurin inhibitors			
RR – 16 What are the most effective, cost-effective and safe ways of using combinations of topical calcineurin inhibitors with topical corticosteroids of different potencies in the treatment of atopic eczema in children, with particular reference to areas of thin skin such as the face and flexures?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–17 for new evidence.	None identified relevant to this question.	See CG57-17 for assessment of the impact of the new evidence.
RR – 17 What is the effectiveness and safety of using topical calcineurin inhibitors for treating children with atopic eczema in comparison with using different potencies of topical corticosteroids and does this differ in various body sites such as the face?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) See CG57–17 for new evidence. **6-year surveillance (2014)**	See CG57–17 for new evidence.	See CG57–17 for new evidence.	See CG57-17 for assessment of the impact of the new evidence.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
No relevant evidence identified.			
RR – 18 How effective/cost-effective and safe is the use of topical tacrolimus 0.1% ointment for treating children with atopic eczema?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) See CG57–17 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–17 for new evidence.	See CG57–17 for new evidence.	See CG57-17 for assessment of the impact of the new evidence.
RR – 19 What are the optimal treatment durations when using topical pimecrolimus and tacrolimus in the treatment of children with atopic eczema?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) See CG57–17 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–17 for new evidence.	See CG57–17 for new evidence.	See CG57-17 for assessment of the impact of the new evidence.
RR – 20 How safe are topical calcineurin inhibitors for long-term therapy (1–3 years) in the treatment of atopic eczema in children?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) See CG57–17 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–17 for new evidence.	See CG57–17 for new evidence.	See CG57-17 for assessment of the impact of the new evidence.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
Treatment			
Dry bandages and medicated dressings (including wet wrap therapy)			
RR – 21 What are the benefits and harms of the different bandaging therapies (for example, wet, dry and medicated bandages) in the treatment of atopic eczema in children?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.
RR – 22 How effective, cost-effective and safe are wet wrap dressings with emollients alone or in combination with various potencies of topical corticosteroids, for the longer term management (greater than 5 days consecutively) of atopic eczema in children and how do they compare with the use of other topical therapies alone?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.
RR – 23 How effective is the use of topical corticosteroids of different potencies or topical calcineurin inhibitors under occlusion for the treatment of atopic eczema in children and, if effective, for how long can they safely be used?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)**	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
No relevant evidence identified.			
Treatment			
Antihistamines and other antipruritics			
RR – 24 What is the clinical effectiveness, cost-effectiveness and safety of using sedating and non-sedating antihistamines in children with atopic eczema in terms of the outcomes itch and night-time sleep disturbance?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–19 for new evidence.	See CG57–19 for new evidence.	See CG57-19 for assessment of the impact of the new evidence.
Treatment			
Treatment for infections associated with atopic eczema			
RR – 25 What are the prevalence and patterns of antibiotic resistance in children with atopic eczema and how clinically meaningful are these in terms of clinical management and the emergence of multiresistant bacteria?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.
RR – 26 How should bacterially infected atopic eczema in children be defined, how should it be treated and for how long? What are the indications for use of antimicrobial agents in terms of their clinical effectiveness (including palatability), cost-effectiveness and safety?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
4-year surveillance (2011) See CG57–22 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	See CG57-22 for assessment of the impact of the new evidence.
Treatment			
Phototherapy and systemic treatments			
RR – 27 How effective, cost-effective and safe is phototherapy in children with severe atopic eczema? How and when should it be used and should it be combined with other topical therapies?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) See CG57–24 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	See CG57-24 for assessment of the impact of the new evidence.
RR – 28 How effective, cost-effective and safe are systemic treatment options in children with severe atopic eczema and how and when should they be used? For example: azathioprine, ciclosporin, methotrexate, mycophenolate mofetil, oral prednisolone and the newer biological agents.			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–25 for new evidence.	See CG57–25 for new evidence.	See CG57-25 for assessment of the impact of the new evidence.

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
Treatment			
Complementary therapies			
RR – 29 How effective, cost-effective and safe are complementary therapies for the management of atopic eczema in children and how do they compare with conventional Western therapies?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) See CG57–28 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–28 for new evidence.	See CG57–28 for new evidence.	See CG57-28 for assessment of the impact of the new evidence.
Treatment			
Behavioural therapies			
RR – 30 Are behavioural and psychological interventions, for example habit reversal techniques, effective in the management of atopic eczema in children and would their use be feasible and cost-effective in clinical practice?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) See CG57–05 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	See CG57-05 for assessment of the impact of the new evidence.
Education and adherence to therapy			
RR – 31 How effective and cost-effective are different models of educational programmes in the early management of atopic eczema in children, in terms of improving adherence to therapy and patient outcomes such as disease severity and quality of life?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			

Summary of evidence from previous surveillance	Summary of new evidence from 8-year surveillance	Summary of new intelligence from 8-year surveillance	Impact
4-year surveillance (2011) See CG57–30 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	See CG57–30 for new evidence.	See CG57–30 for new evidence.	See CG57-30 for assessment of the impact of the new evidence.
Monitoring growth			
RR – 32 Which factors contribute to growth delay in children with severe atopic eczema, how should they be managed and does this impact on their expected final adult height?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year review (2011) See CG57–33 for new evidence. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	See CG57-33 for assessment of the impact of the new evidence.
RR – 33 What is the impact of food allergy on growth in infants with atopic eczema and how should it be managed?			
Surveillance decision This research recommendation will be considered again at the next surveillance point.			
4-year surveillance (2011) No relevant evidence identified. **6-year surveillance (2014)** No relevant evidence identified.	No relevant evidence identified.	None identified relevant to this question.	No new evidence was identified that would affect this research recommendation.

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