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NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

Guideline

Acne vulgaris: management

Draft for consultation, December 2020

This guideline covers management of acne vulgaris in primary and specialist care. It includes recommendations on topical and oral treatments (including antibiotics and retinoids), treatment using physical modalities and management of acne-related scarring.

Who is it for?

- Healthcare professionals providing NHS-commissioned services
- Commissioners of services
- People with acne vulgaris, their families and carers

What does it include?

- the draft recommendations
- recommendations for research
- rationale and impact sections that explain why the committee made the recommendations and how they might affect practice.
- the guideline context.

Information about how the guideline was developed is on the [guideline's page](#) on the NICE website. This includes the evidence reviews, the scope, and details of the committee and any declarations of interest.

Please tell us if there are any particular issues relating to COVID-19 that we should take into account when finalising the guideline for publication.

6

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1 Recommendations

People have the right to be involved in discussions and make informed decisions about their care, as described in [your care](#).

[Making decisions using NICE guidelines](#) explains how we use words to show the strength (or certainty) of our recommendations, and has information about prescribing medicines (including off-label use), professional guidelines, standards and laws (including on consent and mental capacity), and safeguarding.

2 Throughout this guideline, “acne” in recommendations refers to “acne vulgaris”
3 unless otherwise stated.

4 **1.1 Information for people with acne vulgaris**

5 1.1.1 Give people with acne clear information tailored to their needs. Topics to
6 cover include:

- 7 • the possible reasons for their acne
- 8 • treatment options, including over the counter treatments if appropriate
- 9 • the benefits and drawbacks associated with treatments
- 10 • the importance of adhering to treatment
- 11 • relapses during or after treatment, including:
 - 12 – when and how to obtain further advice
 - 13 – treatment options should a relapse occur.

14 See also the [NICE guideline on patient experience in adult NHS services](#)
15 (particularly recommendations 1.5.11 to 1.5.19) for advice on giving
16 information.

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on information and support](#).

Full details of the evidence and the committee’s discussion are in [evidence review A: information and support](#).

1 **1.2** ***Skin care advice***

2 1.2.1 Advise people with acne to use a [synthetic detergent \(syndet\)](#)-based
3 cleansing product twice daily on acne-affected skin.

4 1.2.2 Advise people with acne to avoid oil-based skin products (for example, oil-
5 based moisturisers, oil-based sun-screens and oil-based skin cleansers).

6 1.2.3 Advise people with acne who use make-up to use oil-free products and,
7 when used, to remove these products at the end of the day.

8 1.2.4 Advise people that persistent picking or scratching of acne lesions can
9 increase the risk of scarring.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on skin care advice](#).

Full details of the evidence and the committee's discussion are in [evidence review B: skin care advice](#) and [evidence review L: risk factors for scarring](#).

10 **1.3** ***Diet***

11 1.3.1 Advise people that there is not enough evidence to support specific diets
12 for treating acne.

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on diet](#).

Full details of the evidence and the committee's discussion are in [evidence review C: diet](#).

13 **1.4** ***Referral to specialist care***

14 1.4.1 Urgently refer people with acne fulminans with systemic symptoms on the
15 same day to the on-call hospital dermatology team, to be reviewed within
16 24 hours.

17 1.4.2 Refer people to a consultant dermatologist-led team if any of the following
18 apply:

- 1 • there is diagnostic uncertainty
- 2 • they have acne fulminans without systemic symptoms
- 3 • they have conglobate acne
- 4 • they have nodulo-cystic acne
- 5 • they have persistent pigmentary changes secondary to acne.
- 6 1.4.3 Consider referring people to a consultant dermatologist-led team if they
- 7 have either:
- 8 • [mild to moderate](#) acne that has not responded to 2 completed courses
- 9 of treatment (see table 1)
- 10 • [moderate to severe](#) acne which has not responded to previous
- 11 treatment which contains an oral antibiotic (see table 1).
- 12 1.4.4 Be aware that the risk of scarring increases with the severity and duration
- 13 of acne.
- 14 1.4.5 Consider referring people to a consultant dermatologist-led team if their
- 15 acne, whatever its severity, or acne-related scarring, is causing or
- 16 contributing to persistent psychological distress or a mental health
- 17 disorder.
- 18 1.4.6 Consider referral to mental health services if a person with acne
- 19 experiences significant psychological distress or a mental health disorder,
- 20 including those with a current or past history of:
- 21 • suicidal ideation or self-harm
- 22 • a severe depressive or anxiety disorder
- 23 • body dysmorphic disorder.
- 24 When considering referral, take into account the person's potential
- 25 treatment options (for example, oral isotretinoin).
- 26 Also see the NICE guidelines on [depression in children and young people:](#)
- 27 [identification and management](#) for advice on recognition, [depression in](#)
- 28 [adults: recognition and management](#) for advice on recognition and

1 assessment, and [self-harm in over 8s: long-term management](#) for advice
2 on self-harm.

3 1.4.7 Consider condition-specific management or referral to a specialist (for
4 example a reproductive endocrinologist), if a medical disorder or
5 medication (including self-administered anabolic steroids) is likely to be
6 contributing to a person's acne.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on referral to specialist care](#).

Full details of the evidence and the committee's discussion are in [evidence review D: referral](#) and [evidence review L: risk factors for scarring](#).

7 **1.5 Managing acne vulgaris**

8 The recommendations in this section cover [mild to moderate](#) and [moderate to severe](#)
9 acne.

10 **First-line treatment options**

11 1.5.1 Offer a 12-week course of 1 of the following first-line treatment options for
12 people with acne, according to severity of their acne and taking account of
13 the person's preferences after a discussion of the risks and benefits of
14 each option (see table 1):

- 15 • a fixed combination of [topical adapalene with topical benzoyl peroxide](#)
16 for any acne severity
- 17 • a fixed combination of [topical tretinoin with topical clindamycin](#) for any
18 acne severity
- 19 • a fixed combination of [topical benzoyl peroxide with topical clindamycin](#)
20 for [mild to moderate](#) acne
- 21 • a fixed combination of [topical adapalene with topical benzoyl peroxide](#),
22 together with either [oral lymecycline or oral doxycycline](#) for [moderate to](#)
23 [severe](#) acne

- 1 • [topical azelaic acid](#) with either [oral lymecycline](#) or [oral doxycycline](#) for
2 [moderate to severe](#) acne.

3 **Table 1 Treatment choices for mild to moderate and moderate to severe acne**
4 **vulgaris**

Acne severity	Treatment	Advantages	Disadvantages
Any severity	Fixed combination of topical adapalene with topical benzoyl peroxide , applied once daily in the evening	<ul style="list-style-type: none"> • Topical • Does not contain antibiotics 	<ul style="list-style-type: none"> • Not for use during pregnancy and with caution during breastfeeding (see recommendation 1.5.6) • Can cause skin irritation, photosensitivity, and bleaching of hair and fabrics
Any severity	Fixed combination of topical tretinoin with topical clindamycin , applied once daily in the evening	<ul style="list-style-type: none"> • Topical 	<ul style="list-style-type: none"> • Not for use during pregnancy or breastfeeding (see recommendation 1.5.6) • Can cause skin irritation and photosensitivity
Mild to moderate	Fixed combination of topical benzoyl peroxide with topical clindamycin , applied once daily in the evening	<ul style="list-style-type: none"> • Topical • Can be used with caution during pregnancy. 	<ul style="list-style-type: none"> • Can cause skin irritation, photosensitivity, and bleaching of hair and fabrics
Moderate to severe	Fixed combination of topical adapalene with topical benzoyl peroxide , applied once daily in the evening, plus either oral lymecycline or oral doxycycline taken once daily	<ul style="list-style-type: none"> • Oral component may be effective in treating affected areas that are difficult to reach with topical treatment (such as the back) • Treatment with adequate courses of standard therapy with systemic antibiotics and topical therapy is an MHRA requirement for subsequent oral isotretinoin (see recommendation 	<ul style="list-style-type: none"> • Not for use in pregnancy, during breastfeeding or under the age of 12 (see recommendation 1.5.6) • Topical adapalene and topical benzoyl peroxide can cause skin irritation, photosensitivity, and bleaching of hair and fabrics • Oral antibiotics may cause systemic side effects and antimicrobial resistance • Oral tetracyclines can cause photosensitivity

Acne severity	Treatment	Advantages	Disadvantages
		1.5.8 and the MHRA alert on Isotretinoin for severe acne: uses and effects)	
Moderate to severe	Topical azelaic acid applied twice daily, plus either oral lymecycline or oral doxycycline taken once daily	<ul style="list-style-type: none"> • Oral component may be effective in treating affected areas that are difficult to reach with topical treatment (such as the back) • Treatment with adequate courses of standard therapy with systemic antibiotics and topical therapy is an MHRA requirement for subsequent oral isotretinoin (see recommendation 1.5.8 and the MHRA alert on Isotretinoin for severe acne: uses and effects) 	<ul style="list-style-type: none"> • Not for use in pregnancy, during breastfeeding or under the age of 12 (see recommendation 1.5.6) • Oral antibiotics may cause systemic side effects and resistance • Oral tetracyclines can cause photosensitivity

- 1 1.5.2 Consider [topical benzoyl peroxide](#) monotherapy as an alternative
2 treatment to the options in table 1, if:
- 3
- 4
- 5
- these treatments are contraindicated
 - the person wishes to avoid using a topical retinoid or a topical or oral antibiotic.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on first-line treatment options](#).

Full details of the evidence and the committee's discussion are in [evidence review E1: mild to moderate NMA](#), [evidence review E2: mild to moderate](#)

[pairwise analysis](#), [evidence review F1: moderate to severe NMA](#) and [evidence review F2: moderate to severe pairwise analysis](#).

1 Factors to take into account during consultation

- 2 1.5.3 Be aware that acne of any severity can cause psychological distress and
3 mental health disorders.
- 4 1.5.4 Discuss the importance of completing the course of treatment as positive
5 effects can take 6 to 8 weeks to become noticeable.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on factors to take into account during consultation](#).

Full details of the committee's discussion are in [evidence review D: referral evidence review E1: mild to moderate NMA](#) and [evidence review F1: moderate to severe NMA](#).

6 Factors to take into account when choosing a treatment option

- 7 1.5.5 To reduce the risk of skin irritation associated with topical treatments,
8 such as benzoyl peroxide or retinoids, start with alternate-day or short-
9 contact application (for example washing off after an hour). If tolerated,
10 progress to using a standard application.
- 11 1.5.6 Be aware that topical retinoids and oral tetracyclines are contraindicated
12 during pregnancy and when planning a pregnancy. Discuss with the
13 person with childbearing potential that they will need to use effective
14 contraception.
- 15 1.5.7 For people receiving treatment for acne who wish to use hormonal
16 contraception, consider using the combined oral contraceptive pill in
17 preference to the progesterone-only pill.
- 18 1.5.8 If it is anticipated that oral isotretinoin may be needed in future, be aware
19 when choosing treatment that the [MHRA guidance on isotretinoin for](#)

1 [severe acne: uses and effects](#) states that oral isotretinoin should not be
2 used unless adequate courses of standard therapy with systemic
3 antibiotics and topical therapy have been tried.

4 1.5.9 Do not use the following to treat acne:

- 5 • monotherapy with a topical antibiotic
- 6 • monotherapy with an oral antibiotic
- 7 • a combination of a topical antibiotic and an oral antibiotic.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on factors to take into account when choosing a treatment option](#).

Full details of the evidence and the committee's discussion are in [evidence review E1: mild to moderate NMA](#), [evidence review E2: mild to moderate pairwise analysis](#), [evidence review F1: moderate to severe NMA](#) and [evidence review F2: moderate to severe pairwise analysis](#).

8 **Factors to take into account at review**

9 1.5.10 Review first-line treatment at 12 weeks and:

- 10 • assess whether the person's acne has improved, and whether they
11 have any side effects
- 12 • in people whose treatment includes an oral antibiotic, if their acne has
13 completely cleared consider stopping the antibiotic but continuing the
14 topical treatment
- 15 • in people whose treatment includes an oral antibiotic, if their acne has
16 improved but not completely cleared, consider continuing the oral
17 antibiotic, alongside the topical treatment, for up to 12 more weeks.

18 1.5.11 Do not continue topical antibiotic or oral antibiotic treatments for longer
19 than 6 months.

- 1 1.5.12 Be aware that the use of antibiotic treatments is associated with a risk of
2 antimicrobial resistance (see the [NICE guideline on antimicrobial](#)
3 [stewardship](#)).
- 4 1.5.13 If acne fails to respond adequately to a 12-week course of a first-line
5 treatment option and at review the severity is:
- 6 • [mild to moderate](#): offer another option from the table of treatment
7 choices (see table 1)
- 8 • [moderate to severe](#), and the treatment did not include an oral antibiotic:
9 offer another option that includes an oral antibiotic from the table of
10 treatment choices (see table 1)
- 11 • [moderate to severe](#), and the treatment included an oral antibiotic:
12 consider referral to a consultant dermatologist-led team.
- 13 1.5.14 If [mild to moderate](#) acne fails to respond adequately to 2 different 12-week
14 courses of treatment options, consider referral to a consultant
15 dermatologist-led team.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on factors to take into account at review](#).

Full details of the evidence and the committee's discussion are in [evidence review E1: mild to moderate NMA](#), [evidence review E2: mild to moderate pairwise analysis](#), [evidence review F1: moderate to severe NMA](#), [evidence review F2: moderate to severe pairwise analysis](#) and [evidence review H: management options for refractory acne](#).

16 Oral isotretinoin treatment

- 17 1.5.15 Consider oral isotretinoin for people older than 12 years who have a
18 severe form of acne that is resistant to adequate courses of standard
19 therapy with systemic antibiotics and topical therapy (table 1). For
20 example:
- 21 • nodulo-cystic acne

- 1 • conglobate acne
- 2 • acne fulminans
- 3 • acne likely to cause scarring.
- 4 1.5.16 When considering oral isotretinoin for acne take into account the person's
- 5 psychological wellbeing (see recommendations 1.4.6) and refer to mental
- 6 health services before starting treatment if appropriate.
- 7 1.5.17 If a person with acne is likely to benefit from oral isotretinoin treatment,
- 8 follow [the MHRA safety advice on isotretinoin for severe acne: uses and](#)
- 9 [effects](#) and the [drug safety update on isotretinoin](#). If the person has the
- 10 potential to become pregnant:
- 11 • explain that isotretinoin can cause serious harm to a developing baby if
- 12 taken during pregnancy
- 13 • inform them that they will need to follow the [pregnancy prevention](#)
- 14 [programme](#).
- 15 1.5.18 Prescribe oral isotretinoin for acne treatment at a standard daily dose of
- 16 0.5 to 1 mg/kg.
- 17 1.5.19 Consider dose adjustment with reduced daily dose of isotretinoin (less
- 18 than 0.5 mg/kg) for people with an intolerance or at increased risk of
- 19 significant adverse effects including:
- 20 • a past or current history of a mental health disorder
- 21 • severe nodulo-cystic acne
- 22 • laboratory test abnormalities.
- 23 1.5.20 When giving isotretinoin as a course of treatment for acne:
- 24 • continue until a total cumulative dose of 120 to 150 mg/kg is reached,
- 25 but
- 26 • if there has been an adequate response and no new acne lesions for 4
- 27 to 8 weeks, consider discontinuing treatment sooner.
- 28 1.5.21 When people take oral isotretinoin for acne:

- 1 • review their psychological wellbeing during treatment, and monitor
- 2 them for symptoms or signs of depression
- 3 • advise them on the importance of seeking help if they feel their mental
- 4 health is affected or is worsening.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on oral isotretinoin treatment](#).

Full details of the evidence and the committee's discussion are in [evidence review F1: moderate to severe NMA](#).

5 **Use of oral corticosteroids in addition to oral isotretinoin**

- 6 1.5.22 When a person with acne fulminans is started on oral isotretinoin,
- 7 consider adding a course of oral prednisolone to prevent an acne flare
- 8 (acute significant worsening of acne).

- 9 1.5.23 If an acne flare occurs after starting oral isotretinoin, consider adding a
- 10 course of oral prednisolone.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on oral corticosteroids in addition to oral isotretinoin](#).

Full details of the evidence and the committee's discussion are in [evidence review J: oral corticosteroids plus oral isotretinoin](#).

11 **Physical treatments**

- 12 1.5.24 Consider photodynamic therapy for people aged 18 and over with
- 13 moderate to severe acne if other treatments are ineffective, not tolerated
- 14 or contraindicated.

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on physical treatments](#).

Full details of the evidence and the committee's discussion are in [evidence review E1: mild to moderate NMA](#), [evidence review E2: mild to moderate pairwise analysis](#), [evidence review F1: moderate to severe NMA](#) and [evidence review F2: moderate to severe pairwise analysis](#).

1 Use of intralesional corticosteroids

2 1.5.25 Consider treating severe inflammatory cysts with intralesional injection of
3 triamcinolone acetonide (0.1 ml of triamcinolone acetonide per cm of cyst
4 diameter, at 0.6 mg/ml diluted in 0.9% sodium chloride). This should be
5 done by a member of a consultant dermatologist-led team.

6

7 In December 2020 this was an off-label use for triamcinolone acetonide.

8 See [Prescribing medicines](#) for more information.

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on use of intralesional corticosteroids](#).

Full details of the evidence and the committee's discussion are in [evidence review K: intralesional steroids](#).

9 Treatment options for polycystic ovary syndrome

10 1.5.26 For people with polycystic ovary syndrome and acne:

- 11
- 12 • treat their acne using a first-line treatment option (see recommendation 1.5.1 and table 1)
 - 13 • if the chosen first-line treatment is not effective, consider adding
 - 14 ethinylestradiol with cyproterone acetate (co-cyprindiol) or an
 - 15 alternative combined oral contraceptive pill to their treatment.
 - 16 • for those using co-cyprindiol review at 6 months and discuss
 - 17 continuation or alternative treatment options.

18 1.5.27 Consider referring people with acne and polycystic ovary syndrome with
19 additional features of hyperandrogenism to an appropriate specialist (for
20 example, a reproductive endocrinologist).

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on treatment options for people with polycystic ovary syndrome](#).

Full details of the evidence and the committee's discussion are in [evidence review G: polycystic ovary syndrome](#).

1 **1.6 Relapse**

2 1.6.1 If acne responds adequately to a course of an appropriate first-line
3 treatment (see recommendation 1.5.3 and table 1) but then relapses,
4 consider either

- 5
- another 12-week course of the same treatment, or
 - an alternative 12-week treatment (see table 1).
- 6

7 1.6.2 If acne relapses after an adequate response to oral isotretinoin and is
8 currently [mild to moderate](#), offer an appropriate treatment option (see
9 table 1).

10 1.6.3 If acne relapses after an adequate response to oral isotretinoin and is
11 currently [moderate to severe](#), offer either:

- 12
- a 12-week course of an appropriate treatment option (see table 1), or
 - re-referral, if the person is no longer under the care of the consultant dermatologist-led team.
- 13
14

15 1.6.4 If acne relapses after a second course of oral isotretinoin and is currently
16 [moderate to severe](#), further care should be decided by the dermatology
17 consultant-led team. If the person is no longer under the care of the
18 consultant dermatologist-led team, offer re-referral.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on relapse](#).

Full details of the evidence and the committee's discussion are in [evidence review H: management options for refractory acne](#).

1 **1.7 Maintenance**

2 1.7.1 Encourage continued appropriate skin care (see recommendations 1.2.1
3 to 1.2.4) as part of maintenance treatment for acne.

4 1.7.2 Explain to the person with acne that, following completion of treatment,
5 maintenance treatment is not always necessary.

6 1.7.3 Consider maintenance treatment in people with incomplete response or a
7 history of frequent relapse after treatment.

8 1.7.4 Consider a fixed combination of [topical adapalene and topical benzoyl](#)
9 [peroxide](#) as maintenance treatment for acne. If this is not tolerated, or if 1
10 of the combination is contraindicated, consider topical monotherapy with
11 [adapalene](#), [azelaic acid](#), or [benzoyl peroxide](#).

12 1.7.5 Review maintenance treatments for acne after 12 weeks to decide if they
13 should continue.

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on maintenance](#).

Full details of the evidence and the committee's discussion are in [evidence review I: maintenance treatments](#).

14 **1.8 Management of acne-related scarring**

15 1.8.1 If a person has acne-related scarring, discuss their concerns and provide
16 information in a way that suits their needs. Topics to cover include:

- 17
- 18 • possible reasons for their scars
 - 19 • possible treatment options
 - 20 • the way their acne scars may change over time
 - psychological distress.

- 1 1.8.2 If a person's acne-related scarring is severe and persists a year after their
2 acne has cleared:
- 3 • refer the person to a consultant dermatologist-led team with expertise
4 in scarring management
 - 5 • in a consultant dermatologist-led team setting, consider glycolic acid
6 peel or CO2 laser treatment (alone or after a session of punch
7 elevation).

For a short explanation of why the committee made these recommendations, see [the rationale and impact section on managing acne-related scarring](#).

Full details of the evidence and the committee's discussion are in [evidence review M: management of scarring](#).

8 ***Terms used in this guideline***

9 **Fixed combination of topical adapalene with topical benzoyl peroxide**

10 Formulation with either of these 2 concentrations:

- 11 • 0.1% adapalene with 2.5% benzoyl peroxide
- 12 • 0.3% adapalene with 2.5% benzoyl peroxide

13 **Fixed combination of topical benzoyl peroxide with topical clindamycin**

14 Formulation with either of these 2 concentrations:

- 15 • 3% benzoyl peroxide with 1% clindamycin
- 16 • 5% benzoyl peroxide with 1% clindamycin

17 **Fixed combination of topical tretinoin with topical clindamycin**

- 18 • 0.025% tretinoin with 1% clindamycin

19 **Mild to moderate acne**

20 Acne severity varies along a continuum. For mild to moderate acne, this includes
21 people who have 1 or more of:

- 1 • any number of non-inflammatory lesions (comedones)
- 2 • up to 34 inflammatory lesions (with or without non-inflammatory lesions)
- 3 • up to 2 nodules.

4 **Moderate to severe acne**

5 Acne severity varies along a continuum. For moderate to severe acne this includes
6 people who have either or both of:

- 7 • 35 or more inflammatory lesions (with or without non-inflammatory lesions)
- 8 • 3 or more nodules.

9 **Oral lymecycline or oral doxycycline**

- 10 • 408 mg lymecycline daily
- 11 • 100 mg doxycycline daily

12 **Synthetic detergent (syndet)**

13 Synthetic detergent (syndet) is widely available in solid and liquid form as a skin
14 cleansing product. These contain a blend of synthetic surfactants and are formulated
15 to have neutral to slightly acidic pH similar to the skin.

16 **Topical adapalene**

- 17 • 0.1% adapalene

18 **Topical azelaic acid**

19 Formulation with either of these 2 concentrations:

- 20 • 15% azelaic acid
- 21 • 20% azelaic acid

22 **Topical benzoyl peroxide**

- 23 • 5% benzoyl peroxide

24 **Recommendations for research**

25 The guideline committee has made the following recommendations for research.

1 **Key recommendations for research**

2 **1 Oral isotretinoin treatment**

3 What is the efficacy of reduced dose oral isotretinoin in the management of acne
4 vulgaris?

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on oral isotretinoin treatment](#).

Full details of the evidence and the committee's discussion are in [evidence review F1: moderate to severe NMA](#).

5 **2 Treatment options for people with polycystic ovary syndrome**

6 What is the most effective first-line treatment option for any severity of acne vulgaris
7 for people with polycystic ovary syndrome?

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on treatment options for people with polycystic ovary syndrome](#).

Full details of the evidence and the committee's discussion are in [evidence review G: polycystic ovary syndrome](#).

8 **3 Diet**

9 What is the effect of dietary interventions or dietary changes on acne?

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on diet](#).

Full details of the evidence and the committee's discussion are in [evidence review C: diet](#).

10 **4 Skin care advice**

11 What skin care advice is appropriate for people with acne?

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on skin care advice](#).

Full details of the evidence and the committee's discussion are in [evidence review B: skin care advice](#).

1 **5 Physical treatments for acne vulgaris and acne vulgaris-related scarring**

- 2 What is the effectiveness of physical treatments (such as light devices) in the
3 treatment of acne vulgaris or persistent acne vulgaris-related scarring?

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on physical treatments](#).

Full details of the evidence and the committee's discussion are in [evidence review E1: mild to moderate NMA](#), [evidence review F1: moderate to severe NMA](#) and [evidence review M: management of scarring](#).

4 ***Other recommendations for research***

5 **Acne-related scarring**

- 6 What are the risk factors for acne vulgaris-related scarring?

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on managing acne-related scarring](#).

Full details of the evidence and the committee's discussion are in [evidence review L: risk of scarring](#).

7 **Physical treatments for acne vulgaris and acne vulgaris-related scarring**

- 8 What is the effectiveness of chemical peels for the treatment of acne vulgaris or
9 persistent acne vulgaris-related scarring?

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on physical treatments](#).

Full details of the evidence and the committee's discussion are in [evidence review E1: mild to moderate NMA](#), [evidence review F1: moderate to severe NMA](#) and [evidence review M: management of scarring](#).

1 Information and support

2 What information and support is valued by people with acne vulgaris?

For a short explanation of why the committee made this recommendation, see [the rationale and impact section on information and support](#).

Full details of the evidence and the committee's discussion are in [evidence review A: information and support](#).

3 Rationale and impact

4 These sections briefly explain why the committee made the recommendations and
5 how they might affect practice. They link to details of the evidence and a full
6 description of the committee's discussion.

7 *Information and support*

8 Recommendation [1.1.1](#)

9 **Why the committee made the recommendation**

10 No evidence was found on what information and support is valued by people with
11 acne vulgaris, and their parents or carers. Therefore, the committee made
12 recommendations based on their knowledge and experience.

13 The committee listed some topics that they thought most people with acne vulgaris
14 would find useful in relation to the condition and their care. Among these topics, the
15 committee noted that encouraging people to adhere to treatment was important to
16 highlight early on, because improvement may not be seen immediately.

17 The committee were aware that general principles about tailoring information to
18 people's needs and circumstance are set out in [the NICE guideline on patient](#)

1 [experience in adult NHS services](#) and agreed that this would also be relevant to
2 young people, the age group where acne is most common.

3 Because of the lack of evidence the committee made a research recommendation to
4 find out what information people with acne vulgaris would value, and what impact
5 this would have on their satisfaction with services and shared decision making.

6 **How the recommendations might affect practice**

7 The recommendation aims to standardise what information is provided, and how it is
8 given. No impact on resources is expected.

9 Full details of the evidence and the committee's discussion are in [evidence review A:
10 information and support](#).

11 [Return to recommendations](#)

12 ***Skin care advice***

13 Recommendations [1.2.1 to 1.2.4](#)

14 **Why the committee made the recommendations**

15 Overall, the evidence on skin care products was very limited, but what was available
16 suggested that syndet skin cleansing products used twice daily reduce inflammatory
17 and non-inflammatory acne vulgaris lesion counts. Compared to traditional soap
18 bars, syndet products do not form a soap residue layer, so they rinse off easily.

19 Syndet cleansing products have a relatively high free fatty acid content which helps
20 to maintain skin hydration. Although the research was carried out using a syndet bar,
21 many syndets are now available in different formulations such as liquid or foam. The
22 committee agreed that different formulations are probably similarly effective, so the
23 findings would still be applicable. Because of the limited evidence they
24 recommended this as general skin care advice rather than as a treatment.

25 Although there was some limited evidence on the use of acidic skin cleansers and
26 benzoyl-peroxide-based face washes, the committee agreed that this was not
27 sufficient to make a recommendation.

1 No relevant evidence was identified on the use of other skin care products, such as
2 oil-free products or make-up. Based on the committee's knowledge, oil-based
3 products can make acne vulgaris worse because acne is typified by excessively oil
4 skin.

5 The committee discussed how people often pick or scratch their acne lesions. In the
6 committee's experience this can lead to scarring, so they recommended that people
7 are advised to avoid these behaviours. The committee discussed whether a research
8 recommendation should be made for risk factors related to scarring. Given that the
9 evidence was limited the committee decided that further research was needed, and
10 made a research recommendation.

11 Clinicians are frequently asked for skin care advice and it is therefore an important
12 topic for people with acne. Because of the limited evidence the committee decided to
13 prioritise this for a research recommendation.

14 **How the recommendations might affect practice**

15 The committee noted that there is currently variation in the type of advice that is
16 provided to people with acne and therefore recommendations are aimed at
17 standardising practice.

18 Full details of the evidence and the committee's discussion are in [evidence review](#)
19 [B:skin care advice](#) and [evidence review L: risk factors for scarring](#).

20 [Return to recommendations](#)

21 ***Diet***

22 Recommendation [1.3.1](#)

23 **Why the committee made the recommendation**

24 The committee reviewed the evidence from a small number of randomised controlled
25 trials that examined the effectiveness of a low-glycaemic-load diet in people with
26 acne vulgaris.

27 Although there was some evidence that a low-glycaemic-load diet may improve acne
28 vulgaris, the committee was concerned about the possibility of weight loss or eating

1 disorders, especially as most people with acne vulgaris are young and the onset of
2 eating disorders is most common in adolescence. Because of this, the committee
3 decided that they did not want to recommend a specific diet as a potential treatment
4 option, as the limited evidence of benefit did not outweigh the risk.

5 Given the limited evidence the committee decided that further research is needed in
6 this area and made a research recommendation to encourage this.

7 **How the recommendation might affect practice**

8 The recommendation will not have a substantial impact on current practice.

9 Full details of the evidence and the committee's discussion are in [evidence review C:](#)
10 [diet](#).

11 [Return to recommendation](#)

12 ***Referral to specialist care***

13 Recommendations [1.4.1 to 1.4.7](#)

14 **Why the committee made the recommendations**

15 No evidence was identified comparing different criteria of referral to specialist care.
16 The committee therefore made recommendations based on their expertise and
17 experience. When discussing referral related to scarring the committee also
18 considered evidence related to risk factors for scarring.

19 They highlighted several distinct categories of who should be referred, when, and to
20 where (urgent referral, standard referral criteria, referral to mental health services
21 and referral of people with an underlying medical cause for their acne).

22 The committee also discussed what would constitute 'specialist care' and who the
23 referral would be made to. They agreed that, in line with current advice (see [the](#)
24 [MHRA safety advice on Isotretinoin for severe acne: uses and effects](#)), people who
25 may go on to have treatment with isotretinoin should be referred to a consultant
26 dermatologist-led team to ensure the person's safety and wellbeing.

1 ***Urgent referral***

2 The committee decided that people with acne fulminans who present with systemic
3 symptoms have to be urgently referred in order to be reviewed within 24 hours
4 because this condition could make people seriously unwell, potentially needing them
5 to be admitted to hospital.

6 ***Standard referral to a consultant dermatologist-led team***

7 The committee agreed referral should take place when it is unclear whether a
8 person's lesions are acne or another skin condition, when there are pigmentary
9 changes that are persistent, or when people have severe forms of acne (such as
10 conglobate acne or acne fulminans). People can also be referred if the acne has not
11 responded to previous treatment, or if the acne is causing or contributing to
12 persistent psychological distress or a mental health disorder.

13 The committee also considered evidence related to risk of scarring, which suggests
14 that the severity and duration of acne may be risk factors for scarring. The committee
15 noted that there is substantial uncertainty, as the studies did not control for the
16 influence of other factors. However, the committee agreed that the identification of
17 these as risk factors for scarring was consistent with their knowledge and
18 experience, so recommended that healthcare practitioners should be made aware of
19 these potential links. Because of concerns about the evidence, they decided that the
20 best course of action was to raise awareness of such risk factors, and allow
21 clinicians to make referral decisions related to scarring on an individual basis.

22 Because of the psychological impact that acne or acne-related scarring can have,
23 the committee recommended that people who are persistently psychologically
24 distressed by this could be referred. As levels of psychological distress can be
25 interpreted in many different ways, and what may or may not count as persistent can
26 also vary, the committee recommended this should be judged on a case-by-case
27 basis.

28 The committee discussed the importance of the identification of risk factors for
29 scarring so that these can be addressed to prevent this. They therefore made a
30 research recommendation for this topic.

1 ***Referral to mental health services***

2 The committee recognised that acne vulgaris can have a psychological and social
3 impact on people, potentially causing anxiety or depression. It can also exacerbate
4 pre-existing mental health conditions. They discussed that it is important to refer
5 people to mental health services if there are serious mental health concerns to
6 ensure people's safety. In line with the MHRA advice related to mental health
7 adverse events related to oral isotretinoin use the committee highlighted that
8 awareness of possible mental health disorders or psychological distress, resulting in
9 a need for referral to mental health services, is particularly important when
10 considering this treatment.

11 ***Referral of people with an underlying medical cause for their acne vulgaris***

12 The committee agreed it was important to raise awareness that people with an
13 underlying condition should have their acne treated, but in addition the healthcare
14 professional should provide condition-specific management if possible or referral
15 should be considered if not.

16 **How the recommendations might affect practice**

17 The recommendations aim to reduce the variability in referral for people with acne to
18 specialist care. Having standard criteria would also encourage more timely referrals.
19 Timely referrals will improve outcomes and reduce the potential risk of scarring
20 through appropriate implementation of treatment or management strategies for
21 people with acne. There may be increased resources needed for urgent referral,
22 however the population with acne fulminans is very small and therefore the resource
23 impact is unlikely to be substantial.

24 Full details of the evidence and the committee's discussion are in [evidence review D:
25 referral](#) and [evidence report L: risk factors for scarring](#).

26 [Return to recommendations](#)

27 ***First-line treatment options***

28 Recommendations [1.5.1 and 1.5.2](#)

1 **Why the committee made the recommendations**

2 Based on the evidence, the committee concluded that there were a number of
3 pharmacological treatment options that were clinically and cost effective. For each of
4 the 2 examined levels of acne severity (mild to moderate acne and moderate to
5 severe acne), the identified evidence showed that a range of treatments had similar
6 clinical and cost effectiveness. The committee recommended 5 treatments (2
7 treatment options for both levels of severity, 1 option specifically for mild to moderate
8 acne and 2 options specifically for moderate to severe acne, all according to relevant
9 evidence), with the pros and cons of each given in a table to help shared decision
10 making. The committee decided that all of these options would be given as a 12-
11 week course, as this was consistent with current practice and also the most common
12 course length in the evidence.

13 The committee noted that the evidence showed that combinations of topical
14 treatments that included benzoyl peroxide, clindamycin and/or a retinoid (adapalene)
15 were overall more effective than any of these interventions used as topical
16 monotherapies, and this was the case for any severity of acne. The committee
17 agreed that this was consistent with their clinical experience. The evidence also
18 showed that a combination of 3 topical agents was less or similarly effective
19 compared with a combination of any 2 agents, so triple therapy was not
20 recommended.

21 Topical treatments in combination with an oral tetracycline (either lymecycline or
22 doxycycline) were recommended for moderate to severe acne, as the evidence
23 indicated that oral tetracycline combined with a fixed combination of topical benzoyl
24 peroxide and topical retinoid, and oral tetracycline with topical azelaic acid were
25 amongst the most clinically- and cost-effective pharmacological options. The
26 committee chose to recommend the option of azelaic acid combined with oral
27 tetracycline because, despite its more limited evidence base, it was shown to be
28 clinically and cost effective. It was therefore considered to be a good alternative for
29 people who have irritation to topical retinoids, since all other options for moderate to
30 severe acne contain a topical retinoid.

31 The committee recommended either lymecycline or doxycycline because both are
32 usually taken only once a day, which may improve adherence to the oral antibiotic

1 treatment component compared to tetracycline and oxytetracycline which are taken
2 twice a day. Lymecycline or doxycycline have a lower risk of side effects than
3 minocycline, and are preferred to oxytetracycline because they can be taken with
4 food.

5 Of the 5 options, 4 contain either a topical retinoid or oral tetracycline (lymecycline or
6 doxycycline), so they should not be used during pregnancy. There was evidence that
7 monotherapy with benzoyl peroxide was clinically and cost effective at any level of
8 severity, albeit less so than the other 5 treatments recommended, and so this was
9 recommended as an alternative for people when topical retinoids or oral tetracyclines
10 are contraindicated (for example for use during pregnancy).

11 The committee noted that the evidence for some treatment options such as physical
12 treatments and chemical peels was limited, and therefore they recommended further
13 research into these.

14 **How the recommendations might affect practice**

15 While the recommendations largely reflect current practice, the committee felt that
16 treatment options including the advantages and disadvantages should be discussed
17 with the person, which may mean additional resource use (for example, if longer or
18 more consultations are needed). This will, however, likely to lead to later benefits
19 and reductions in resource use from better understanding and compliance with
20 medication.

21 The committee recognised that some currently available treatment options are not in
22 the recommended list. The evidence related to this, and a detailed discussion of why
23 some specific treatment options were not recommended, can be found in [evidence
24 review E2: mild to moderate pairwise analysis](#), [evidence review F2: moderate to
25 severe pairwise](#), [evidence review E1: mild to moderate NMA](#) and [evidence review
26 F1: moderate to severe NMA](#).

27 [Return to recommendations](#)

28 ***Factors to take into account during consultation***

29 Recommendations [1.5.3 to 1.5.4](#)

1 **Why the committee made the recommendations**

2 Based on experience and expertise the committee discussed that there were some
3 general points that should be thought about or discussed at consultation.

4 The committee recognised that acne vulgaris can be the cause of psychological
5 distress and agreed that this can be the case even if acne is mild. They decided to
6 make a recommendation to raise the awareness of this so that the impact of acne on
7 the person's psychological health will be considered during consultation.

8 The committee also discussed that it is important to encourage adherence and
9 therefore discuss the need for continued treatment with the person because usually
10 the positive effects of treatments only become visible after 6 to 8 weeks.

11 **How the recommendations might affect practice**

12 Even though the recommendations are consistent with current practice, they
13 emphasise psychological aspects and adhering to treatment regimens because both
14 these are important factors to in the management of acne.

15 Even though these recommendations are based on committee experience and
16 expertise, details of the committee's discussion are in [evidence review D: referral](#),
17 [evidence review E1: mild to moderate NMA](#) and [evidence review F1: moderate to](#)
18 [severe NMA](#).

19 [Return to recommendations](#)

20 ***Factors to take into account when choosing a treatment option***

21 Recommendations [1.5.5 to 1.5.9](#)

22 **Why the committee made the recommendations**

23 Based on their experience and expertise, as well as some evidence, the committee
24 agreed that some factors related to first-line treatments should be highlighted.

25 The evidence indicated that topical agents such as benzoyl peroxide and retinoids
26 often cause skin irritation. Therefore, based on this and clinical experience, the
27 committee recommended an initial alternate-day or short-contact application to help
28 reduce skin irritation, and in doing so encourage adherence to treatment.

1 Since some of the options include a topical retinoid or oral tetracyclines, the
2 committee highlighted that these are contraindicated during pregnancy and when
3 planning a pregnancy. Therefore use of effective contraception should be discussed
4 with people with the potential to become pregnant.

5 Even though evidence for the combined oral contraceptive pill did not show clear
6 effectiveness, based on consensus and clinical experience the committee decided
7 that women who need hormonal contraceptives could be given the combined oral
8 contraceptive pill in addition to a first-line treatment option. This would be preferable
9 to the progesterone-only pill, which, based on the expertise and experience of the
10 committee, is known to potentially cause acne. The committee also recognised that
11 making recommendations about contraceptive methods is outside the scope of this
12 guideline, and that the most reliable contraceptive is the one which the person would
13 prefer to use after shared decision making looking at all options. They therefore only
14 recommended this for people who had already chosen hormonal contraception.

15 The committee discussed that in clinical practice it may be anticipated that oral
16 isotretinoin treatment will be needed in future, for example based on severity. A
17 healthcare professional may then want to choose a first-line option with an oral
18 antibiotic, as this is a prerequisite for oral isotretinoin treatment and may also
19 successfully treat the acne.

20 The evidence showed lower clinical and cost effectiveness of oral antibiotics when
21 used as monotherapy compared with the recommended treatment options in
22 moderate to severe acne, and no clinical effectiveness in mild to moderate acne, and
23 because of this as well as antibiotic stewardship the committee decided not to
24 recommend oral antibiotics as monotherapy. They also agreed that combined topical
25 antibiotics and oral antibiotics should not be used. There was no evidence on this,
26 but based on experience and expertise the committee noted that such combinations
27 are not used in current practice and agreed that without evidence this should not be
28 introduced as an option.

1 **How the recommendation might affect practice**

2 The recommendations related to antibiotics may lead to a significant change in
3 clinical practice. Currently, antibiotics both topical and oral forms may be given long-
4 term and not reviewed during treatment.

5 Full details of the evidence and the committee's discussion are in [evidence](#)
6 [review E1: mild to moderate NMA](#), [evidence review E2: mild to moderate pairwise](#)
7 [analysis](#), [evidence review F1: moderate to severe NMA](#) and [evidence review F2:](#)
8 [moderate to severe pairwise analysis](#).

9 [Return to recommendations](#)

10 ***Factors to take into account at review***

11 Recommendations [1.5.10 to 1.5.14](#)

12 **Why the committee made the recommendations**

13 No evidence was identified for how long a treatment should be used. The committee
14 agreed, based on their clinical experience, that first-line treatment should be
15 continued for 12 weeks to determine if it is effective and to allow it to have the
16 optimum effect, then reviewed.

17 The committee agreed that treatment with an oral antibiotic (as part of combined oral
18 antibiotic and topical treatment) could be stopped at 12 weeks, if the person's acne
19 is completely clear, to help prevent the development of antimicrobial resistance
20 (while continuing with the topical treatment). If not completely cleared the antibiotic
21 can be continued for up to a further 12 weeks (alongside the topical treatment).

22 There was a lack of evidence on the comparative effectiveness of antibiotic use
23 according to different length of treatment times. Therefore, the committee used their
24 knowledge and experience to recommend that treatments including topical or oral
25 antibiotics should last no longer than 6 months. They noted that staying on any
26 treatment which has not proved effective at 6 months would be inadvisable because
27 of the increased risk of scarring, as well as the potential to develop antimicrobial
28 resistance.

1 The committee noted that 6 months of antibiotic treatment is longer than the 12-week
2 course of antibiotic treatments that are currently commonly used. However, they
3 decided that if the treatment is found to improve the acne at the 12-week review it
4 would be useful to continue. They also noted that the recommendation against
5 antibiotic monotherapy and against combined topical antibiotic with an oral antibiotic
6 treatment would lead to substantially lower prescribing of antibiotic treatments for
7 acne vulgaris overall.

8 The committee also took into account the principles of antimicrobial guidance and
9 policy, as outlined in the [NICE guideline on antimicrobial stewardship](#), as well as the
10 [World Health Organization Global action plan on antibiotic resistance](#). All of these
11 antibiotic treatments increase the risk of antimicrobial resistance, and the committee
12 noted that people should be aware of the principles of antimicrobial stewardship
13 when considering treatments for acne.

14 No evidence was identified for the best further treatment option when there has been
15 no or only a partial response at review.

16 The committee therefore agreed that treatment failure should be dealt with in a
17 stepwise approach, taking into account the number of treatment courses and
18 severity of acne after the first treatment. If mild to moderate acne fails to respond to
19 a 12-week course of a topical first-line treatment, the committee decided that another
20 option should be offered. For unresponsive moderate to severe acne, further
21 treatment depends on whether or not the first choice was an option that contained an
22 oral antibiotic. If it did not then this should be considered next, but if the option
23 included an oral antibiotic then referral to a consultant dermatologist-led team can be
24 considered. The committee discussed that in these cases a timely referral could
25 prevent scarring.

26 When mild to moderate acne vulgaris fails to respond to a second 12-week course of
27 treatment, the committee agreed that the person should be referred to a consultant
28 dermatologist-led team rather than continuing courses of treatment in primary care.

29 **How the recommendation might affect practice**

30 The recommendation of 12-week review and a maximum 6-month duration will lead
31 to standardisation of practice, reducing repeated long-term antibiotic prescription and

1 the risk of antimicrobial resistance. This in turn may result in positive associated cost
2 savings and improved clinical outcomes. With regard to further treatment when there
3 was no or only partial improvement, the committee noted that these
4 recommendations are consistent with other parts of the guideline and therefore will
5 help standardise practice.

6 Full details of the evidence and the committee's discussion are in [evidence](#)
7 [review E1: mild to moderate NMA](#), [evidence review E2: mild to moderate pairwise](#)
8 [analysis](#), [evidence review F1: moderate to severe NMA](#), [evidence review F2:](#)
9 [moderate to severe pairwise analysis](#) and [evidence review H: management options](#)
10 [for refractory acne](#).

11 [Return to recommendations](#)

12 ***Oral isotretinoin treatment***

13 Recommendations [1.5.15 to 1.5.21](#)

14 **Why the committee made the recommendations**

15 The committee noted that the evidence on this topic was uncertain because of the
16 small number of participants, and agreed that results should be interpreted with
17 some caution. The evidence indicated that oral isotretinoin was an effective and
18 cost-effective treatment for moderate to severe acne. However, taking into account
19 [the MHRA safety advice on isotretinoin for severe acne: uses and effects](#), and
20 specifically the possibility of psychiatric side effects, the committee recommended
21 oral isotretinoin only in situations when they agreed the benefits outweighed the risks
22 (such as in severe form of acne that is resistant to adequate courses of standard
23 therapy with systemic antibiotics and topical therapy).

24 The committee noted the need to follow MHRA guidance before oral isotretinoin is
25 started, and to ensure that those who are taking it are advised about the important
26 safety issues associated with this medicine, and monitored as needed. They also
27 emphasised that when starting oral isotretinoin, people of childbearing potential have
28 to use contraception and need to follow the recommended [pregnancy prevention](#)
29 [programme](#).

1 The committee noted from the evidence that results were almost exclusively derived
2 from trials testing oral isotretinoin in dosages of at least 0.5 mg/kg/day, and that total
3 cumulative doses of at least 120 mg/kg in a single course were more effective
4 compared with total cumulative doses lower than 120 mg/kg in a single course. After
5 reviewing the evidence, and based on their clinical experience, the committee
6 decided to recommend a standard daily dose of 0.5 mg to 1 mg/kg. The committee
7 agreed based on expertise and clinical experience that people who have an
8 intolerance or are at risk of significant adverse effects are likely to need dosage
9 adjustment as some adverse events are dose dependent. They decided to
10 recommend a dose adjustment for people with severe nodulo-cystic acne to avoid an
11 acute flare. The committee also discussed that particular care needs to be taken
12 when prescribing isotretinoin for people with a past or current history of a mental
13 health disorder, for example depression by giving a dose adjustment to see whether
14 it is tolerated. People with abnormal laboratory test results would need a dose
15 reduction (for example renal impairment, elevated lipid profile and abnormal
16 haematological profile).

17 The evidence suggested that a cumulative dose of 120 to 150 mg/kg is effective, but
18 it was known from the committee's experience that sometimes an adequate
19 response with skin clearance can occur before this has been reached. They decided
20 after balancing the potential adverse events and effectiveness, that for some people
21 based on clinical judgement, treatment can be complete before a total cumulative
22 dose of 120 to 150 mg/kg is reached if there is sustained clear skin for 4 to 8 weeks.

23 When people take oral isotretinoin the committee emphasised, because of MHRA
24 safety concerns, that their psychological wellbeing has to be reviewed and
25 monitored, and that people need to know that it is important to seek help if they need
26 it.

27 The committee noted that the evidence for lower dose oral isotretinoin was scarce,
28 and therefore prioritised this for a research recommendation to investigate this
29 further.

1 **How the recommendations might affect practice**

2 The recommendations reinforce current practice and MHRA guidance. There may be
3 additional resource use, for example, referral to mental health services or if longer or
4 more consultations are needed. This will likely to lead to later benefits and cost
5 savings, with reduction in potential adverse outcomes and shorter overall duration of
6 treatment.

7 Full details of the evidence and the committee's discussion are in [evidence](#)
8 [review F1: moderate to severe NMA](#) and [evidence review F2: moderate to severe](#)
9 [pairwise analysis](#).

10 [Return to recommendations](#)

11 ***Use of oral corticosteroids in addition to oral isotretinoin***

12 Recommendations [1.5.22](#) and [1.5.23](#)

13 **Why the committee made the recommendations**

14 No evidence was found on this topic, so the committee made recommendations
15 based on their clinical knowledge and experience.

16 The committee discussed that oral corticosteroids would only be given to a very
17 small group of people: those with acne fulminans who are going to start isotretinoin.
18 The committee agreed that it is known that oral isotretinoin may cause acne flare, so
19 it is accepted practice to also give oral corticosteroids to people with acne fulminans
20 starting oral isotretinoin to prevent it. If oral isotretinoin is given and an acne flare
21 occurs after the start of treatment, an oral corticosteroid can also be used to treat
22 this.

23 **How the recommendations might affect practice**

24 The recommendation aims to standardise the use of oral corticosteroids in addition
25 to oral isotretinoin when treating acne fulminans. This reflects current clinical practice
26 and is not likely to have resource implications.

27 Full details of the evidence and the committee's discussion are in [evidence review J:](#)
28 [oral corticosteroids plus oral isotretinoin](#).

1 [Return to recommendations](#)

2 ***Physical treatments***

3 Recommendation [1.5.24](#)

4 **Why the committee made the recommendation**

5 Based on modest evidence that photodynamic therapy is moderately clinically and
6 cost effective in the treatment of moderate to severe acne vulgaris compared with
7 other treatments, the committee decided that it should be introduced as an
8 alternative for treating this severity of acne when other treatments are ineffective, not
9 tolerated or contraindicated. The evidence for physical treatments for mild to
10 moderate acne was very limited. Therefore, the committee noted that for those
11 people with mild to moderate acne when other treatments are ineffective, not
12 tolerated or contraindicated, the use of photodynamic therapy would depend upon
13 the consultant dermatologist's clinical expertise and judgement on a case-by-case
14 basis.

15 Because of the limited evidence, the committee decided to prioritise this topic for
16 further research.

17 **How the recommendation might affect practice**

18 Physical treatments for the management of acne are not part of current practice in
19 the NHS. Therefore, the recommendation is expected to result in a change in current
20 practice and have some impact on resources and training. The impact is not
21 expected to be substantial, as most dermatology centres across the country already
22 have photodynamic therapy facilities and the proportion of people with acne fulfilling
23 the criteria is not expected to be high.

24 Full details of the evidence and the committee's discussion are in [evidence review](#)
25 [F1: moderate to severe NMA](#).

26 [Return to recommendations](#)

27 ***Use of intralesional corticosteroids***

28 Recommendation [1.5.25](#)

1 **Why the committee made the recommendation**

2 Severe inflammatory acne vulgaris cysts can be painful and unsightly, so even
3 though the evidence was limited the committee agreed it was important to make a
4 recommendation on this by using their knowledge and experience together with the
5 available evidence.

6 From the limited evidence there were sufficiently positive results to recommend the
7 use of intralesional triamcinolone acetonide, which agreed with the committee's
8 experience. The committee chose to recommend a concentration of 0.6 mg/ml as
9 this is in line with the effective concentrations used in the available evidence.

10 The committee also discussed that there are some possible side effects of
11 triamcinolone acetonide injections, for example hypopigmentation (especially in
12 people with darker skin). Because of this, the committee recommended a lower dose
13 than is used for other inflammatory conditions, noting that the recommended dose is
14 small and is less likely to cause side effects. The committee also agreed that usually,
15 inflammatory acne lesions respond well to low concentrations of triamcinolone
16 acetonide, so the higher doses often used for other treatments are not needed.

17 **How the recommendation might affect practice**

18 At present there is variation in the use of intralesional corticosteroids for people with
19 inflammatory cysts, in terms of indication, time point and dosage. The
20 recommendation aims to standardise practice and is likely to have low impact on
21 resources as intralesional corticosteroids is readily available and the procedure can
22 be done during the clinic consultation.

23 Full details of the evidence and the committee's discussion are in [evidence review K:](#)
24 [intralesional steroids](#).

25 [Return to recommendation](#)

26 ***Treatment options for people with polycystic ovary syndrome***

27 Recommendations [1.5.26 to 1.5.27](#)

1 **Why the committee made the recommendations**

2 There was insufficient evidence to identify the most effective treatment for acne
3 vulgaris in people with polycystic ovary syndrome, so the committee agreed that the
4 usual first-line treatment options are appropriate in the first instance. This enables
5 treatment for acne in people with polycystic ovary syndrome to be started without
6 delay.

7 If the first-line treatment options do not work, adding a hormonal treatment could be
8 effective because of hyperandrogenism in people with polycystic ovary syndrome.

9 The committee agreed that either the combined oral contraceptive pill (which is an
10 established and widely available hormonal treatment for the symptoms of polycystic
11 ovary syndrome) or ethinylestradiol with cyproterone acetate (co-cyprindiol) could be
12 used, as they have different mechanisms of action from one another. The committee
13 agreed that a 6-month review for co-cyprindiol should take place to discuss the
14 benefits and risks of continuing the treatment or the use of an alternative option.

15 The committee also agreed that the standard first-line treatment options as well as
16 the combined contraceptive pill or co-cyprindiol could be delivered in primary care,
17 but some people with acne vulgaris and polycystic ovary syndrome who have
18 additional features of hyperandrogenism would need more specialist treatment and
19 would benefit from referral to a specialist, such as a reproductive endocrinologist.

20 Because of the insufficient evidence for this review the committee prioritised this
21 topic for further research.

22 **How the recommendations might affect practice**

23 The committee considered the recommendations largely reflect current practice,
24 although there may be an increase in the use of first-line treatment options instead of
25 hormonal treatments as initial care for acne in people with polycystic ovary syndrome
26 which could be cost saving.

27 Full details of the evidence and the committee's discussion are in [evidence review G:](#)
28 [polycystic ovary syndrome](#).

29 [Return to recommendations](#)

1 **Relapse**

2 Recommendations [1.6.1 to 1.6.4](#)

3 **Why the committee made the recommendations**

4 No evidence was identified, so the recommendations were based on the committee's
5 experience and expertise. The committee agreed that relapse after treatment should
6 be dealt with in a stepwise approach, taking into account the number of treatment
7 courses and severity of acne after the first treatment.

8 For people with acne that relapses after adequate response to first-line treatment,
9 the committee agreed the same treatment should be tried again if it was well
10 tolerated and the person was happy with the outcome, or a different option could be
11 tried if preferred.

12 In a situation when acne has adequately responded to oral isotretinoin but has
13 relapsed to mild to moderate severity, the committee recommended offering a new
14 12-week course of one of the first-line treatments for mild to moderate severity. This
15 would most likely achieve adequate results while avoiding the side effects of oral
16 antibiotics or another course of oral isotretinoin.

17 In a situation when acne has adequately responded to oral isotretinoin but has
18 relapsed to moderate to severe severity, the committee agreed to recommend 2
19 options. Either a new 12-week course of one of the first-line treatment options, as
20 this may adequately treat the relapse, or re-referral to a consultant dermatologist-led
21 team for alternative treatment options (which may include a further course of
22 isotretinoin).

23 The committee agreed that people whose acne vulgaris has relapsed after treatment
24 with 2 separate courses of oral isotretinoin, and who currently have moderate to
25 severe acne, should be offered a re-referral if they are no longer under the care of a
26 consultant dermatologist-led team. They discussed that these people may need a
27 tailored approach to their acne treatment, including a change in dose or duration of
28 oral isotretinoin or other alternative treatment options.

1 **How the recommendations might affect practice**

2 The committee noted that these recommendations are consistent with other parts of
3 the guideline and therefore will help standardise practice. They acknowledged that
4 referral of a person to a consultant dermatologist-led team after acne vulgaris
5 relapsed twice with 2 separate courses of oral isotretinoin, may lead to a change in
6 current clinical practice. However, they agreed that this approach will lead to better
7 outcomes because it is using a specialist tailored approach to treatment.

8 Full details of the evidence and the committee's discussion are in [evidence review H:](#)
9 [management options for refractory acne](#).

10 [Return to recommendations](#)

11 ***Maintenance***

12 Recommendations [1.7.1 to 1.7.5](#)

13 **Why the committee made the recommendations**

14 There was some evidence on this topic, and the committee used this together with
15 their experience and expertise to make recommendations.

16 The committee noted that appropriate skin care, as described in section 1.2, should
17 be encouraged to maintain the skin improvements achieved by acne treatment.

18 The committee discussed that people whose acne has cleared are often concerned
19 that not having further treatment will mean their acne will relapse, which is often not
20 the case. The committee therefore recommended that healthcare professionals
21 should explain that maintenance treatment is not always needed.

22 The evidence showed that people with partial acne improvement would benefit from
23 maintenance treatment, which was consistent with the committee's experience.

24 Based on clinical experience, another group that the committee thought may benefit
25 from maintenance treatment were those whose acne had previously returned after
26 treatment.

27 There was some evidence of limited quality suggesting that topical retinoids such as
28 adapalene and tretinoin, topical benzoyl peroxide or topical azelaic acid, could

1 reduce lesion count with few adverse effects for maintenance treatment. The
2 committee agreed that the combination treatment of adapalene and benzoyl
3 peroxide demonstrated the best clinical effect, but discussed that other options
4 should be available for those who have contraindications or are unable to tolerate
5 the treatment so agreed that topical adapalene, topical azelaic acid or topical
6 benzoyl peroxide could be used.

7 Based on experience, the committee agreed that a 12-week review to decide
8 whether or not continued maintenance treatment is necessary at this stage.

9 **How the recommendations might affect practice**

10 Although the recommendations do not largely deviate from current practice, there is
11 currently variation on what types of maintenance treatments are given. The
12 recommendations would therefore standardise practice.

13 Full details of the evidence and the committee's discussion are in [evidence review 1:
14 maintenance treatments](#).

15 [Return to recommendations](#)

16 ***Managing acne-related scarring***

17 Recommendations [1.8.1 and 1.8.2](#)

18 **Why the committee made the recommendations**

19 A considerable amount of evidence was identified on this topic. However, the types
20 of comparisons made interpretation of the effectiveness of treatments difficult. The
21 committee acknowledged that any treatment should be preceded by a discussion of
22 treatment options and other issues relevant to the person, to help with shared
23 decision making. The committee noted that referral to a consultant dermatologist-led
24 team with expertise in the management of scarring is important to prevent potential
25 skin damage caused by the treatment. They were aware that the evidence was not
26 strong enough to recommend referral for everyone with acne scarring, which would
27 lead to significant impact on resources. The committee therefore specified based on
28 the available evidence and clinical expertise that those with persistent severe
29 scarring are likely to have the greatest benefit. The committee discussed that in their

1 experience, tissue remodelling and healing process occurs for up to about a year
2 after the acne has cleared and management of acne scarring should be considered
3 after this timeframe.

4 There was evidence that 3 types of treatment showed some efficacy in improving the
5 appearance of scars. These were glycolic acid peels, or CO2 laser treatment either
6 alone or after a session of punch elevation. The choice of option would depend on
7 the type of scarring, but the committee did not want to be too prescriptive to allow for
8 clinical judgement as people may present with a number of different types of scars.

9 Additionally, the committee agreed that there were uncertainties that need further
10 research to clarify. The committee therefore prioritised research recommendations
11 on this topic.

12 **How the recommendations might affect practice**

13 The availability of treatments for acne scarring in NHS centres varies across the
14 country. The recommendations are expected to result in a change in current
15 practice, with referral to a consultant dermatologist-led team and standardised
16 options of glycolic acid peel or CO2 laser treatment with punch elevation where
17 needed. The impact is not expected to be substantive, as only a small number of
18 people will fulfil the criteria. Additional resources and training may be needed in
19 centres offering these treatment options.

20 Full details of the evidence and the committee's discussion are [evidence review M:
21 management of scarring.](#)

22 [Return to recommendations](#)

23 **Context**

24 Acne vulgaris is a common condition that can affect the face, chest and back. It is
25 most prevalent among adolescents and young adults, affecting approximately 80%
26 of people at some time between 11 and 30 years of age.

27 When treating acne vulgaris its severity, distribution, and the views of the affected
28 person, need to be taken into account. The aim of treatment is to reduce the severity
29 of skin lesions and to prevent recurrence and scarring.

1 There is variation in how acne vulgaris is treated in clinical practice, and therefore a
2 need to standardise treatment. There is also a need when prescribing antibiotic
3 therapy for acne vulgaris to take into account the principles of antimicrobial guidance
4 and policy, as outlined in the [NICE guideline on antimicrobial stewardship](#), as well as
5 the [World Health Organization Global action plan on antibiotic resistance](#).

6 **Finding more information and resources**

7 To find out what NICE has said on topics related to this guideline, see our web page
8 on [skin conditions](#).

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