

NATIONAL INSTITUTE FOR HEALTH AND CARE EXCELLENCE

SCOPE

1 **Guideline title**

Liver disease (non-alcoholic fatty): assessment and management of non-alcoholic fatty liver disease (NAFLD) in adults, children and young people

1.1 **Short title**

Liver disease (non-alcoholic fatty [NAFLD])

2 **The remit**

The Department of Health has asked NICE: 'to develop a clinical guideline on the management of liver disease (non-alcoholic)'.

3 **Need for the guideline**

3.1 **Epidemiology**

- a) Primary non-alcoholic fatty liver disease (NAFLD) is a term used to describe excess fat in the liver (steatosis) in the absence of excessive alcohol consumption or any of the other secondary causes of steatosis. These include the side-effects of certain medications, hepatitis C virus infection and particular endocrine conditions. NAFLD is more common in certain ethnic groups including people of Latin American and South Asian family origin.
- b) The severity of NAFLD ranges from simple steatosis, to fat with inflammation and fibrosis (non-alcoholic steatohepatitis [NASH]), to cirrhosis.
- c) The prevalence of NAFLD in the general population is estimated at 20–30%; this figure is based largely on ultrasound studies in other similar populations. NASH is present in around 2–3% of the

population. NAFLD is more common in people who are overweight, hypertensive or have type 2 diabetes mellitus.

- d) The rate of progression of NAFLD is variable. Older age (around 45–50 years), being overweight and having diabetes are all associated with an increased risk of progressive disease.
- e) NAFLD will progress to cirrhosis in some people. A proportion of these will die from liver failure or hepatocellular cancer or need a liver transplant.
- f) In addition to excessive morbidity and mortality from liver disease, NAFLD is associated with an increased cardiovascular morbidity and mortality and excess mortality from cancer.

3.2 *Current practice*

- a) NAFLD is usually diagnosed in primary care incidentally either by abnormal liver blood tests or an abnormal liver ultrasound appearance picked up as part of an investigation for an unrelated condition.
- b) The care pathway in primary care for someone with suspected NAFLD is unclear, and practice regarding further investigation and referral varies widely.
- c) NAFLD is increasingly being identified through case finding in hospital outpatient departments for people with associated conditions such as diabetes, obesity or hypertension. However, this practice is not universal and there is no guidance about which patients should be screened for NAFLD.
- d) Once people with NAFLD have been referred to secondary care, their condition may be investigated further with a liver biopsy, but because there is no guidance about which patients to biopsy, investigation tends to be ad hoc.

- e) Because there is currently no licensed treatment for NAFLD, most people are discharged back to their GP. Some are given advice on lifestyle, which is usually focused on achieving weight loss, but others are given little or no lifestyle advice.

4 The guideline

The guideline development process is described in detail on the NICE website (see section 6, 'Further information').

This scope defines what the guideline will (and will not) examine, and what the guideline developers will consider. The scope is based on the referral from the Department of Health.

The areas that will be addressed by the guideline are described in the following sections.

4.1 Population

4.1.1 Groups that will be covered

- a) Adults, children and young people with suspected or confirmed primary NAFLD.
- b) No subgroups of people have been identified as needing specific consideration.

4.1.2 Groups that will not be covered

- a) People with secondary causes of fatty liver (for example, chronic hepatitis C infection, total parenteral nutrition treatment and drug-induced fatty liver).

4.2 Setting

- a) All primary and secondary care settings where NHS healthcare is provided or commissioned.

4.3 *Management*

4.3.1 Key issues that will be covered

Assessment

- a) Identification of people who may have NAFLD.
- b) Diagnostic criteria for NAFLD.
- c) Tools to assess severity or stage of disease (for example, liver biopsy and transient elastography).

Management

- d) Non-pharmacological treatment (for example, diet and exercise).
- e) Pharmacological treatment (for example, insulin sensitisers). Note that guideline recommendations will normally fall within licensed indications; exceptionally, and only if clearly supported by evidence, use outside a licensed indication ('off-label use') may be recommended. The guideline will assume that prescribers will use a drug's summary of product characteristics to inform decisions made with individual patients.
- f) The association between NAFLD and other extra-hepatic conditions (for example, cardiovascular disease, cancer, diabetes, insulin resistance, hypertension and dyslipidaemia).
- g) Pharmacological treatment for extra-hepatic conditions (for example, diabetes, insulin resistance, hypertension and dyslipidaemia) in people with NAFLD where these need to differ from existing guidance.
- h) Which people with NAFLD should be monitored and followed up and how often.

4.3.2 Issues that will not be covered

- a) Management of end-stage liver disease, hepatocellular carcinoma and liver transplant associated with NAFLD.
- b) Assessment and management of cirrhosis.

4.4 Main outcomes

- a) Progression of NAFLD.
- b) Adverse events.
- c) Health-related quality of life.

4.5 Review questions

Review questions guide a systematic review of the literature. They address only the key issues covered in the scope, and usually relate to interventions, diagnosis, prognosis, service delivery or patient experience. Please note that these review questions are draft versions and will be finalised with the Guideline Development Group.

4.5.1 Assessment

- a) In whom should NAFLD be suspected?
- b) Which diagnostic methods should be used to confirm a diagnosis of NAFLD?
- c) What is the usefulness of different tools to assess the severity of NAFLD?

4.5.2 Management

- a) Which non-pharmacological treatments should be used in the management of NAFLD?
- b) Which pharmacological treatments should be used in the management of NAFLD?

- c) What is the level of increased risk of extra-hepatic conditions that are associated with NAFLD?
- d) How does having NAFLD affect the choice of pharmacological treatment for associated co-existing conditions (for example, diabetes, hypertension, and/or dyslipidaemia)?
- e) Which people with NAFLD should be monitored and how often?

4.6 Economic aspects

Developers will take into account both clinical and cost effectiveness when making recommendations involving a choice between alternative interventions. A review of the economic evidence will be conducted and analyses will be carried out as appropriate. The preferred unit of effectiveness is the quality-adjusted life year (QALY), and the costs considered will usually be only from an NHS and personal social services (PSS) perspective. Further detail on the methods can be found in [The guidelines manual](#).

4.7 Status

4.7.1 Scope

This is the final scope.

4.7.2 Timing

The development of the guideline recommendations will begin in July 2014.

5 Related NICE guidance

5.1 Published guidance

5.1.1 Related NICE guidance

- [Lipid modification](#). NICE clinical guideline 181 (2014).
- [Physical activity: brief advice for adults in primary care](#). NICE public health guidance 44 (2013).
- [Walking and cycling](#). NICE public health guidance 41 (2012).
- [Hepatitis B and C](#). NICE public health guidance 43 (2012).

- [SonoVue \(sulphur hexafluoride microbubbles\) – contrast agent for contrast-enhanced ultrasound imaging of the liver](#). NICE diagnostics guidance 5 (2012).
- [Hypertension](#). NICE clinical guideline 127 (2011).
- [Alcohol-use disorders: diagnosis, assessment and management of harmful drinking and alcohol dependence](#). NICE clinical guideline 115 (2011).
- [Alcohol-use disorders: preventing harmful drinking](#). NICE public health guidance 24 (2010).
- [Alcohol-use disorders: diagnosis and clinical management of alcohol-related physical complications](#). NICE clinical guideline 100 (2010).
- [Promoting physical activity for children and young people](#). NICE public health guidance 17 (2009).
- [Type 2 diabetes](#). NICE clinical guideline 87 (2009).

5.2 Guidance under development

NICE is currently developing the following related guidance (details available from the NICE website):

- [Obesity \(update\)](#). NICE clinical guideline. Publication expected November 2014.
- [Suspected cancer \(update\)](#). NICE clinical guideline. Publication expected May 2015.
- [Type 2 diabetes \(update\)](#). NICE clinical guideline. Publication expected August 2015.
- [Diabetes in children and young people](#). NICE clinical guideline. Publication expected August 2015.
- [Assessment and management of cirrhosis](#). NICE clinical guideline. Publication expected May 2016.
- [Hepatitis C](#). NICE clinical guideline. Publication date to be confirmed.

6 Further information

Information on the guideline development process is provided in the following documents, available from the NICE website:

- [How NICE clinical guidelines are developed: an overview for stakeholders the public and the NHS: 5th edition](#)
- [The guidelines manual](#).

Information on the progress of the guideline will also be available from the [NICE website](#).