

# Cystic Fibrosis: diagnosis and management

## Review questions

*NICE Guideline*

*Methods, evidence and recommendations*

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# Contents

<b>1</b>	<b>Review questions .....</b>	<b>5</b>
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# 1 Review questions

No.	Number in the workplan	Review question
1	23	In infants, children, young people and adults (including those that have undergone newborn screening) when should cystic fibrosis be suspected?
2	28	What information and support should be given to children, young people and adults with cystic fibrosis?
3	16	What is the effectiveness of different models of care (for example, specialist centre, shared care [delivered by a Network CF Clinic which is part of an agreed designated network with a Specialist CF Centre], community, telehealth and/or home care for people with CF?
4	15	What is the clinical and cost-effectiveness of multidisciplinary teams of various compositions?
5	27	What parts of the transition from children's to adult services are most important for young people with cystic fibrosis and their family members and carers?
6	29	What are the non-lower-respiratory complications of cystic fibrosis in infants, children, young people and adults?
7	22	What is the effectiveness of programmes of exercise in the management of cystic fibrosis?
8	26	What is the clinical and cost effectiveness of nutritional interventions in people with cystic fibrosis?
9	2	In people with cystic fibrosis, what is the most effective regimen of enzyme replacement therapy in the treatment of exocrine pancreatic insufficiency?
10	3	What are the effective strategies for treatment and secondary prevention of distal ileal obstruction syndrome?
11	4	What is the diagnostic accuracy of tests to detect or strategies to detect early and late CF liver disease?
12	5	What is the diagnostic and prognostic value of different strategies to detect CF liver disease and predict progression (including progression to cirrhosis and portal hypertension with (out) oesophageal varices)?
13	1	What is the effectiveness of ursodeoxycholic acid for preventing the development or progression of liver disease in people with cystic fibrosis?
14	24	What is the most effective strategy to monitor for the onset of CF-related diabetes (CFRD)?
15	25	What is the most effective strategy to monitor for the identification of reduced bone mineral density in people with CF?
16	21	What strategies are effective at identifying people with cystic fibrosis for the presence of a psychological and/or behavioural problem?
17	7	<p>What is the value of the following investigative strategies in monitoring the onset of pulmonary disease in people with CF without clinical signs or symptoms of lung disease?</p> <ul style="list-style-type: none"> <li>• Non-invasive microbiological investigation- induced sputum samples, cough swab, throat swab, and nasopharyngeal aspiration</li> <li>• Invasive microbiological investigation- bronchoalveolar lavage</li> <li>• Lung physiological function tests- Cardiopulmonary exercise testing, Spirometry and Lung Clearance Index</li> <li>• Imaging techniques- Chest x-ray and CT scan</li> </ul>
18	8	<p>What is the value of the following investigative strategies in monitoring evolving pulmonary disease in people with established lung disease?</p> <ul style="list-style-type: none"> <li>• Non-invasive microbiological investigation- induced sputum samples, cough</li> </ul>

No.	Number in the workplan	Review question
		swab, throat swab, and nasopharyngeal aspiration <ul style="list-style-type: none"> <li>• Invasive microbiological investigation- bronchoalveolar lavage</li> <li>• Lung physiological function tests- Cardiopulmonary exercise testing, Spirometry and Lung Clearance Index</li> <li>• Imaging techniques- Chest x-ray and CT scan</li> <li>• Evolving pulmonary disease defined as decline in lung function (based on FEV1), increased exacerbations and/or infections, (symptom based?) and CT changes.</li> </ul>
19	9	What is the added value of imaging and invasive microbiological testing in addition to non-invasive microbiological testing and lung function tests in monitoring the response to treatment following an acute exacerbation? Definition of established lung disease: clinical signs and symptoms and/or radiological signs of lung disease.
20	6	What is the effectiveness of airway clearance techniques in people with cystic fibrosis?
21	11	What is the effectiveness of mucoactive or mucolytic agents, including dornase alpha, nebulised sodium chloride (isotonic and hypertonic) and mannitol?
22	14	What is the effectiveness of long-term antimicrobial prophylaxis to prevent pulmonary bacterial colonisation with <i>Staphylococcus aureus</i> in people with CF?
23	12	What is the effectiveness of antimicrobial treatment for acute pulmonary infection or those with an exacerbation in children and adults with cystic fibrosis?
24	13	What is the effectiveness of antimicrobial regimens in suppressing chronic pulmonary infection in children and adults with CF with any of the following pathogens: <ul style="list-style-type: none"> <li>• <i>Pseudomonas aeruginosa</i></li> <li>• <i>Burkholderia cepacia</i> complex</li> <li>• <i>Staphylococcus aureus</i></li> <li>• <i>Aspergillus fumigatus</i></li> </ul>
25	10	What is the effectiveness of immunomodulatory agents in the management of lung disease?
26	17	What is the effectiveness of cohorting on the basis of pathogen status versus not cohorting on the basis of pathogen status in reducing transmission of CF pathogens?
27	18	What is the effectiveness of different models of segregating patient's in reducing transmission of CF pathogens?
28	19	What is the effectiveness of individual protective equipment in reducing transmission of CF pathogens?
29	20	What is the effectiveness of the combination of cohorting, segregating and protective equipment in reducing transmission of CF pathogens?