D.24 Psychological assessment

Item	Details
Key issue in the scope	Recognising psychological and behavioural problems.
Review question in the scope	How should people with cystic fibrosis be monitored for psychological or behavioural problems?
Review question for the protocol	What strategies are effective at identifying people with cystic fibrosis for the presence of a psychological and/or behavioural problem?
Objectives	Cystic fibrosis is a life-threatening disease and poses cognitive, emotional and behavioural challenges for many children and adults with CF as well as their families and/or carers. Areas of concern might include anxiety and depression, disordered eating disorders and adherence to treatments. These psychological and/or behavioural problems are also not well recognised by health care professionals, vary across the country and require a multi-disciplinary assessment. The aim of this review is to determine which assessment strategies are effective at identifying mental health problems in children and adults with cystic fibrosis. It is hoped that this information will lead to improvements in quality of life outcomes and, in turn, inform service requirements. A recent survey by the Cystic Fibrosis Organisation UK suggests that access to psychosocial input in the UK is not currently equitable.
Language	English
Study design	• Systematic review of diagnostic studies • Cross-sectional studies • Prospective or retrospective cohort studies where cross-sectional data is reported
Population and directness	Infants, children, young people and adults with defined CF, diagnosed clinically and by sweat test or genetic testing. Population size and indirectness: • Studies with indirect populations will not be considered. • No restrictions to sample size.
Stratified, subgroup and adjusted analyses	The following groups will be assessed separately if possible: • Children under 6 years • Children and young people aged 7 to 16 years • Young people and adults over 16 years Sensitivity analysis: • Sensitivity analysis: including and excluding studies with a high risk of bias
Index test: recognition or assessment tool	Clinical assessment: • Generalised Anxiety Disorder 7-item scale (GAD-7)

Item	Details
	• Patient Health Questionnaire 2-item scale (PHQ-2) • Patient Health Questionnaire 9-item primary care scale (PHQ-9) • Hospital Anxiety and Depression Scale (HADS) • Paediatric Index of Emotional Distress (PI-ED) • Centre for Epidemiologic Studies Depression Scale (CES-D) • Eating Disorders Examination (EDE) • Child Eating Disorders Examination (CEDE) • Eating Attitudes Test (EAT) • Child Eating Attitude Test (ChEAT)
Reference standard	• Diagnosis statistical manual (DSM) or International Classification of diseases (ICD) diagnosis for anxiety, depression, mood disorders, emotional distress and eating disorders • Electronic monitoring of adherence or pharmacy records for adherence to drug treatment • As reported by study for other psychological and behavioural problems stated in the protocol
Outcomes	• Sensitivity • Specificity • Positive likelihood ratio • Negative likelihood ratio • AUROC • Reliability and validity
Importance of outcomes	Critical outcomes for decision making: • Sensitivity • Specificity
Setting	Any healthcare setting where NHS care is delivered (primary, secondary, tertiary or community)
Search strategy	Sources to be searched: Medline, Medline In-Process, Cochrane Central Register of Controlled Trials, Cochrane Database of Systematic Reviews, Cochrane Database of Abstracts of Reviews of Effectiveness, Health Technology Database, Embase, PsycINFO. Limits (e.g. date, study design): All study designs. Apply standard exclusions and English language filters. Supplementary search techniques: No supplementary search techniques will be used. See appendix E.18 for full search strategy
Review strategy	Appraisal of methodological quality: • The methodological quality of each study will be assessed using a quality checklists for diagnostic studies (QUADAS-2) or a critical appraisal of outcome measures checklist (Jerosch-Herold, 2005) as set out in the Developing NICE Guidelines Manual 2014. • The quality of the evidence for an outcome (i.e. across studies) will be assessed using adapted GRADE for diagnostic studies. Data analysis: • Meta-analysis will be conducted if appropriate for diagnostic studies. • The cut-offs for diagnostic accuracy measures: ○ Sensitivity and specificity: - High >90% - Moderate 75 to 90% - Low <75% ○ Positive likelihood ratio:

Item	Details
	- Very useful test >10 - Moderately useful test 5 to 10 - Not a useful test <5 ○ Negative likelihood ratio: - Very useful test <0.1 - Moderately useful test 0.1 to 0.2 - Not a useful test >0.2 Review process: • A list of excluded studies will be provided following weeding. • Evidence tables and an evidence profile will be used to summarise the evidence.
Equalities	• Psychological and behavioural issues are more likely in people with a lower socioeconomic status. • Gender- outcomes are worse for women although there is no evidence that this is a consequence of difference in care. • Geographical issues – care is given through specialist centres and this may be a problem if a person with CF is living in an isolated location.
Notes/additional information	Most common problems in people with CF: • Depression • Anxiety • Non adherence to treatment • Needle phobias • Feeding issues (i.e. anorexia, bulimia but also avoidant and restrictive food intake disorder and body dysmorphia) • Low mood • School refusal Relevant documents: • ECFS consensus guidelines • CF Org UK psychosocial report: https://www.cysticfibrosis.org.uk/media/281430/psychosocial%20report%20v3.pdf • Psychological interventions for Cystic Fibrosis: http://onlinelibrary.wiley.com/doi/10.1002/14651858.CD003148/pdf • M. Bryon, Summary to date of eating disorders in children and adults with cystic fibrosis. Presented at the 20th Annual North American Cystic Fibrosis Conference, Denver, CD (2006)