Supplementary tables and figures

Table S1 Search terms

Population	AND	Index test
Chronic obstructive pulmonary disease		Case finding
OR		**OR**
Chronic obstructive airways disease		Screening
OR		**OR**
Chronic obstructive lung disease		Early detection
OR		**OR**
COPD		Secondary prevention
OR		**OR**
COAD		Spirometry
OR		**OR**
Emphysema		Questionnaire
OR		**OR**
Chronic bronchitis		Peak flow
OR		**OR**
Airflow obstruction		Chest X-ray
OR		**OR**
Airflow limitation		Decision aid
		OR
		Algorithm
		OR
		Sensitivity
		OR
		Specificity

Table S2 QUADAS-2 tool for assessing methodological quality and risk of bias of included studies

	Signalling question	Signalling question	Signalling question	Risk of bias	Concerns about applicability
Domain 1: Patient selection					
Patient selection	Was a consecutive or random sample of patients enrolled?	Was a case-control design avoided?	Did the study avoid inappropriate exclusions?	Could the selection of patients have introduced bias?	Are there concerns that the included patients and setting do not match the review question?
	Yes: If all consecutive or random samples of subjects were enrolled. No: If subjects were non-randomly selected. Unclear: If sampling method was unclear.	Yes: If the study was not a case control design. No: If the study had a case control design. Unclear: If the study design was unclear.	Yes: If there were no inappropriate exclusion criteria. No: If subjects were excluded based on inappropriate criteria such as presence of depression. Unclear: If selection criteria were unclear.	Low risk: If all signalling questions answered 'yes.' High or unclear risk: If 'no or unclear' was reported for at least one signalling question.	Low concern: If selected subjects matched the review question and inappropriate exclusions were avoided. High concern: If selected subjects differed from those in the review question. Unclear concern: If there was insufficient information on included subjects and setting.
Domain 2: Index test					
Index test	Were the index test results interpreted without knowledge of the results of the reference standard?	If a threshold was used, was it pre-specified?		Could the conduct or interpretation of the index test have introduced bias?	Are there concerns that the index test, its conduct, or interpretation differ from the review question?
	Yes: If the index test results were interpreted without knowledge of the spirometry results. No: If the index test results were interpreted with knowledge of the spirometry	Yes: If the threshold for a positive test result was pre-specified. No: If the threshold for a positive test result was not pre-specified. Unclear: If this was		Low risk: If all signalling questions answered 'yes.' High or unclear risk: If 'no' was reported for at least one signalling question.	Low concern: If the index test was performed as described in the review question. High concern: If the index test differed from those specified in the review

	Signalling question	Signalling question	Signalling question	Risk of bias	Concerns about applicability
	results. Unclear: If it was unclear whether index test results were interpreted independently of spirometry results.	unclear from the report.			question. Unclear concern: If there was insufficient information available.
Domain 3: Reference standard					
Reference standard	Is the reference standard likely to correctly classify the target condition?	Were the reference standard results interpreted without knowledge of the results of the index test?		Could the reference standard, its conduct, or its interpretation have introduced bias?	Are there concerns that the target condition as defined by the reference standard does not match the review question?
	Yes: If quality controlled spirometry was used. No: If spirometry was performed without adequate quality control. Unclear: If it was unclear from the report whether spirometry quality control procedures had been implemented.	Yes: If spirometry results were interpreted without knowledge of the index test results. No: If spirometry results were interpreted with knowledge of the index test results. Unclear: If this was not clear from the report.		Low risk: If all signalling questions answered 'yes.' High or unclear risk: If 'no' was reported for at least one signalling question.	Low concern: If quality controlled spirometry was used. High concern: If quality controlled spirometry was not used. Unclear concern: If insufficient information was provided in the report on spirometry quality control.
Domain 4: Flow and timing					
Flow and timing	Was there an appropriate interval between the index test and reference standard?	Did all patients receive the reference standard?	Were all patients included in the analysis?	Could the patient flow have introduced bias?	
	Yes: If the time between the index and reference tests were less than six months. No: If the time between the	Yes: If all eligible subjects received spirometry. No: If not all eligible	Yes: If all subjects recruited to the study with index test results were included in the analysis.	Low risk: If all signalling questions answered 'yes.' High or unclear risk: If	

	Signalling question	Signalling question	Signalling question	Risk of bias	Concerns about applicability
	index and reference tests were longer than six months. Unclear: If this was unclear from the report.	subjects received the reference standard. Unclear: If this was not clear from the report.	No: If not all recruited subjects with index test results were included in the analysis. Unclear: If this was unclear from the report.	'no' was reported for at least one signalling question.	

Table S3 Characteristics of included studies

Study	Country	Setting	Recruitment method	Eligibility criteria	Index and reference tests	Definition of COPD
Buffels 2004	Belgium	20 general practitioners	Invited patients routinely attending general practice over a 12 week period in 1999.	Inclusion criteria: Age 35-70 years Exclusion criteria: Receiving bronchodilators and/or inhaled corticosteroids	Index test: Screening questionnaire Reference test: Pre-BD spirometry in all subjects with respiratory symptoms and 10% sample of asymptomatic subjects	Pre-BD $FEV_1/FVC<88.5\%$ predicted for men & $FEV_1/FVC<89.3\%$ for women
Duong-Quy 2009	Vietnam	12 primary care medical centres in one city	Broadcast an advertisement on the local television daily for one week. A recruitment company was used to help with participant recruitment (details not reported). Eligible subjects expressing an interest in participating were advised to attend one of the 12 primary care centres from January 2007 to February 2008.	Inclusion criteria: Active and former smokers with >10 pack-years and aged >40 years Exclusion criteria: Previously diagnosed respiratory disease (asthma, COPD and tuberculosis)	Index test: Pre-BD handheld flow meter (Piko-6®) Reference test: Full medical assessment including clinical examination, pulmonary radiology, ECG, and post-BD spirometry for those who had an index $FEV_1/FEV_6<0.7$ and a sample of those with $FEV_1/FEV_6\geq0.7$	Post-BD $FEV_1/FVC<0.7$ with <200mL or 12% reversibility
Freeman 2005	UK	One general practice	Postal invitation from October 1997 to April 2002.	Inclusion criteria: Age ≥40 years & current/ex-smoker & had either received respiratory medications in the preceding 2 years or had a history of asthma Exclusion criteria: None	Index test: Screening questions Reference test: Pre-/ post-BD spirometry on all subjects	Post-BD $FEV_1/FVC<0.7$ and lack of reversibility (reversibility defined as increase in FEV_1 of 200mL and 15% from pre-BD FEV1 (not clear if all were post-BD)

Study	Country	Setting	Recruitment method	Eligibility criteria	Index and reference tests	Definition of COPD
Frith 2011	Australia	4 primary care practices	Recruited during routine practice visits, invitation to study days, and local newspaper advertisement between August and December 2006.	Inclusion criteria: Age ≥50 years & current/ex- smoker & no prior diagnosis of obstructive lung disease (COPD, emphysema, chronic bronchitis, asthma) & no treatment for obstructive lung disease in past 12months Exclusion criteria: Refusal or inability to give consent, pre-existing non-obstructive lung disease, symptoms suggestive of unstable heart disease, and spirometry contraindications	Index test: Pre-BD handheld flow meter (Piko-6®) & screening questionnaire (COPD Diagnostic Questionnaire) Reference test: Pre-/ post-BD spirometry on all patients	Post-BD $FEV_1/FVC<0.7$
Hanania 2010	US	Two family physician group offices	Invited patients aged ≥40 years visiting the practices from March-May 2008	Inclusion criteria: Age ≥40 years Exclusion criteria: None	Index test: Screening questionnaire (Lung Function Questionnaire) Reference test: Pre-BD spirometry	Pre-BD $FEV_1/FVC<0.7$

Study	Country	Setting	Recruitment method	Eligibility criteria	Index and reference tests	Definition of COPD
Kotz 2008	Netherlands	General population and primary care practices	Advertisements in a local newspaper, flyers, posters and mailings to households and invitation during primary care consultations from Jan 2005-Dec 2006.	Inclusion criteria: Age 40-70 years & current smoker with ≥10 pack years & motivated to stop smoking & able to read and speak Dutch & reporting a respiratory symptom (cough, phlegm or dyspnoea) Exclusion criteria: Prior respiratory diagnosis, spirometry in previous 12 months or contraindications to smoking cessation therapy	Index test: Questionnaire (COPD Diagnostic Questionnaire) Reference test: Pre-/post-BD spirometry in all participants	Post-BD $FEV_1/FVC<0.7$
Mintz 2011	US	36 primary care centres	NR	Inclusion criteria: Age ≥30 years old & current/ex- smoker with ≥10 pack years Exclusion criteria: Regular use of respiratory medications within 4 weeks of the study, known diagnosis of substantial lung conditions with regular use of respiratory medications.	Index test: Screening questionnaire (Lung Function Questionnaire) Reference test: Pre-/ post-BD spirometry	LFQ≤18 & post-BD $FEV_1/FVC<0.7$

Study	Country	Setting	Recruitment method	Eligibility criteria	Index and reference tests	Definition of COPD
Price 2006	UK & US	2 primary care practices	Postal invitation	Inclusion criteria: Age ≥40 years & current/ex-smoker Exclusion criteria: Refusal to consent, history of non-obstructive lung disease, use of respiratory medications in past year, acute symptoms of unstable heart disease	Index test: Screening questionnaire (COPD Diagnostic Questionnaire) Reference test: Pre-/post-BD spirometry	Post-BD $FEV_1/FVC<0.7$
Sichletidis 2011	Greece	25 general practices	Invited first 50 patients meeting the inclusion criteria who visited each participating GP from 1st March-31st May 2009.	Inclusion criteria: Age >40 years Exclusion criteria: Confirmed diagnosis of lung disease, thoracic surgery in previous 6 months, acute respiratory infection, uncontrolled cardiac disease, or could not perform acceptable spirometry	Index tests: 1. Screening questionnaire (International Primary Airways Group Questionnaire, also known as the COPD Diagnostic Questionnaire) 2. Post-BD handheld flow meter (Piko-6®) (Bronchodilator=400µg salbutamol) Reference test: Pre-/post-BD spirometry	Post-BD $FEV_1/FVC<0.7$
Thorn 2012	Sweden	21 primary healthcare centres	Invited patients attending participating primary healthcare centres over a 5 month period.	Inclusion criteria: Age 45-85 years & current/ex-smoker with ≥15 pack years Exclusion criteria: None	Index test: Pre-BD handheld flow meter (COPD-6) Reference test: Pre-/post-BD spirometry	Post-BD $FEV_1/FVC<0.7$

BD=bronchodilator, FEV_1=forced expiratory volume in one second, FEV_6=forced expiratory volume in 6 seconds, FVC=forced vital capacity, NR=not reported

Table S4 Results: studies evaluating screening questionnaires

Study	Population	Screening questionnaire	Spirometry (reference test)	Number screened	New COPD cases
Buffels 2004	Eligible: 3158 Invited: 3158 Attended: 3158 Data on subjects who underwent spirometry Mean age: NR Male: 45% <u>Smoking status</u> Current: 30.7% Former: 18.1% Never: 50.1%	<u>Items</u> • Cough >2 weeks • Dyspnoea during mild exercise/at night • Nasal allergy/hay fever • Visit to doctor for wheeze or chronic cough <u>Threshold</u> ≥1 symptom	Device: Spirobank spirometer with Winspiro software Bronchodilator: None Operator: GPs who had received 12 hours of training Standard: NR Quality control: Technical support was provided to GPs throughout the study. Accuracy of GP-performed spirometry was compared to that from a lab technician.	<u>Index test</u> Total: 3158 Positive: 728 <u>Reference test (spirometry)</u> Total: 703 with positive index test and 222 with negative index test. Acceptable quality: NR	Subjects with positive index test: 126/703 (17.9%) Subjects with negative index test: 9/222 (4.1%) <u>FEV_1 % predicted</u> >80%: 53 (39%) 50-80%: 69 (51%) 30-50%: 12 (9%) ≤30%: 1 (<1%)
Freeman 2005	Eligible: 1195 Invited: 1195 Attended: 624 Data on subjects who performed spirometry Mean age: 61.7 Male: 52% <u>Smoking status</u> Current: 54.1% Former: 45.9%	<u>Items</u> • Age • Smoking status • Pack-years • Cough • Dyspnoea • Wheeze <u>Threshold</u> NR (included only “best” reported)	Device: Micro-Med handheld spirometer with Spida software Bronchodilator: 5mg salbutamol for those with prior respiratory medication or history of asthma or FEV_1<80% predicted Operator: Trained respiratory nurse Standard: ATS standards. Minimum of 3 tests or until reproducibility within 5%. Quality control: All spirometry results were reviewed by a physician to ensure compliance with ATS standards.	<u>Index test</u> Total: 369 Positive: 121* (multiple response questionnaire), 142* (binary response questionnaire) <u>Reference test (spirometry)</u> Total: 369 Acceptable quality: NR	62/369 (16.8%) <u>FEV_1 % predicted</u> NR

Study	Population	Screening questionnaire	Spirometry (reference test)	Number screened	New COPD cases
Frith 2011	Eligible: 233 Invited: 237 Attended:237 Data on subjects with acceptable spirometry Mean age: 61 Male: 69% <u>Smoking status</u> Current: 45% Former: 55% Never: <1%	COPD diagnostic questionnaire (CDQ) <u>Items</u> See Price 2006 (below) <u>Thresholds:</u> Score ≥19.5, ≥16.5	Device: EasyOne spirometer (ndd Medical) Bronchodilator: 360mcg salbutamol Operator: trained operators using ATS/ERS guidelines Standard: ATS/ERS standards. At least 3 adequate baseline and post-BD FVC manoeuvres performed. Quality control: spirometry quality monitored by a respiratory physiologist blinded to the questionnaire and Piko-6® results.	<u>Index test</u> Total: 233 Positive: 110* (threshold ≥19.5), 165* (threshold ≥16.5) <u>Reference test (spirometry)</u> Total: NR Acceptable quality: 204	57/204 (27.9%) <u>FEV_1 % predicted</u> >80%: 19 (33.3%) 50-80%: 35 (61.4%) 30-50%: 3 (5.3%) <30%: 0
Hanania 2010	Eligible: NR Invited: NR Attended: 937 Data on subjects with acceptable spirometry and adequate data Mean age: NR Male: 38.1% <u>Smoking status</u> NR	Lung Function Questionnaire (LFQ) <u>Items:</u> • Age • Cough • Wheeze • Dyspnoea • Smoking <u>Threshold:</u> Score ≤18	Device: EasyOne spirometer (ndd Medical) Bronchodilator: None Operator: NR Standard: NR Quality control: Investigators rated spirometry quality based on reliability and reproducibility. Only included traces considered reliable.	<u>Index test</u> Total: 937 Positive: 484* <u>Reference test</u> Total: 937 Acceptable quality: NR Analysed: 837	156/837 (18.6%) <u>FEV1 % predicted</u> ≥80%: 17 (11.5%) 50-80%: 76 (51.4%) 30-50%: 44 (29.7%) <30%: 11 (7.4%) (NB. Reported numbers do not add up to 156)

Study	Population	Screening questionnaire	Spirometry (reference test)	Number screened	New COPD cases
Kotz 2008	Eligible: 1052 Invited: 1052 Attended: 826 Data on subjects with spirometry Mean age:52.3 Male:58.7% <u>Smoking status</u> Current: 100%	COPD Diagnostic Questionnaire (CDQ) <u>Items:</u> See Price 2006 (below) <u>Thresholds:</u> Score ≥19.5, ≥16.5	Device: Vitalograph 2120 Bronchodilator: 500 µg terbutaline Operator: Two qualified research assistants under the supervision of a pulmonologist Standard: ATS/ERS standards Quality control: spirometry performed according to ATS/ERS standards. All spirometry test results were validated by a pulmonologist and specialised lung function laboratory assistant not involved in the trial- both were blinded to the questionnaire scores.	<u>Index test</u> Total: 1052 Analysed: 676 Positive: 549* (threshold ≥16.5) 366* (threshold ≥19.5) <u>Reference test</u> Total: 826 Acceptable quality: 716	278/676 (41.1%) <u>FEV1 % predicted</u> ≥80%: 142 (51.1%) 50-80%: 119 (42.8%) <50%: 17 (6.1%)
Mintz 2011	Eligible: 1724 Invited: 4956 Attended: 2284 Data on subjects who completed index test Mean age: 53.9* Male: 51.2% <u>Smoking status</u> Current: 57.6% Former: 42.4%	Lung Function Questionnaire (LFQ) <u>Items</u> • Age • Cough • Wheeze • Dyspnoea • Smoking • Activity limitation <u>Threshold</u> Score ≤18	Device: Biomedical Systems, St Louis, MO Bronchodilator: 360µg albuterol Operator: Trained site staff Standard: ATS standards Quality control: Only data collected from acceptable spirometric manoeuvres were included. Patients producing unacceptable spirometry were allowed to repeat this within 7 days of the study visit.	<u>Index test</u> Total: 1575 Positive: 1216 <u>Reference test (spirometry)</u> Total: 1225 Acceptable quality: 849 (713 in subjects ≥40 years)	162/713 (22.7%) (NB. restricted to subjects ≥40 years) <u>FEV_1 % predicted</u> NR

Study	Population	Screening questionnaire	Spirometry (reference test)	Number screened	New COPD cases
Price 2006	Eligible: NR Invited: 17,361 Attended: 898 Data on subjects with acceptable spirometry Mean age: 58.2 Male: 49.3% <u>Smoking status</u> Current: 44.5% Former: 55.5%	COPD Diagnostic Questionnaire <u>Items</u> • Age • Pack-years • Weather-affected cough • Productive phlegm in absence of a cold • Early morning cough • Wheeze • Allergies <u>Thresholds</u> Score ≥19.5, ≥16.5	Device: EasyOne spirometer (ndd Medical) Bronchodilator: 2.5mg salbutamol/albuterol Operator: NR Standard: ATS standards Quality control: Principal investigators conducted blinded review of all spirometry loops. A pulmonologist not associated with the study reviewed all loops on which there was disagreement	<u>Index test</u> Total: 898 Positive: 267* (threshold ≥16.5) 446* (threshold ≥19.5) <u>Reference test (spirometry)</u> Total: 898 Acceptable quality: 818 572 (70%) used for questionnaire development, 246 (30%) used for validation	155/818 (18.9%) <u>FEV_1 % predicted</u> NR
Sichletidis 2011	Eligible: 1250 Invited: 1250 Attended: 1250 Data on subjects with acceptable spirometry Mean age: 65.3 Male: 57.1% <u>Smoking status</u> Ever: 48.8% Never: 51.2%	COPD Diagnostic Questionnaire (also referred to as International Primary Airways Group questionnaire) <u>Items:</u> See Price 2006 (above) <u>Threshold</u> Score ≥17	Device: Vitalograph Bronchodilator:400µg salbutamol Operator: Pulmonary specialists Standard: ATS/ERS standards Quality control: Spirometry performed and interpreted by pulmonary specialists according to ATS/ERS standards	<u>Index test</u> Total: 1250 Positive: 409* (smokers) 594* (smokers & non-smokers) <u>Reference test (spirometry)</u> Total: NR Acceptable quality: 1078	Ever smokers: 90/624 (14.4%) Ever smokers & non-smokers: 111/1078 (10.3%) <u>FEV_1 % predicted</u> ≥80%:40 (36.0%) 50-80%:53 (47.7%) 30-50%:16 (14.4%) <30%:2 (1.8%)

*Derived values (may differ from reported test performance)

BD=bronchodilator, NR=not reported, FEV_1=forced expiratory volume in 1 second, FVC=forced vital capacity, FEV_6=forced expiratory volume in 6 seconds

Table S5 Results: studies evaluating handheld flow meters

Study	Recruited population	Handheld flow meter	Spirometry (reference test)	Number screened	New COPD cases
Duong-Quy 2009	Eligible: 2464 Invited: NR Attended: 2464 Data on subjects who undertook index test Mean age: 52 Male:99.7% <u>Smoking status</u> Current: 88.9% Former: 11.1%	Pre-BD Piko-6® Operator: NR 3 manoeuvres were taken and the best of 3 selected. All measures where FEV_1/FEV_6>1 were excluded. <u>Threshold</u> FEV_1/FEV_6<0.7	Device: SpiroLab II Bronchodilator: short-acting β2 agonist (unspecified) Operator: NR Standard: Required at least 3 measures and at least 2 within 150mL to ATS/ERS standards. Quality control: NR	<u>Index test</u> Total: 2464 Positive: 324 <u>Reference test (spirometry)</u> Total: 144 subjects with positive index test and 123 with negative index test. Acceptable quality: NR	Subjects with positive index test: 136/144 (94.4%) Subjects with negative index test: 3/123 (2.4%) <u>FEV_1 % predicted</u> (in subjects with positive index test) <80%: 65 (47.8%) 50-79%: 63 (46.3%) 30-49%: 8 (5.9%) <30%: 0
Frith 2011	Eligible: 233 Invited: 237 Attended:237 Data on subjects with acceptable spirometry Mean age: 61 Male: 69% <u>Smoking status</u> Current: 45% Former: 55% Never: <1%	Pre-BD Piko-6® Operator: Study nurse or GP <u>Threshold</u> FEV_1/FEV_6<0.75 (optimal cut-point)	Device: EasyOne spirometer (ndd Medical) Bronchodilator: 360mcg salbutamol Operator: trained operators using ATS/ERS guidelines Standard: ATS/ERS standards. At least 3 adequate baseline and post-BD FVC manoeuvres performed. Quality control: spirometry quality monitored by a respiratory physiologist blinded to the questionnaire and Piko-6® results.	<u>Index test</u> Total: 233 Positive: 101* <u>Reference test (spirometry)</u> Total: NR Acceptable quality: 204	57/204 (27.9%) <u>FEV_1 % predicted</u> >80%: 19 (33.3%) 50-80%: 35 (61.4%) 30-50%: 3 (5.3%) <30%: 0

Study	Recruited population	Handheld flow meter	Spirometry (reference test)	Number screened	New COPD cases
Sichletidis 2011	Eligible: 1250 Invited: 1250 Attended: 1250 Data on subjects with acceptable spirometry Mean age: 65.3 Male: 57.1% Smoking status Ever: 48.8% Never: 51.2%	Post-BD Piko-6® Bronchodilator: 400µg salbutamol Operator: GPs with 2 hours training Threshold Post-BD $FEV_1/FEV_6<0.7$	Device: Vitalograph Bronchodilator: 400µg salbutamol Operator: Pulmonary specialists Standard: ATS/ERS standards Quality control: Spirometry performed and interpreted by pulmonary specialists according to ATS/ERS standards	Index test Total: 1250 Positive ǂ: 104* (ever smokers) 137* (ever smokers & non-smokers) Reference test (spirometry) Total: NR Acceptable quality: 1078	Ever smokers: 90/624 (14.4%) Ever smokers & non-smokers: 111/1078 (10.3%) FEV_1 % predicted ≥80%:40 (36.0%) 50-80%:53 (47.7%) 30-50%:16 (14.4%) <30%:2 (1.8%)
Thorn 2012	Eligible: NR Invited: NR Attended: 305 Data on subjects who performed the index and reference tests Mean age: 61.2 Male: 43.3% Smoking status Ever: 100%	Pre-BD COPD 6® Operator: Nurses Threshold $FEV_1/FVC<0.73$	Device: NR Bronchodilator: 0.5mg terbutaline Operator: Nurses Standard: ATS standards Quality control: Spirometry performed according to ATS standards. No other quality control measures reported.	Index test Total: 305 Positive: 106* Reference test (spirometry) Total:305 Acceptable quality: NR	77/305 (25.2%) FEV_1 % predicted ≥80%:35 (45.5%) 50-80%:41 (53.2%) 30-50%:1 (1.3%) <30%:0

*Derived values (may differ from reported test performance)

ǂ 83* (smokers) and 109* (smokers & non-smokers) positive index tests when using a combination of the CDQ and handheld flow meter

BD=bronchodilator, NR=not reported, FEV_1=forced expiratory volume in 1 second, FVC=forced vital capacity, FEV_6=forced expiratory volume in 6 seconds

Table S6Quality of reporting

	Buffels 2004	Duong-Quy 2009	Freeman 2005	Frith 2011	Hanania 2010	Kotz 2008	Mintz 2011	Price 2006	Sichletidis 2011	Thorn 2012
Clear description of recruitment	Y	Y	Y	Y	Y	Y	N	Y	Y	Y
Clear description of participants	N	Y	Y	Y	Y	Y	Y	Y	Y	Y
Clear description of withdrawals	Y	Y	N	N	U	Y	Y	Y	Y	N
Participant flow diagram	Y	N	N	Y	N	Y	Y	Y	N	N
Spirometry quality control	Y	N	Y	Y	Y	Y	Y	Y	Y	U
Standard diagnostic criteria	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Representative spectrum of patients	U	N	Y	Y	U	Y	Y	Y	Y	Y
Clear description of selection criteria	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Spirometry as reference standard	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Spirometry performed within six months of index test	Y	U	Y	Y	Y	U	Y	Y	U	Y
All or random selection of participants underwent spirometry	Y	N	Y	Y	Y	Y	N	Y	Y	Y
Spirometry performed and interpreted independently of screening test result	U	U	U	Y	U	Y	U	Y	U	U
Screening test performed and interpreted independently of spirometry	Y	Y	U	Y	U	Y	U	Y	Y	Y
Intervention described in sufficient detail to permit its replication	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Clinical data available representative of routine practice	Y	Y	Y	Y	Y	Y	Y	Y	Y	Y
Uninterpretable, indeterminate or intermediate results reported	N	N	N	Y	N	Y	Y	Y	Y	N

Y=yes, N=no, U=unclear

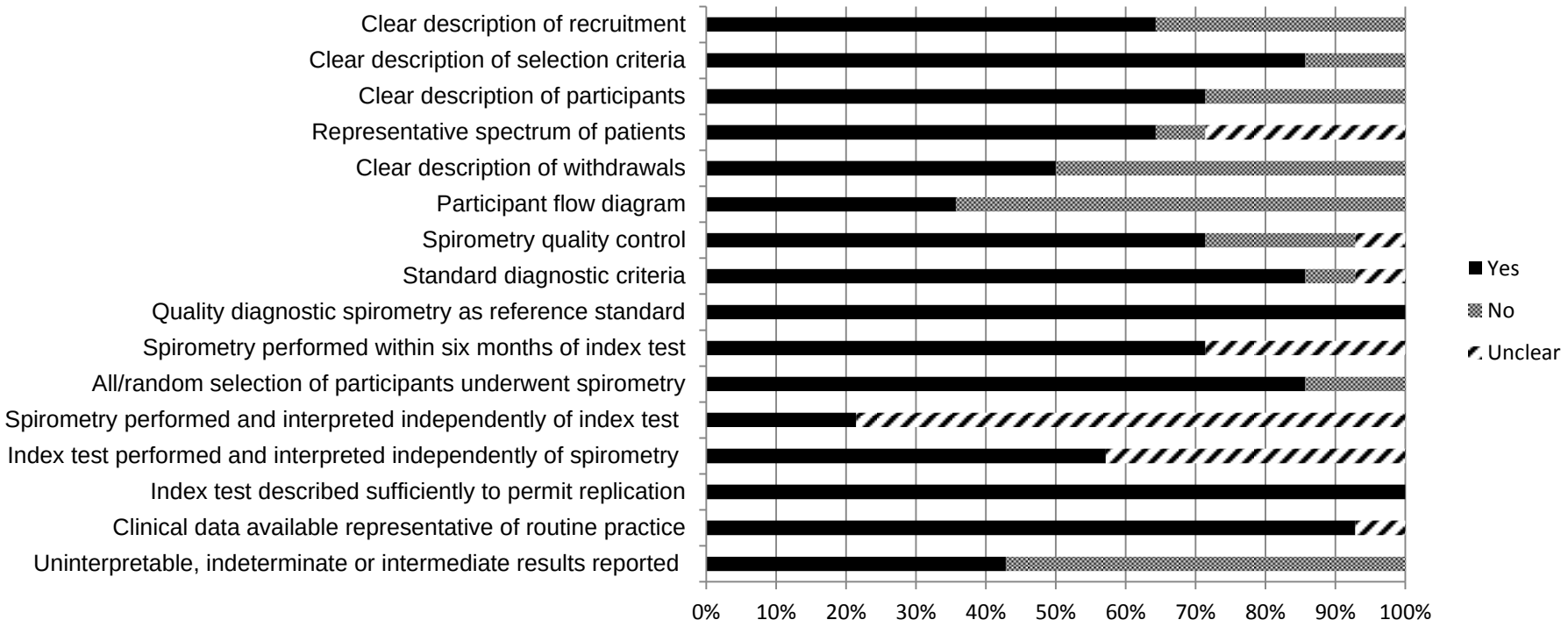

Figure S1 Quality of reporting