

**Characterisation of patients with severe asthma in the UK Severe Asthma Registry in the biologic era**

**Appendix 1 - List of UK Severe Networks and Network Leads in UKSAR (2020)**

<b>Lead Centre &amp; Data Collection Centres</b>	<b>Lead Clinician</b>
<b>Belfast City Hospital</b>	<b>Professor Liam Heaney</b>
<b>Royal Brompton and Harefield NHS Trust</b>	
St Georges University Hospital NHS Trust	Professor A Menzies-Gow
<b>Birmingham Regional Severe Asthma Service</b>	
University Hospitals Birmingham NHS Trust	Dr Adel Mansur
Sandwell & West Birmingham NHS Trust	Dr Adeel Sahal
Royal Wolverhampton NHS Trust	Dr Rachid Berair
Queen Elizabeth Hospital Birmingham	Dr Duncan Wilson
University Hospitals of Derby & Bunton NHS	Dr Deepak Subramanian
The Dudley Group NHS Foundation Trust	Dr Martin Doherty
Worcestershire Acute Hospitals NHS Trust	Dr Bethan Barker
Gloucestershire Hospitals NHS Trust	Dr Simon Message
<b>South Thames and Kent Severe Asthma Network</b>	
Guy's & St Thomas' NHS Trust	Dr David Jackson
<b>North Central &amp; East London Severe Asthma Service</b>	
Bart's Health NHS Trust	Dr Paul Pfeffer
Royal Free London NHS Trust	Dr Paul Dilworth
Homerton University Hospital NHS Trust	Prof Raja Rajakulasingham
<b>East Midlands Severe Asthma Network</b>	
University Hospitals of Leicester NHS Trust	Professor Salman Siddiqui
Nottingham University Hospital NHS Trust	Dr Sherif Gonem
<b>North West Midlands Severe Asthma Service</b>	
University Hospitals of North Midlands NHS Trust	Dr Elfatih Idris
<b>Yorkshire Asthma MDT (Yorkshire/Hull/Leeds)</b>	
Sheffield Teaching Hospitals NHS Trust	Professor Ian Sabroe
Hull University Teaching Hospitals NHS Trust	Dr Shoaib Faruqi
The Leeds Teaching Hospitals NHS Trust	Dr Ian Clifton
Chesterfield Royal Hospital	Dr Sally Davies
Doncaster Royal Infirmary	Dr Aldrin Adeni & Dr Trevor Rogers
Wakefield & Dewsbury Hospital	Dr James McCreanor & Dr Llinos Jones
Bradford Royal Infirmary	Dr Dinesh Saralaya
North Lincolnshire & Goole	Dr Umesh Bangalore Lakshminarayana

York District Hospital	Dr Rebecca Thomas
Airedale Hospital	Dr Su Ann Leong
Grimsby Hospital	Dr Madhav Menon
Harrogate Hospital	Dr Claire Taylor
Barnsley District General Hospital	Dr Hazim Madhi
Calderdale Hospital	Dr Johnnie Walker
<b>East of England Severe Asthma Network</b>	
Cambridge University Hospitals NHS Trust	<b>Dr Robin Gore</b>
<b>Wessex Network</b>	
University Hospital Southampton NHS Trust	<b>Dr Paddy Dennison</b>
Portsmouth Hospitals NHS Trust	<b>Dr Thomas Browne</b>
Oxford University Hospitals NHS Trust	<b>Professor Ian Pavord</b>
Churchill Hospital	Dr Henry Bettinson
<b>South West Asthma Network</b>	
University Hospitals Plymouth NHS Trust	Dr Mitesh Patel
University Hospitals Bristol NHS Trust	Dr James Dodd
Royal Devon & Exeter NHS Trust	Dr Matthew Masoli
Taunton & Somerset NHS Trust	Dr Robert Stone
<b>North West Network</b>	
Wythenshawe Hospital	Dr Rob Niven
Liverpool Royal Infirmary	Dr Hassan Burhan
Salford Royal	Dr Ronan O'Driscoll
Countess of Chester Hospital	Dr Stephen Scott
Royal Albert Edward Infirmary Wigan	Dr Imran Aziz
Lancashire Teaching Hospital	Dr Aashish Vyas
North Manchester General Hospital	Dr Nita Seghal
Wirral University Teaching Hospital	Dr John Corless
Royal Preston Hospital	Dr Aashish Vyas
<b>Newcastle Severe Asthma Network</b>	
Newcastle Upon Tyne NHS Trust	<b>Dr Simon Doe</b>
Freeman Hospital	Dr Andrew Stanton
<b>NHS Greater Glasgow &amp; Clyde</b>	
Gartnavel General Hospital	Dr Rekha Chaudhuri

**Appendix 2: List of Fields collected at baseline (fields in red have been added from June 2020)**

<b>Variable</b>	<b>Type</b>	<b>Responses</b>
<b>Identifiers</b>		
Date First Seen	Date	
Patient ID	Numerical	<i>Automatically generated unique UKSAR registration number</i>
<b>Patient Demographics</b>		
Gender	Categorical	Female; Male
Age At First Assessment (Years)	Numerical	
Ethnicity	Categorical	Caucasian; South East Asian; North East Asian; African; Mixed; Other
Occupational Cause or Worsening of Asthma	Categorical	No; Yes
Height (m)	Numerical	
Weight (kg)	Numerical	
BSA (m <sup>2</sup> )	Numerical	<i>Calculated dependent field</i>
BMI (kg/m <sup>2</sup> )	Numerical	<i>Calculated dependent field</i>
<b>Index of Multiple Deprivation</b>	<b>Numerical</b>	
Bronchial Thermoplasty Patient	Categorical	No; Yes
Research Patient	Categorical	No; Yes
Initial Data Complete	Categorical	No; Yes
<b>Medical History</b>		
Rescue Steroids In Last Year	Numerical	
Invasive Ventilation Events Ever	Numerical	
A&E Attendances For Asthma In Last Year	Numerical	
Hospital Admissions For Asthma In Last Year	Numerical	
Age at Onset of Symptoms (Years)	Numerical	
Smoking Status	Categorical	Never smoked; Ex-smoker; Current smoker
Pack Years	Numerical	

Years Since Last Smoked	Numerical	
<b>Nasal Polyps</b>	<b>Categorical</b>	<b>No; Yes</b>
Atopic Disease	Categorical	No; Yes
Atopic Disease Description	Free-text	
<b>Current Atopic Eczema</b>	<b>Categorical</b>	<b>No; Yes</b>
Other Comorbidity	Categorical	No; Cardiac disease; Other
Comorbidity Description	Free-text	
<b>Investigations</b>		
Blood Eosinophil Count (N/109L)	Numerical	
Highest Blood Eosinophil Count [in available medical records] (N/109L)	Numerical	
Date Highest Eosinophil Count	Date	
IgE (IU/mL)	Numerical	
Prior Highest Sputum Eosinophils (%)	Numerical	
CT Scan	Categorical	Not done; Normal; Abnormal
Abnormal CT Scan Details	Free-text	
Date Of Bone Densitometry	Date	
Spinal Bone Density (T-Score)	Numerical	
Femoral Neck Bone Density (T-Score)	Numerical	
Additional Clinical Tests	Free-text	
<b>Lung Function</b>		
FEV1 (L)	Numerical	
Predicted FEV1 (L)	Numerical	<i>Calculated dependent field</i>
FEV1 (% Predicted)	Numerical	<i>Calculated dependent field</i>
Post-BD FEV1 (L)	Numerical	
Post -BD FEV1 (% Predicted)	Numerical	<i>Calculated dependent field</i>
FVC (L)	Numerical	
Predicted FVC (L)	Numerical	<i>Calculated dependent field</i>

FVC (% Predicted)	Numerical	<i>Calculated dependent field</i>
Post-BD FVC (L)	Numerical	
Post-BD FVC (% Predicted)	Numerical	<i>Calculated dependent field</i>
FEV1/FVC	Numerical	<i>Calculated dependent field</i>
Post-BD FEV1/FVC	Numerical	<i>Calculated dependent field</i>
Residual Volume (% Predicted)	Numerical	
Total Lung Capacity (% Predicted)	Numerical	
KCO (% Predicted)	Numerical	
PC20 Methacholine / Histamine (mg/mL)	Numerical	
Date of PC20 Methacholine / Histamine	Date	
FeNO (ppb)	Numerical	
FeNO Date	Date	
<b>Allergen Testing</b>		
Environmental Allergen Test	Categorical	No; RAST; SPT
RAST Positive	Categorical	No; Yes
SPT Positive	Categorical	No; Yes
Positive to Perennial Allergen	Categorical	No; Yes
Perennial Allergen Details	Free-text	
<b>Asthma Control Questionnaire</b>		
ACQ1 Woken at Night	Categorical	Never; Hardly ever; A few times; Several times; Many times; A great many times; Unable to sleep because of asthma
ACQ2 Symptoms in Morning	Categorical	No symptoms; Very mild symptoms; Mild symptoms; Moderate symptoms; Quite severe symptoms; Severe symptoms; Very severe symptoms
ACQ3 Limited in Activities	Categorical	Not limited at all; Very slightly limited; Slightly limited; Moderately limited; Very limited; Extremely limited; Totally limited
ACQ4 Shortness of Breath	Categorical	None; A very little; A little; A moderate amount; Quite a lot; A great deal; A very great deal
ACQ5 Wheezing	Categorical	Never; Hardly any of the time; A little of the time; A moderate amount of the time; A lot of the time; Most of the time; All of the time

ACQ6 Puffs of SABA	Categorical	None; 1 - 2 puffs/inhalations most days; 3 - 4 puffs/inhalations most days; 5 - 8 puffs/inhalations most days; 9 - 12 puffs/inhalations most days; 13 - 16 puffs/inhalations most days; More than 16 puffs/inhalations most days
ACQ7 FEV1	Categorical	> 95% predicted; 95 - 90%; 89 - 80%; 79 - 70%; 69 - 60%; 59 - 50%; < 50%
ACQ6 Score	Numerical	<i>Calculated dependent field</i>
ACQ7 Score	Numerical	<i>Calculated dependent field</i>
<b>EuroQoL Questionnaire</b>		
EuroQoL Mobility	Categorical	I have no problems in walking about; I have slight problems in walking about; I have moderate problems in walking about; I have severe problems in walking about; I am unable to walk about
EuroQoL Self-care	Categorical	I have no problems washing or dressing myself; I have slight problems washing or dressing myself; I have moderate problems washing or dressing myself; I have severe problems washing or dressing myself; I am unable to wash or dress myself
EuroQoL Usual Activities	Categorical	I have no problems doing my usual activities; I have slight problems doing my usual activities; I have moderate problems doing my usual activities; I have severe problems doing my usual activities; I am unable to do my usual activities
EuroQoL Pain / Discomfort	Categorical	I have no pain or discomfort; I have slight pain or discomfort; I have moderate pain or discomfort; I have severe pain or discomfort; I have extreme pain or discomfort
EuroQoL Anxiety / Depression	Categorical	I am not anxious or depressed; I am slightly anxious or depressed; I am moderately anxious or depressed; I am severely anxious or depressed; I am extremely anxious or depressed
EuroQoL Health Scale	Numerical	
<b>Mini-AQLQ Questionnaire</b>		
<b>Feel SHORT OF BREATH as a result of your asthma</b>	<b>Categorical</b>	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Feel bothered by or have to AVOID DUST in the environment</b>	<b>Categorical</b>	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Feel FRUSTRATED as a result of your asthma</b>	<b>Categorical</b>	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>

Feel bothered by <b>COUGHING</b>	Categorical	All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time
Feel <b>AFRAID OF NOT HAVING YOUR ASTHMA MEDICATION AVAILABLE</b>	Categorical	All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time
Experience a feeling of <b>CHEST TIGHTNESS or CHEST HEAVINESS</b>	Categorical	All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time
Feel bothered by or have to <b>AVOID CIGARETTE SMOKE</b> in the environment	Categorical	All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time
Have <b>DIFFICULTY GETTING A GOOD NIGHT'S SLEEP</b> as a result of your asthma	Categorical	All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time
Feel <b>CONCERNED ABOUT HAVING ASTHMA</b>	Categorical	All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time
Experience a <b>WHEEZE</b> in your chest	Categorical	All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time
Feel bothered by or have to <b>AVOID</b> going outside because of <b>WEATHER OR AIR STRENUOUS ACTIVITIES</b> (such as hurrying, exercising, running up stairs, sports)	Categorical	Totally Limited; Extremely Limited; Very Limited; Moderate Limitation; Some Limitation; A Little Limitation; Not at all Limited
<b>MODERATE ACTIVITIES</b> (such as walking, housework, gardening, shopping, climbing stairs)	Categorical	Totally Limited; Extremely Limited; Very Limited; Moderate Limitation; Some Limitation; A Little Limitation; Not at all Limited
<b>SOCIAL ACTIVITIES</b> (such as talking, playing with pets/children, visiting friends/relatives)	Categorical	Totally Limited; Extremely Limited; Very Limited; Moderate Limitation; Some Limitation; A Little Limitation; Not at all Limited
<b>WORK-RELATED ACTIVITIES</b> (tasks you have do to at work)	Categorical	Totally Limited; Extremely Limited; Very Limited; Moderate Limitation; Some Limitation; A Little Limitation; Not at all Limited
<b>Asthma Medication</b>		
Maintenance OCS	Categorical	No; Yes
Maintenance OCS (mg)	Numerical	
ICS	Categorical	No; Yes
ICS Dose (BDP equivalent/ug)	Numerical	

Steroid Sparing Medication	Categorical	No; Yes
Steroid Sparing Medication Name	Free-text	
<b>Prior Biologic Therapy</b>	Categorical	No; Yes
Theophylline	Categorical	No; Yes
Theophylline Level (mg/L)	Numerical	
SABA	Categorical	No; Yes
LABA	Categorical	No; Yes
LABA Name	Free-text	
LAMA	Categorical	No; Yes
LAMA Name	Free-text	
Leukotriene Receptor Antagonists	Categorical	No; Yes
Maintenance Macrolides	Categorical	No; Yes
Nebuliser	Categorical	No; Yes
Evidence Of Poor Adherence	Categorical	No; Prescription records; Objective measures; Clinical impression
% Expected ICS Prescriptions Filled	Numerical	
Prednisolone Level Measured	Categorical	No; Yes (2-4 hours); Yes (>4 hours)
Prednisolone Level (ng/L)	Numerical	
FeNO Suppression	Categorical	Not done; Negative; Positive
<b>Systematic Assessment and Management Plan</b>		
ERS/ATS Severe Asthma	Categorical	No; Yes; Currently being assessed
Other Factors Contributing To Symptoms	Free-text	
Patient Is Adherent With Treatment	Categorical	No; Yes
Management Plan	Categorical	Discharge to local service; Optimisation of current treatment; Biologic therapy; Bronchial thermoplasty; Maintenance oral corticosteroids; Steroid sparing agent; Enter into clinical trial; <b>Adherence intervention</b> ; Other
Biologic Therapy Details	Free-text	
Steroid Sparing Details	Free-text	
Trial Details	Free-text	
Other Management Plan	Free-text	



**Appendix 3: List of Fields collected at follow-up (fields in red have been added from June 2020)**

Variable	Type	Responses
<b>Identifiers</b>		
Date Seen	Date	
Patient ID	Numerical	<i>Automatically generated unique UKSAR registration number</i>
<b>Summary</b>		
Clinical Summary	Free-text	
Maintenance OCS	Categorical	No; Yes
Maintenance OCS (mg)	Numerical	
Biologic / SS <sup>a</sup>	Categorical	No; Biologic; Steroid sparing agent
Biologic Therapy Details	Free-text	
Biologic / SS <sup>a</sup> Stopped or Changed	Categorical	No; Yes
Reason Biologic / SS <sup>a</sup> Stopped or Changed	Categorical	Failed clinical response; Other reason
Other Reason Biologic / SS <sup>a</sup> Stopped or Changed	Free-text	
Maintenance Macrolides	Categorical	No; Yes
Rescue Steroids In Last Year	Numerical	
A&E Attendances For Asthma In Last Year	Numerical	
Hospital Admissions For Asthma In Last Year	Numerical	
Height (m)	Numerical	
Weight (kg)	Numerical	
Fat Free Mass (%)	Numerical	
BMI (kg/m <sup>2</sup> )	Numerical	<i>Calculated dependent field</i>
BSA (m <sup>2</sup> )	Numerical	<i>Calculated dependent field</i>
ERS/ATS Severe Asthma	Categorical	No; Yes
Serious Medical Event Since Last Entry	Categorical	None; Anaphylaxis; Severe infection; Malignancy; MI / CVA; <b>Pregnancy</b> ; Other

<b>Severe Infection Details</b>	Free-text	
<b>Malignancy Details</b>	Free-text	
<b>Pregnancy Details</b>	<b>Categorical</b>	<b>Not on Biologic; On Biologic with-held during Pregnancy; On Biologic continued during Pregnancy</b>
<b>Other Serious Medical Event Details</b>	Free-text	
<b>Further Details</b>	Free-text	
<b>Patient Status</b>	Categorical	Actively managed; Discharged; Lost to follow up; Died; Transferred to other centre
<b>Spirometry</b>		
<b>Predicted FEV1 (L)</b>	Numerical	<i>Calculated dependent field</i>
<b>Pre-BD FEV1 (L)</b>	Numerical	
<b>Pre-BD FEV1 (% Predicted)</b>	Numerical	
<b>Post-BD FEV1 (L)</b>	Numerical	
<b>Post -BD FEV1 (% Predicted)</b>	Numerical	
<b>Predicted FVC (L)</b>	Numerical	<i>Calculated dependent field</i>
<b>Pre-BD FVC (L)</b>	Numerical	
<b>Pre-BD FVC (% Predicted)</b>	Numerical	
<b>Post-BD FVC (L)</b>	Numerical	
<b>Post-BD FVC (% Predicted)</b>	Numerical	
<b>Pre-BD FEV1/FVC</b>	Numerical	
<b>Post-BD FEV1/FVC</b>	Numerical	
<b>FeNO (ppb)</b>	Numerical	
<b>Blood Eosinophil Count (N/109L)</b>	Numerical	
<b>Bone Density</b>		
<b>Date Of Bone Densitometry</b>	Date	
<b>Spinal Bone Density (T-Score)</b>	Numerical	
<b>Femoral Neck Bone Density (T-Score)</b>	Numerical	

<b>Asthma Control Questionnaire</b>		
<b>ACQ1 Woken at Night</b>	Categorical	Never; Hardly ever; A few times; Several times; Many times; A great many times; Unable to sleep because of asthma
<b>ACQ2 Symptoms in Morning</b>	Categorical	No symptoms; Very mild symptoms; Mild symptoms; Moderate symptoms; Quite severe symptoms; Severe symptoms; Very severe symptoms
<b>ACQ3 Limited in Activities</b>	Categorical	Not limited at all; Very slightly limited; Slightly limited; Moderately limited; Very limited; Extremely limited; Totally limited
<b>ACQ4 Shortness of Breath</b>	Categorical	None; A very little; A little; A moderate amount; Quite a lot; A great deal; A very great deal
<b>ACQ5 Wheezing</b>	Categorical	Never; Hardly any of the time; A little of the time; A moderate amount of the time; A lot of the time; Most of the time; All of the time
<b>ACQ6 Puffs of SABA</b>	Categorical	None; 1 - 2 puffs/inhalations most days; 3 - 4 puffs/inhalations most days; 5 - 8 puffs/inhalations most days; 9 - 12 puffs/inhalations most days; 13 - 16 puffs/inhalations most days; More than 16 puffs/inhalations most days
<b>ACQ7 FEV1</b>	Categorical	> 95% predicted; 95 - 90%; 89 - 80%; 79 - 70%; 69 - 60%; 59 - 50%; < 50%
<b>ACQ6 Score</b>	Numerical	<i>Calculated dependent field</i>
<b>ACQ7 Score</b>	Numerical	<i>Calculated dependent field</i>
<b>EuroQoL Questionnaire</b>		
<b>EuroQoL Mobility</b>	Categorical	I have no problems in walking about; I have slight problems in walking about; I have moderate problems in walking about; I have severe problems in walking about; I am unable to walk about
<b>EuroQoL Self-care</b>	Categorical	I have no problems washing or dressing myself; I have slight problems washing or dressing myself; I have moderate problems washing or dressing myself; I have severe problems washing or dressing myself; I am unable to wash or dress myself
<b>EuroQoL Usual Activities</b>	Categorical	I have no problems doing my usual activities; I have slight problems doing my usual activities; I have moderate problems doing my usual activities; I

		have severe problems doing my usual activities; I am unable to do my usual activities
<b>EuroQoL Pain / Discomfort</b>	Categorical	I have no pain or discomfort; I have slight pain or discomfort; I have moderate pain or discomfort; I have severe pain or discomfort; I have extreme pain or discomfort
<b>EuroQoL Anxiety / Depression</b>	Categorical	I am not anxious or depressed; I am slightly anxious or depressed; I am moderately anxious or depressed; I am severely anxious or depressed; I am extremely anxious or depressed
<b>EuroQoL Health Scale</b>	Numerical	
<b>Mini-AQLQ Questionnaire</b>		
<b>Feel SHORT OF BREATH as a result of your asthma</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Feel bothered by or have to AVOID DUST in the environment</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Feel FRUSTRATED as a result of your asthma</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Feel bothered by COUGHING</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Feel AFRAID OF NOT HAVING YOUR ASTHMA MEDICATION AVAILABLE</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Experience a feeling of CHEST TIGHTNESS or CHEST HEAVINESS</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Feel bothered by or have to AVOID CIGARETTE SMOKE in the environment</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Have DIFFICULTY GETTING A GOOD NIGHT'S SLEEP as a result of your asthma</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Feel CONCERNED ABOUT HAVING ASTHMA</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>Experience a WHEEZE in your chest</b>	Categorical	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>

<b>Feel bothered by or have to AVOID going outside because of WEATHER OR AIR</b>	<b>Categorical</b>	<b>All of the Time; Most of the Time; A Good Bit of the Time; Some of the Time; A Little of the Time; Hardly Any of the Time; None of the Time</b>
<b>STRENUOUS ACTIVITIES (such as hurrying, exercising, running up stairs, sports)</b>	<b>Categorical</b>	<b>Totally Limited; Extremely Limited; Very Limited; Moderate Limitation; Some Limitation; A Little Limitation; Not at all Limited</b>
<b>MODERATE ACTIVITIES (such as walking, housework, gardening, shopping, climbing stairs)</b>	<b>Categorical</b>	<b>Totally Limited; Extremely Limited; Very Limited; Moderate Limitation; Some Limitation; A Little Limitation; Not at all Limited</b>
<b>SOCIAL ACTIVITIES (such as talking, playing with pets/children, visiting friends/relatives)</b>	<b>Categorical</b>	<b>Totally Limited; Extremely Limited; Very Limited; Moderate Limitation; Some Limitation; A Little Limitation; Not at all Limited</b>
<b>WORK-RELATED ACTIVITIES (tasks you have do to at work)</b>	<b>Categorical</b>	<b>Totally Limited; Extremely Limited; Very Limited; Moderate Limitation; Some Limitation; A Little Limitation; Not at all Limited</b>

<sup>a</sup> Steroid sparing medication