BREATHING PATTERN DISORDER

ASSESSMENT GUIDANCE: CORE COMPONENTS

FUNDAMENTAL COMPONENTS TO BE COMPLETED ON THE 1ST OR 2ND APPOINTMENT

REFERRAL ANALYSIS

Physiological test results eg; CPET/LFTs/Blood tests/cardiac/radiology

Contributing factors review eg; physiology, psychology, biomechanics

Contribution of chronic cardio-respiratory disease

Symptoms in excess or unexplained by any PMH

SUBJECTIVE ASSESSMENT

Patient description of symptoms/problems (stable/better/worse)

Triggers (initial and ongoing)

Aggravating/easing factors

Length & frequency of symptoms

Duration of symptoms recovery

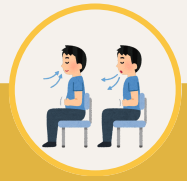
Contributing factors

Past medical history (respiratory and cardiac priority)

Drug history

Lifestyle (Sleep/diet/ hydration/physical activity/ work pattern)

Social history



OBJECTIVE ASSESSMENT & OUTCOME MEASURES

General observation of breathing
Nose/mouth breathing
Nasal Flow
Upper chest/Lower chest or abdomen
Audible breathing insp/exp
IE ratio (expiratory pause)
RR/HR/Sp02

Observation of breathing during:
-Movement/ function/ exercise/trigger activity
Evaluation of same components as above
-Physiotherapist should comment if response is normal or unexpected

Hands on assessment of breathing:
General expansion/symmetry/tension/biomechanical screen
General observation of posture

OUTCOME MEASURES
Nijmegen Questionnaire / Breathing Pattern Assessment Tool / Breath hold (end expiratory) / Self Evaluation of Breathing Questionnaire / Dyspnea-12

Recommended to complete at least one outcome measure during assessment

ASSESSMENT OUTCOME

To confirm BrPD, the patients presentation may include one or more of the following:

-An observed change in breathing pattern from expected baseline (this may include a BPAT of more than 4)
-Breathlessness unexplained by physiological factors
Inconsistent and unusual breathing response to triggers including exercise, movement, and function

-Subjective description of breathing discomfort in response to triggers including exercise, movements and function (eating, talking)

-Symptoms of hyperventilation

ref: Grillo et. al 2025

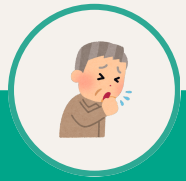
BREATHING PATTERN DISORDER

ASSESSMENT GUIDANCE: CONTRIBUTING FACTORS

SCREENING ASSESSMENTS TO TRIAGE FOR MORE IN-DEPTH ASSESSMENT
QUESTIONS USED TO REFER ON TO SPECIFIC SERVICES OF FACILITATE SUPPORT FROM SENIOR

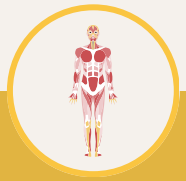
NOSE/SINUS SYMPTOMS

Nose/Sinus history (respiratory disease, surgery, trauma)
Postnasal drip
Loss/change of smell
Subjective discomfort in nose breathing
Medication review



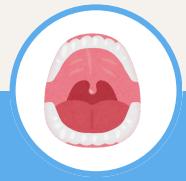
COUGH

Triggers to cough
Type- dry/irritable/productive/ floppy
Sputum (24hr, amount, viscosity)
Infection history
Respiratory history review



BIOMECHANICAL SCREEN

Pain
MSK History (esp. back, neck, thorax)
Pelvic floor history
Posture observation (detailed)



UPPER AIRWAY

Voice Change
Symptoms in throat: throat clearance/closure/tightness
Globus sensation
Difficulty swallowing
Triggers such as perfumes/smells
Reflux history

CONTRIBUTION OF PMH

Respiratory history in detail
Cardiac history in detail
Covid history / Long Covid
Autonomic dysfunction r/v

EXERCISE AND PHYSICAL ACTIVITY

Symptom description during activity / exercise
Audible breathing

PSYCHOLOGICAL HEALTH

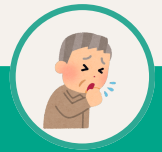
Stress
Anxiety
Depression
Other mental health history
Social support

ref: Grillo et. al 2025

BREATHING PATTERN DISORDER

ASSESSMENT GUIDANCE: OPTIONAL COMPONENTS

BASED ON SCREENING OF CONTRIBUTING FACTORS. MAY REQUIRE SKILLS OF A MORE EXEPERIENCED PRACTITIONER



COUGH

Subjective
Cough history
ACT triage

Objective
Observe cough
ACT assessment

Outcome measure
LCQ

NOSE/SINUS AX

Subjective
Assessment in more detail
ENT history and medication

Objective
Nasal flow assessment
Cottle manoeuvre

Outcome Measure
SNOT22

BIOMECHANICAL SCREEN

Assessment of core strength
Breath hold and breathing response (insp, +/- exp)
Rib cage movement
T10 measurement of expansion
Ski junp
MARM
Bradcliff angle
Observation of recorded videos of symptoms

EXERCISE AND PHYSICAL ACTIVITY

Fatigue focus
Subjective
Agg/ease
Type of fatigue
PEM screen
24 hour pattern
Lifestyle/social impacts

Outcome Measure
Fatigue Assessment Scale
Chalders Assessment

PSYCHOLOGICAL HEALTH

Subjective
Hx in more detail and in line with practitioner skillset

Objective
Body position and tension
Awareness and reaction to stress

Outcome Measure
PHQ/GAD
B-HVQ/HAD

OBSERVATION DURING AND AFTER MOVEMENT

Documentation should define movement and BORG breathlessness report

Observe both before and after movement
Observe posture/ACM use
Listen for insp/exp noise
Airway used (nose/mouth/both)
Additional comments/techniques used eg PLB
Upper airway symptoms
Erratic breaths/large volumes/RR
Observe posture
Recovery time

UPPER AIRWAY

Subjective
As screen but more detail
Description of Sx (typical attack questions)
Differentiation from other SOB

Objective
Observation of fast deep breath in (mouth and nose)
Cervical and thoracic spine screen

Outcome Measure
Cough VAS (severity and frequency)
VCD=Q
Newcastle laryngeal hypersensitivity questionnaire

ref: Grillo et. al 2025

Terminology

Terminology	Detailed description
Ax	Assessment
CPET	Cardiopulmonary Exercise Test
LFT	Lung Function Test
PMH	Past Medical History
IE ratio	Inspiratory to expiratory ratio (usually count the time for breath in verses the time for breath out)
RR	Respiratory rate
HR	Heart rate
Sp02	Blood oxygen saturations
BPAT	Breathing pattern assessment tool
MSK	Musculoskeletal
ACT	Airway clearance techniques
ENT	Ear, nose and throat
PEM	Post exertional malaise
Hx	History
BORG	BORG breathlessness scale
ACM	Accessory muscles
SOB	Shortness of Breath
Breath hold	Measure the time a patient can hold their breath from either end TLC or end ERV
T10 measurement	Place the tape measure around the rib cage at the point of T10 and measure length on FRC and TLC
Ski jump	With the patient in supine, observe the dip post the anterior ribs onto the abdomen (increased severity of dip could suggest hyperinflation)
MARM	Manual Assessment of Respiratory Motion, an evaluation of the movement of the rib cage during respiration
Bradcliff angle	Placing a goniometer on the sternal notch, measure the angle of the lower anterior ribs

ref: Grillo et. al 2025