

Perioperative Management of OSA in Adults

Primary Care

Screening 1:

| | |
|----------------------|-----------------------|
| Snoring | Cognitive dysfunction |
| Unrefreshing Sleep | Apnoeas |
| Tiredness/Fatigue | Waking/Headache |
| Choking during sleep | Nocturia/Insomnia |

≥2 of the above:

Suspect OSA. Use Epworth Sleepiness Scale to assess sleepiness. Consider using STOP-BANG questionnaire

Priority factors for rapid assessment:

- Vocational driving or vigilance-critical job
- Unstable cardiovascular disease
- Pregnancy
- Preoperative assessment for major surgery

STOP-BANG

Screening questionnaire +/- Epworth Sleepiness scale:

- S** Snoring
- T** Tiredness (or Epworth score >12)
- O** bserved apnoeas
- P** ressure: Hypertension
- B** MI >35 kg.m²
- A** ge >50
- N** eck Circumference > 40cm
- G** ender: Male

Secondary Care 1

Assessment:

Home sleep study

Management:

Emphasis on **lifestyle advice and support for smoking cessation, alcohol reduction, weight loss and exercise**

Mild:

Mandibular advancement device

Continuous Positive Airway Pressure (CPAP) if symptoms are affecting quality of life in the presence of priority factors

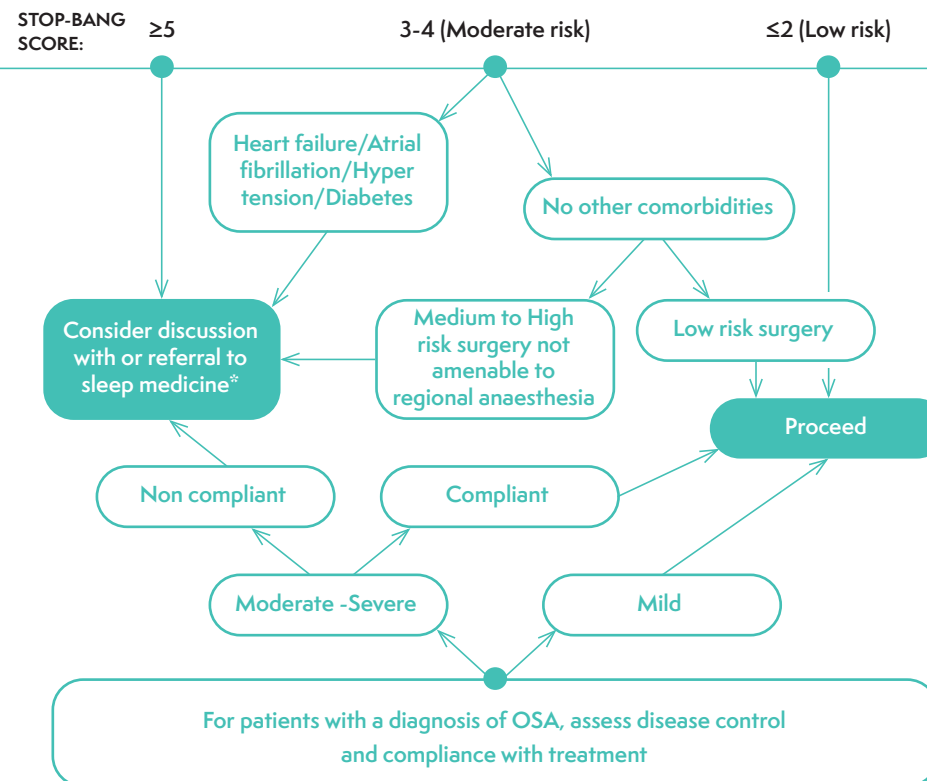
Mod-Severe:

CPAP

Follow up of compliance, disease control and quality of life

Preoperative Phase 2

Patients without an existing diagnosis of OSA should be screened via the STOP-BANG questionnaire and risk stratified according to risk score:



*Develop streamlined pathways between perioperative services and sleep medicine
Establishing home oximetry testing from perioperative clinic can improve screening accuracy and pathway efficiency

Do not delay urgent surgery for investigation of OSA

If high risk, manage as if known OSA and refer for assessment post operatively

Examples of risk stratification tools: SOBA OSA algorithm 3 or ASA OSA tool 4

Aim for 4-6 weeks of CPAP therapy prior to planned surgery

OSA patients should not be denied access to day surgery based on diagnosis alone. Protocols should maximise opportunity for OSA patients to be managed safely via day case pathways if co-morbidities are optimised and surgery is amenable to multimodal opioid-sparing analgesia/regional anaesthesia 5

Support patients to engage in shared decision making, lifestyle modification and preparation for surgery to reduce OSA associated risk 6

Empower patient to bring in their own CPAP machine and use it post operatively 7
(May require adapter to use with oxygen in immediate post operative period)

Intraoperative Care & Surgery

8x increase in difficult airway incidence

Increased opioid sensitivity 2

Regional/ local techniques are gold standard 4

Caution with Interscalene Blocks due to risk of phrenic nerve palsy

If sedation, use capnography and consider HFNO or CPAP

Limited opioid strategy

Full NMB reversal prior to awake extubation (Consider Sugammadex)

Postoperative Care

Recover in facility where CPAP can be safely administered

Consider HDU or enhanced care for increased monitoring requirement or those at high risk according to risk stratification 6

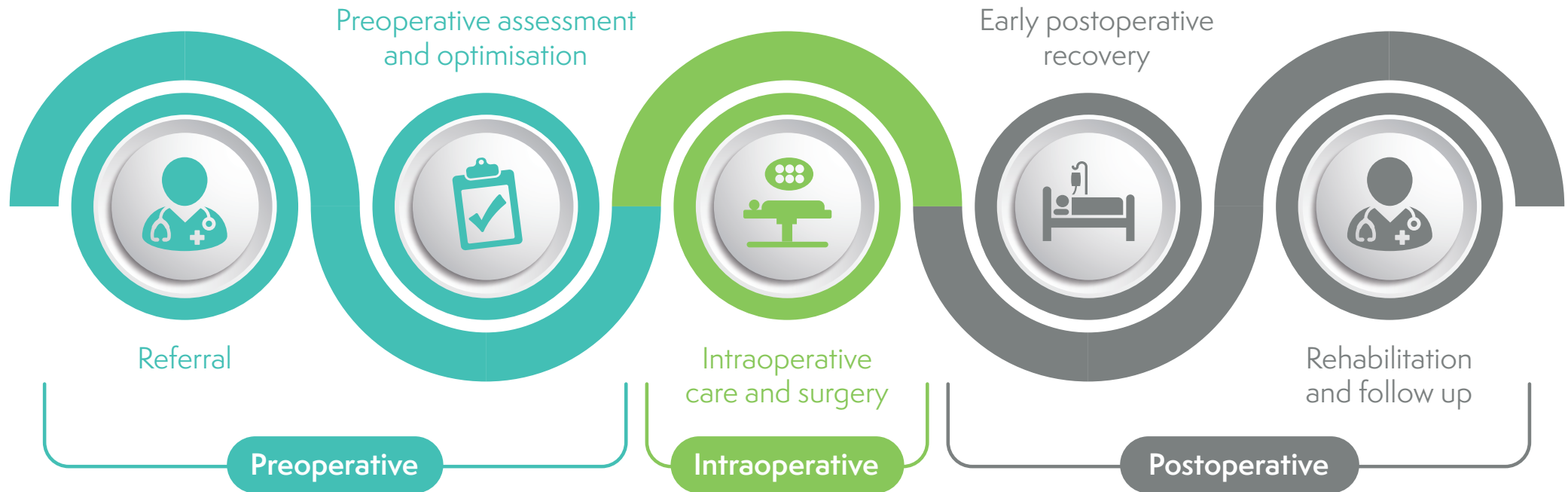
Only discharge to unmonitored environment when no longer at risk of respiratory depression 4

Follow up existing and suspected OSA by sleep services in community

Links

- 1 NICE OSA guidelines
- 2 Pre-op Association OSA guidelines
- 3 SOBA OSA guide
- 4 ASA guidelines on management of patients with OSA
- 5 Guidelines for day case surgery
- 6 FICM/CPOC enhanced care guidelines
- 7 Society of Anesthesia and Sleep Medicine guideline

Management of OSA in the Perioperative Period



Key Principles

- Patient centered care
- Shared decision making
- Joined up team working
- Technology that works

Core Competencies

- **Recognise & Optimise** long term conditions, frailty, anaemia and diabetes
- **Support Patients** to stop smoking, be active and exercise more, reduce alcohol, improve nutrition, prepare mentally and manage their weight
- **Assess Risk** with anticipation and prevention of complications
- **Plan** the perioperative period and discharge
- **Rehabilitate** to community