NICE National Institute for Health and Care Excellence

Resource impact summary report

Resource impact

Published: 19 December 2024

www.nice.org.uk

Contents

Resource impact summary report

This summary report is based on the NICE assumptions used in the resource impact template. Users can amend the 'Inputs and eligible population' and 'Unit costs' worksheets in the template to reflect local data and assumptions.

Recommendations

NICE has recommended to use AcuPebble SA100, Sunrise, WatchPAT 300 or WatchPAT ONE novel home-testing devices as options to diagnose and assess severity of obstructive sleep apnoea hypopnoea syndrome (OSAHS) in people 16 years and over.See the recommendations in the guidance for more details.

Eligible population for home-testing devices

The Sleep Apnoea Trust states that around 10 million people in the UK have obstructive sleep apnoea. They also state 10% (1.0 million, 0.8 million in England) have a formal diagnosis and 90% (9 million, 7.6 million in England) are undiagnosed. The increase in the number of home-testing devices available may lead to increased access to diagnosis and treatment. It could also potentially reduce waiting times, by reducing the number and frequency of visits to a sleep clinic. Table 1 uses these figures to estimate people with sleep apnoea in people aged 16 years and over in England.

Table 1 Eligible population for novel testing devices in England, current practice

Sleep apnoea diagnosis	Number of people	Percentage of people, %
People aged 16 and over	58,280,126	–
People with sleep apnoea hypopnoea	8,440,000	–
People with a formal diagnosis of sleep apnoea hypopnoea	844,000	10
People without a formal diagnosis of sleep apnoea hypopnoea	7,596,000	90

Data in table 1 is based on Sleep Apnoea Trust.

The use of novel home-testing devices as additional diagnostic options may increase the number of people diagnosed and having treatment.

Current treatment options

The NICE guideline on obstructive sleep apnoea/hypopnoea syndrome and obesity hypoventilation syndrome in over 16s recommends home respiratory polygraphy (RP) as the initial test for obstructive sleep apnoea hypopnoea syndrome.

If home RP is unavailable, home oximetry can be used but oximetry alone may be inaccurate for differentiating between obstructive sleep apnoea hypopnoea syndrome and other causes of hypoxaemia in people with heart failure or chronic lung diseases.

The new devices give another option for home-testing.

Hospital respiratory polygraphy or polysomnography (PSG) can be used if additional monitoring is needed.

Expert clinical advice suggests that hospital-sleep testing capacity has reduced since the COVID-19 pandemic, creating more reliance on home testing as the primary approach to sleep diagnostics.

Financial resource impact (cash items)

There will be a financial cost to using these devices (see table 2) and any additional costs should be assessed at a local level.

Table 2 Devices costs

Name of device	Basis of cost	Frequency of use of device	Unit cost, £
AcuPebble SA100	Per test	reusable	£50
Sunrise	Per test	single use	£75
WatchPAT 300	Per test	reusable	£50
WatchPAT ONE	Per test	single use	£80

Costs are based on information provided by companies and some of them are volume based. Organisations should contact the companies for more detail on pricing.

Due to a lack of robust data on current practice and the variation across organisations and services in implementation of the technologies, the size of the resource impact will need to be estimated at a local level.

To calculate the financial impact of cash items, see the resource impact template. Users are required to input local assumptions.

Capacity impact

Increased options of diagnostic devices may increase the number of people undertaking an assessment, diagnosed, and subsequently having treatments. This will have an impact on:

- the range of diagnostic tests. There will be an increased number of options available
- the number of people having sleep apnoea treatments such as continuous positive airway pressure (CPAP), customised mandibular advancement (CMAS) or weight management treatments
- earlier diagnosis and more timely health interventions. This may reduce appointments in primary care (GP appointments).

To calculate the financial capacity impact from a commissioner (national) and provider (local) perspective, see the resource impact template. Users are required to input local assumptions.

Benefits

Implementing the guidance may:

- Improve access to home testing, because some devices can be sent directly to the person by the manufacturer or NHS provider, which may increase access to home testing and reduce waiting times.
- Save staff time because the devices are less invasive than those currently used in the NHS and are easier to put on and operate compared with the devices currently used in

the NHS. Therefore, staff clinic time may be saved which can be used for other clinical priorities, potentially increasing the volume of patients a clinic can manage routinely.

- Reduce time to diagnosis, leading to more timely treatment initiation and symptom improvement. It may also reduce waiting times.
- Reduce the need for repeat tests and in-hospital testing, therefore reducing healthcare resource use.
- Provide newer home-testing devices that may be easier to put on and operate than the devices currently used in the NHS and may also be more comfortable to wear.

These benefits may also provide some savings to offset some of the potential costs identified above.

Key information

Table 3 Key information

Speciality	Respiratory
Disease area	Obstructive sleep apnoea hypopnoea syndrome
Programme budgeting category	PBC11X - Problems of the respiratory system
Commissioner(s)	Integrated care boards
Provider(s)	Primary care, community health care
Pathway position	Diagnosis

About this resource impact summary report

This resource impact summary report accompanies the NICE guidance on home-testing devices for diagnosing obstructive sleep apnoea hypopnoea syndrome and should be read with it.

ISBN: 978-1-4731-6712-4