

ACE impact

**Optimising the
management of
patients with
chronic obstructive
pulmonary
disease (COPD)**

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MAKING COPD INHALERS MORE AFFORDABLE

People with chronic obstructive pulmonary disease (COPD) present with progressive breathlessness due to damaged lungs. While this damage is irreversible, disease symptoms may be controlled with medication and smoking cessation.

Long-acting muscarinic antagonists (LAMA) as monotherapy and in combination with long acting beta-2 agonists (LAMA+LABA) are the mainstay maintenance therapies for patients with COPD.¹ These effective inhaled medications prevent patients from experiencing exacerbations (periods of flare-ups with increased shortness of breath and cough). However, due to their high cost, some patients have been using cheaper alternatives, such as a combination of inhaled corticosteroids (ICS) and LABA.

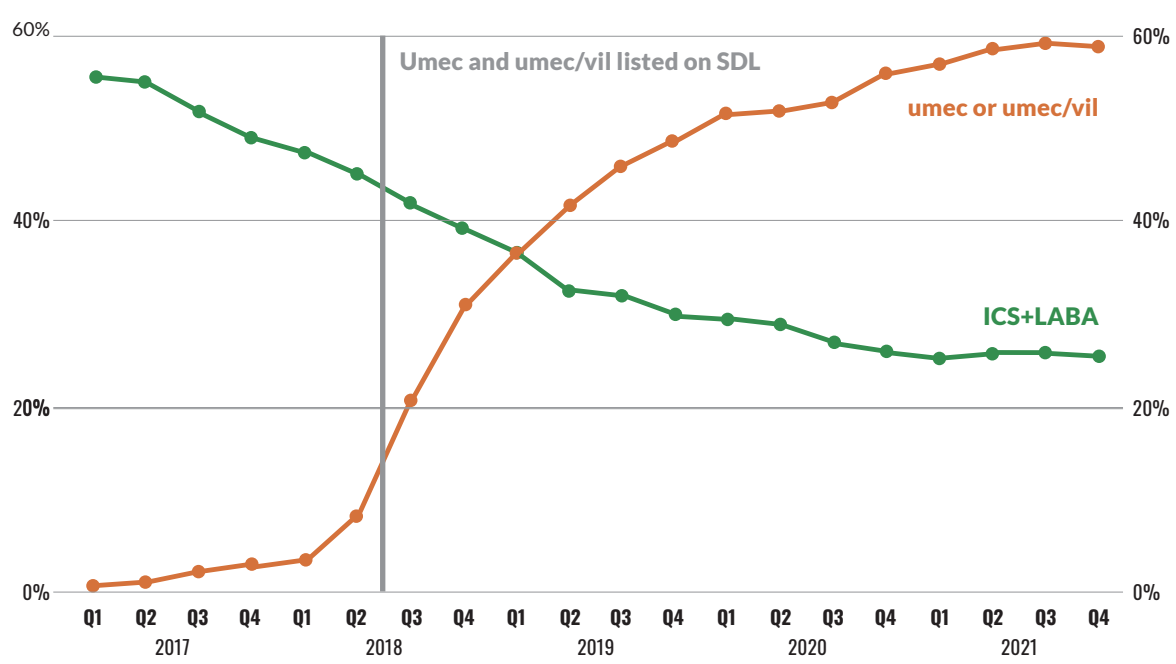
The use of ICS+LABA is associated with an increased risk of pneumonia. This demonstrates a high clinical need to make subsidised LAMA and LAMA+LABA available, to drive appropriate care. To address this, ACE undertook a Health Technology Assessment to inform subsidy recommendations for COPD medications. Value-based pricing negotiations were conducted alongside the assessment to improve cost-effectiveness of the treatments.

Umeclidinium (umec), a LAMA, and umeclidinium combined with vilanterol (umec+vil), a LAMA+LABA, were listed on the Ministry of Health Standard Drug List (SDL) in July 2018.² An ACE Clinical Guidance was also published at that time to inform appropriate clinical practice.³

POSITIVE IMPACT OF SUBSIDY

Figure 1

Proportion of patients with COPD on maintenance inhalers[^]



Among COPD patients who did not have a concurrent asthma diagnosis, the proportion on umec or umec+vil increased from less than 10% before subsidy to ~60% by 2021. This increase was accompanied with drop in the proportion of patients on ICS+LABA, from above 50% before the subsidy to ~25%.

[^]Excluding patients with concurrent asthma as they will require ICS+LABA for asthma treatment.

To understand the impact of the subsidy, ACE conducted a real-world retrospective cohort study. The results showed that compared to patients who started on ICS+LABA, patients who started on umec or umec+vii were associated with better COPD control and reduced rates of pneumonia hospitalisation over a one-year follow-up period.

Patients started on umec, as compared to ICS+LABA, had:



Patients started on umec+vii, as compared to ICS+LABA, had:

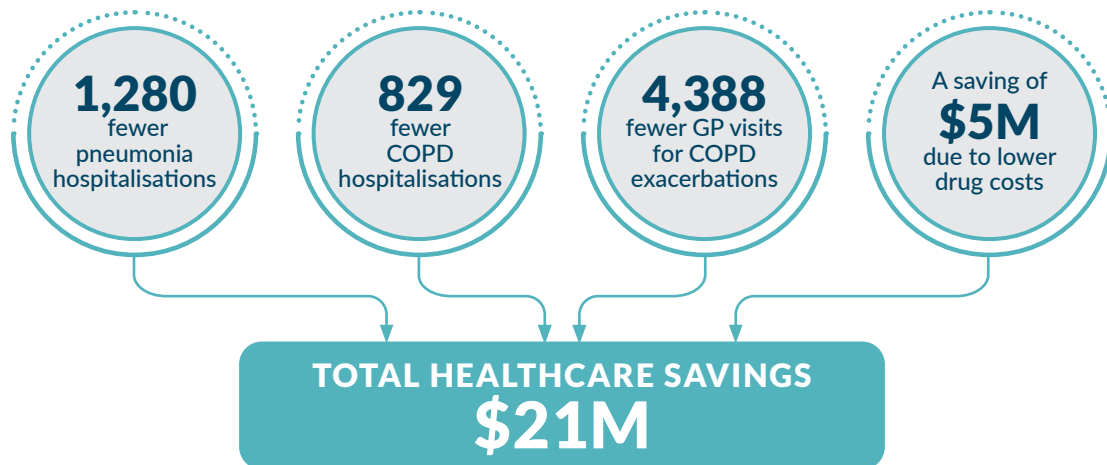


“The recent advancements in COPD management, particularly new inhalers like LAMAs and combined ones, are significantly improving patients’ lives. The subsidy listing of these inhalers will ensure their appropriate prescription according to established guidelines, including ACE’s, and increase patient uptake.”



Dr Tan Teck Shi
Consultant,
SingHealth Polyclinics

Based on actual and projected number of patients switching from ICS+LABA to umec or umec+vii in the first five years (2019 – 2023) after subsidy, it is projected that Singapore’s public healthcare system has:



References

- 1 Global Strategy for the Diagnosis, Management and Prevention of COPD, Global Initiative for Chronic Obstructive Lung Disease (GOLD) 2022. Available from: <http://goldcopd.org>
- 2 Agency for Care Effectiveness, Ministry of Health, Singapore. (2018). LAMA monotherapy and combination therapy with LAMA/LABA-Technology Guidance from the MOH Drug Advisory Committee. Available from: [https://www.ace-hta.gov.sg/docs/default-source/drug-guidances/lama-lama-laba-for-copd-\(2-jul-2018\).pdf?sfvrsn=e8d74c88_2](https://www.ace-hta.gov.sg/docs/default-source/drug-guidances/lama-lama-laba-for-copd-(2-jul-2018).pdf?sfvrsn=e8d74c88_2)
- 3 Agency for Care Effectiveness, Ministry of Health, Singapore. (2018). Managing stable chronic obstructive pulmonary disease – Focusing on inhalers. Available from: [https://www.ace-hta.gov.sg/docs/default-source/acgs/managing-stable-copd---focusing-on-inhalers-\(sep-2018\).pdf?sfvrsn=25860a3a_0](https://www.ace-hta.gov.sg/docs/default-source/acgs/managing-stable-copd---focusing-on-inhalers-(sep-2018).pdf?sfvrsn=25860a3a_0)

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